

TOM SWIFT: Galactic Ambassador

By
Victor Appleton II

Made in The United States of America

Technical Editing: Greg Hall

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THE NEW TOM SWIFT INVENTION SERIES

Tom Swift:

Galactic Ambassador

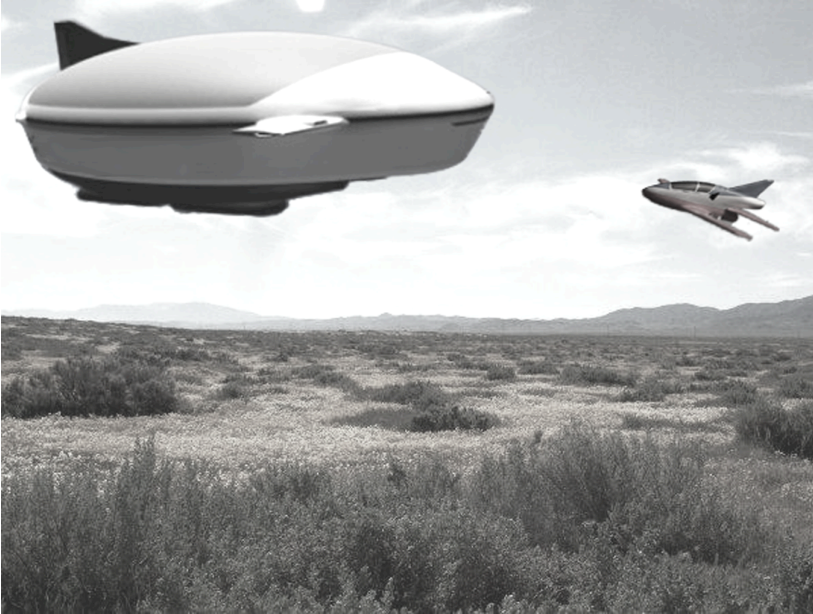
By Victor Appleton II

Just as he manages to overcome another of the many communication difficulties, Tom's space friends let him know that they are being "recalled" by their masters in a neighboring solar system. They have failed to penetrate the mysterious forces that prevent them from being able to visit the Earth.

With so much to be learned from them, Tom and Damon Swift embark on a highly focused program to find some way to let their friends visit. They must find the answer within 56 days, the deadline imposed for the return of the space friends. The solution is a self-contained environment replicating their own, but housed in a giant blimp.

Their plans seemed doomed to failure as a mysterious enemy with no stated intentions first attempts to kill Tom and then destroys the airship. With time and circumstances against him, can Tom succeed?

This book is dedicated to people who deal in diplomacy. It can't be an easy life dealing with people who are totally immersed in cultures that are as foreign to us as night is to day. Unless, that is, diplomacy is exactly like the most excellent Peter Ustinov movie, "Romanoff and Juliet." In that case, it is a hilarious set of misunderstandings and intrigues and romance. Actually, it sounds kind of nice. That, plus endless banquets filled with caviar and roasted squab.



The small jet streaked low to the ground heading directly for a collision with the airship.

Chapter 14

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AUTHOR'S NOTE:

Okay. I admit that one of the great unsolved matters in the Tom Swift books was what the heck happened to his Space Friends. I understand that they were a bridge into technology that became a crutch and could have become an easy out for just about everything, but I was always curious as to why Tom and his father never managed to get much better at the whole communicating thing.

I also know that a few of my fellow fan authors have their own takes on the who and why of the mysterious beings. Many see their motives as ulterior. I see them as sadly unimaginative and driven not by their own curiosity to get to the surface of Earth but more as them being forced to do this by another, more powerful race.

I have brought the situation to a head with this story. I wanted to explore a “world” where they are either here or not. No more pussy footing around. It is put up or shut up time.

And so you have this story. It is not what I set out to write. As I worked along new twists and turns raced down from my mind and through my fingers before I could stop them. Then, being a fairly lazy writer I sort of let them all stay to see where things might lead. The book that might have originally been called *Tom Swift and the Friendly Invasion* became more a story where our hero needs to become far more of an adult than he ever has been. He must become a diplomat and and ambassador.

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Tom Swift and His Tectonic Interrupter

FOREWORD

Name me any other person who began communicating, regularly, with beings from another part of our galaxy, and all at just barely eighteen years of age. Other than, that is, Tom Swift.

Go ahead. Ponder that. Think carefully. I can wait.

If you find yourself stuck for an answer, you might as well give up. The answer is, "nobody!" From that fateful first contact when a mysterious missile streaked through the skies over Shopton, New York, and buried itself in the grounds of Swift Enterprises, Tom and his dad have learned how to communicate with their space friend.

They have learned about the some of the plant and animal life from these outer space beings. They have discovered cures for diseases that threatened to wipe out these people whom they have never actually met.

All this thanks to the wonders of mathematics.

But, what they have not been able to accomplish is to get their friends to help them understand enough about a number of issues all concerning an inability to land on or to survive on the Earth.

Imagine, if you will, coming from a remote island where you have never seen any other people, being given a telegrapher's key and not much else. Then, imagine trying to figure out how to communicate with the outside world.

Could you do it? Could any of us?

Good thing that Tom doesn't see the impossible; he sees the challenge.

Victor Appleton II

CHAPTER 1 /

A STARTLING MESSAGE

TOM SWIFT—inventor, scientist, and less than two months shy of his twentieth birthday—raced through the gates at Swift Enterprises, the four-mile-square experimental and engineering facility located on the outskirts of Shopton, New York. He was in such a hurry that he didn't even drive the extra quarter mile to his private entrance; he called ahead to the gate and drove through after a quick electronic approval of his ID.

He drove directly to the building housing the communications center leaping out of his car the instant he pulled into a parking space.

Running into the building he was met by the Swift's communications chief, George Dilling.

"It sounded ultra important, George," he managed to get out.

"Skipper," the tall communications man replied. "This is something I don't think we ever expected. It's from our space friends. I've been around their symbols long enough to recognize some of them. This message starts out with the words 'urgent' and 'departure'. The computer is working on digesting the rest but seems to be skipping a lot of the symbols. They must be new to us."

"Dad will be here in a few minutes, George. Let's go take a look at the message. Maybe I can decipher some more of it before he gets here."

The two strode into the secured room housing the powerful transmission equipment as well as the oscilloscopes, monitors, and the computer that were used to be encode outgoing messages as well as decoding anything they received. Red lights were flashing all over the computer console indicating that it was using all the available computing power and should not be interrupted.

Tom pushed one button and a printout of the raw message symbols along with the meager start at a translation came out of the printer next to the computer. He picked it up and scanned the results.

"You're right, George. More than half of these symbols are new to me, or look like significant modifications to ones we already know. I think that a few of the less drastic variations might be almost the same as versions of known symbols. I think I can pick out the gist of the message by making a few guesses, but I suppose we'd better wait for dad to get here first."

Within minutes the radio room door buzzed and opened. Tom's

father, darker haired than Tom but with the same athletic build, entered the room. “What have we got, George? Hello, Son. Couldn’t wait for me to get dressed?”

He was smiling slightly so Tom knew that this was more a teasing comment than a rebuke.

“Damon. It’s one of those brainteaser messages. I wouldn’t have called you two at home this late in the night except that it begins with the word ‘urgent’.”

Tom’s father walked over to the desk where Tom was now seated pouring over the message. He had already scribbled one or more possible words under about 30% of the symbols. He looked up saying, “This looks really bad, Dad. If my rushed translation is anywhere close, it looks like our space friends are abandoning their Outpost near Mars and leaving our solar system!”

“That would be a terrible blow to science here on Earth. We have so much to learn from them. Let me have a copy of the message, George, and I’ll do a tandem translation with Tom.” He was soon pouring over a page of the mysterious symbols.

The space friends, as Tom and his father called them, had first made their presence known when they sent a missile across space to crash land in a remote area of Swift Enterprises almost two years earlier. Once dug up, the undamaged missile was found to be covered with a series of symbols, many of them indicating an origin in higher mathematics which both of the Swifts agreed was a universal language.

Over the ensuing months, the alien beings sent a type of serpent, some samples of their planet’s plant life for the men to study and then sent a disc-shaped craft filled with sick and dying animals with the hope of medical help. Tom and a group of doctors and scientists had been able to determine the cause of the mystery illness that had suddenly plagued their friend’s home planet and were able to offer a cure.

The space friends had also moved a small planetoid, now called Nestria, into orbit between the Earth and its moon. It had started out as the site of a potential war but now housed a permanent settlement of scientists and colonizers numbering almost two hundred.

Tom and Damon worked in silence for almost a half hour and then began comparing notes. After Tom wrote down a combined message on a separate piece of paper, they sat back studying it.

“This is terrible news, Dad,” Tom moaned.

“What does it say, Tom,” asked George.

“Basically, it comes down like this. ‘Urgent. Departure created/forced/mandated by—and then some unknown symbol here—

directing/forcing/making in reduction of two lunar cycles.’ I guess that means less than 56 days. Anyway, it continues, ‘Impossible to resistance/opposite/cancel action. Failure of...’ I think this one might mean their mission, Dad. What do you think?”

“Put that in there and continue,” he directed.

“Okay. ‘Failure of our mission proof negative Earth intersection...’”

“Tom, “ Dilling broke in, “what does that mean in English?”

“I believe if means that their failure to complete their mission, probably to be able to visit our planet, is the reason they are being compelled or ordered to depart. The rest of the message is so full of unknown symbols that it is going to take dad and me several days working along with the computer to decipher.”

He was interrupted by a signal from the computer. On its screen was the message:

**TRANSLATION OF KNOWN AND
SIMILAR SYMBOLS INCOMPLETE.
REQUIRE INFORMATION INPUT.
PARTIAL TRANSLATION SENT
TO PRINTER.**

George retrieved the printout. He set it between the other two and they all compared it to what Tom and Damon Swift had come up with.

“Practically the same, Tom,” the older inventor stated.

“We need to send them an acknowledgement along with some sort of clarifying questions. Want me to do that, Dad?”

“Let’s do it together. George. Pull up a chair and give us your input, too.”

The three men spent the next ten minutes devising the outgoing message. Once satisfied, the two older men left Tom to create the message in the mathematical symbol language. They retired to the coffee room next door and made a fresh pot. “Going to be a long night, it looks like,” the radioman remarked. “Is there some way to hurry up the process?”

“If I know Tom, he won’t stop until he has it right. Luckily, I think we have all of the symbols necessary to create our message. He may only need to design one or two.”

An hour later Tom came wandering into the coffee room and plopped down on the comfortable sofa along one wall. His father rose and poured Tom a mug of coffee, adding two spoons of sugar and a small portion of milk to it; the only way Tom now drank coffee. His

preferred hot beverages were cocoa and spiced cider, neither an option at the present time.

“Thanks, Dad,” he said accepting the steaming mug. “He handed his father a sheet of paper. “Does this look like I have it right? I wasn’t too sure about this symbol,” he pointed at something that looked like a tulip rising from a star, “or this one,” indicating a small circle bisected by a sine wave.

Mr. Swift looked over the page silently reciting its content as he deciphered the symbols from memory.

“If you mean ‘we want to contact your masters’ by the first new symbol and ‘working day and night’ by the other, then I think you have it.”

“Good. That’s the general idea behind those symbols. Really combinations of existing ones.”

They returned to the radio room and Tom beamed the message out using Enterprises’ high-power transmitter. The three returned to their coffee a few minutes later.

“It’s going to take over a half hour for the message to get there and any immediate response...” George broke off as a signal indicated an incoming message.

More symbols began forming on the screen. Tom wrote them down as fast as they appeared. Within two minutes they stopped.

“They can’t be as far away as Mars to have responded this fast,” Tom exclaimed. The others agreed, but his father added:

“Or, this could be a follow-up to their previous message that was sent before we beamed ours out.”

Tom looked over the sheet he had filled. He sat down and began writing the translation. In just a couple minutes he had it.

“Dad! This is an answer to our questions. I asked them to verify the timetable and this messages repeats the ‘two lunar cycles’ but adds an indication here that it is three days greater than that, so fifty-nine days. And, where we asked if there was some way for us to intercede on their behalf, they answer with ‘disappointment’ or ‘impossible’ and that symbol they once used which we believe is their dissatisfaction over the orders of their masters.”

The printer churned out the computer’s translation. A quick scan showed that it was almost word-for-word with Tom’s manual one.

“Let’s send another quick message telling them we want to try to do something to get them down here, safely, before they are forced to depart. I only hope we can follow through on that promise.”

Tom created the message using only well known symbols. Just a few minutes after it was transmitted, a single symbol appeared on the

screen. Tom and his dad recognized it immediately and both spoke the translation at the same time. “Hope!”

The two Swifts bade George a good night and headed home in Mr. Swift’s large sedan.

Moments after leaving the main gate Damon Swift noticed a set of dim headlights following them at a distance of several hundred yards. The vehicle had first appeared just as they left the gate at Enterprises and made the same three turns Damon had since then. Not wanting to worry Tom he decided to try to shake any potential tail. He steered around a corner several blocks ahead and increased his speed.

“What’s up, Dad,” Tom inquired recognizing that this wasn’t a direct route back to their home.

“I’m seeing if the car behind us is following us or just happens to be out here past midnight.”

He looked in the rear-view mirror and Tom turned around in his seat to watch behind them. “Oops!” Tom said seeing the headlights turn the same corner. By this time Mr. Swift had managed to gain another hundred yards of lead over the other vehicle. He sped up even more down the tree-lined straight street.

The other car began to fall behind. He quickly slowed down using only the hand break so as to not turn on the brake lights, shut off his headlights and sped around another corner. He pulled the sedan into the first driveway they came to and shut the motor off. He and Tom ducked down.

Presently they saw the headlight beams swing around the corner but the mystery car accelerated and sped off down the street. Tom used his cell phone and called the Shopton Police. The night sergeant promised to have a couple patrol cars head for the area immediately.

He suggested that the Swifts remain in their car in the driveway. After giving the policeman the home’s address they agreed to remain put.

While they waited, Tom and his father discussed many of the issues they would be facing in trying to get their space friends down onto the Earth. Tom reminded his father that he had discovered evidence in the lower Mexican peninsula of a visit by being from outer space hundreds of years before Cortez had ransacked the area. It had been unsuccessful with indications that the aliens perished within a few weeks or a month.

They were just speaking about how their friends had so far been unable or unwilling to provide them with any information about their physiology, environmental requirements or even what they looked like, when a set of headlights swept past their windows.

Both men froze when the beams returned and focused directly at

the rear of their car lighting up the car's interior. "Do you have your eGun in the car," Tom asked. This electronic interrupter weapon was the only type of gun ever carried by Swift employees, unless they were exploring a dangerous area. It had long been a Swift policy that science and destructive weaponry did not mix.

"No. I took it out last week. I needed to replace the solar battery but forgot to put it back," he whispered.

At that moment, they heard a car door close behind their car.

Seconds later red and blue lights began flashing behind and to the right and left of their car. A loud speaker blared, "Hold it right there! Hands up! *Get down on your knees, now!*"

Tom risked raising his head to look out the rear window. He could see three uniformed officers standing by their cars, guns pointed at a figure standing just behind their own car. The figure got down on his knees, hands still raised in the air.

Tom watched one of the officers approach the figure and then snap on handcuffs.

He opened the car door and stepped out. "Boy, am I glad to see you guys," he exclaimed. His father joined him in thanking the officers for their prompt response.

"Only too happy to protect and serve, sir. Especially for you two. I wouldn't have a job with the Shopton Police if it weren't for the money you Swift folks bring into the local economy."

The other officers had already hustled their prisoner into the rear seat of one of the police cruisers, so Tom didn't ask to see him. He did inquire, "Would you ask your Chief if our security chief and I could come in to question your prisoner?"

The officer agreed saying that processing would take the next three hours or so, but that any interrogation would need to wait until after 8:00 a.m. when the prisoner's lawyer or public defender could be contacted. Tom suggested a 9:00 a.m. meeting.

One officer moved the mystery stalker's car out onto the street while another went up to the porch to speak with the confused homeowner and his wife. Climbing back into their sedan, the Swifts headed for home and a quick, troubled nap.

Three hours later, Tom contacted Harlan Ames, Enterprises' head of Security and close family friend, at home telling him about the adventure the previous night. He promised to meet Tom at the Shopton Police Department headquarters a few minutes before the appointed hour.

Tom and his father had agreed on their drive home to not worry Tom's mother or his eighteen-year-old sister, Sandy. When Tom walked into the kitchen, his dark-haired and still beautiful mother,

Anne Swift, and his vivacious sister greeted him.

“Yo, Tomonomo,” Sandy said giving him a peck on the cheek. “What’s up? We heard you and daddy leave last night, and he just told us about the space beings messages. You *can* do something, can’t you?”

“I sure hope we can. I really want to have the opportunity to meet our friends face-to-face, if that is at all possible. Not to mention lost chances at moving our knowledge of science ahead with their assistance. We just have to find a way,” he declared.

After a quick breakfast of sausage patties and cheese grits, one of Tom’s favorites, he left for Enterprises with his father. The older man dropped Tom off at the main gate while he headed for meeting with a supplier in a neighboring community.

Tom jogged to the Communications building, hopped into his car and was soon motoring his way to the downtown Police Department. He arrived about five minutes to 9:00 and just behind the car of Harlan Ames. They got out and shook hands.

“Good morning, Tom,” the security chief greeted him.

“Hi, Harlan. Now we get to see who was following dad and me.”

They walked into the gray stone-faced building. The desk sergeant directed them to the Police Chief’s office.

“Hi, Tom. Hi, Harlan,” he greeted them. After exchanging some pleasantries, he suggested they head to the interrogation room.

“I think you are in for a real surprise,” he said, mysteriously.

Moments later the prisoner was brought into the room. Both Tom and Harlan gasped when the mystery driver proved to be an attractive red-haired woman, about 25 years old, fuming with hatred.

“You Swifts think you’re so important and so precious.” She stood up. “Well, I’m here to tell you, you’re both dead men!”

CHAPTER 2 /

REVELATION

CHIEF ROCK pushed the woman down into her seat. “That’s enough with the threats, *Lucy!*” he barked. “Besides, this isn’t Damon Swift,” he declared pointing at Harlan.

“My name’s not Lucy,” she practically screamed. “Stop calling me Lucy!” It then seemed to sink in what the chief had just said. She scowled at Harlan. Her face had gone red and her eyes were glistening with tears of rage.

“Listen, sweetie,” the chief said sitting back down. “You play nice with us and give us your blasted name and *we’ll stop calling you Lucy*. Understand?”

She turned away, sullenly, and refused to speak.

“Okay, *Lucy*,” the chief continued. “You were arrested on charges vehicular stalking of the two Swifts. Even if you won’t tell us who you are, at least tell us why.”

She continued to sit, an even deeper scowl crossing her face when the chief had again called her the name they dubbed her with instead of ‘Jane Doe.’

“Chief,” Tom said. “Was there any ID in her car or on her?”

“Nothing! Plus, the car was reported stolen earlier that evening over on the other side of town.” He looked at the woman, “That’s another charge, by the way. Here’s her purse. No ID, no money, just a hairbrush and her cell phone, and that’s one of those disposable jobs. We can’t trace it specifically to her, but at least we know what type and what serial number range it came from.”

“Who reported the car stolen, Chief,” asked Harlan. The chief gave him that name and phone number of the individual making the report. Harlan stepped out of the room to make a call. Seconds later, Tom and Chief Rock were startled when the cell phone on the table in front of them began ringing. They stared at it until it stopped.

Harlan stepped back into the room five minutes later, smiling. Tom told him about the ringing phone. “I figured it might be something like this,” he said placing a powerful hand on the woman’s left shoulder. “It matches the number calling in the stolen car. Care to talk, now?”

The sullen prisoner seemed to deflate and sagged in her chair. She looked at Tom and then at the police chief. Harlan was still standing behind her, his hand squeezing her shoulder. He continued to squeeze, looking down at the back of her head, increasing the pressure

until it became obvious to Tom that she was feeling discomfort.

“Might as well stop that, Harlan,” he directed. Ames released the pressure and then sat back down pulling his chair right up next to the woman.

“Okay, Tom. And now, Lucy or whatever your name is, why were you following the Swifts?”

She sat in silence refusing to even look at any of the other room occupants. Then she looked up, glaring, “I’ll tell you this. You ruined my grandfather’s life and now I’m going to make sure you pay for it! Politics was everything to him!”

Tom motioned the other men to follow him out of the room.

“How did you get her cell phone number?” the Chief asked Harlan.

With a grin, Ames answered, “I called the company that imports that phone and asked for the numbers of any of that model purchased here in Shopton in the past three or four days. There were three. This was first on the list.”

“And, they just let you have it?”

“They have to let the Secret Service know basic info like that. Getting the name of the person who activated the phone will, however, take a court order.”

“Secret Service?” Chief Slater asked incredulously.

“Yeah. My former life, Chief. B-E. Before Enterprises. I stretched the truth a little but they accepted my old ID number. Some great security, huh?”

“Have you got a computer that can access the Internet, Chief,” Tom asked.

He was taken to a computer in the Deputy Chief’s office and Tom sat down at the keyboard. Within minutes he rose, grinning. “I believe I have an idea,” he said.

They returned to the room where the woman still refused to meet any of their eyes.

“Let’s start this all over,” Tom suggested. “How are you doing, Gabrielle,” he asked.

She gasped and sat bolt upright turning to Tom, all color draining from her face. “What? How? How did you know?”

“Once you mentioned your grandfather it all fell into place.” Tom related the problems they had faced with former Senator Grimsby, a long-time foe of Damon Swift whom he blamed for his own early business failures. He had been forced to resign in disgrace when it was revealed that his secretary was a major security leak, giving information to anyone who should pay for it, friendly nations or

terrorist organizations.

His adamant attempts to derail the Swifts during their recent projects to bring water to a small African nation and to begin the cleanup and repair of the Earth's ozone layer over the South Pole had almost spelled doom for both the projects as well as damage to the Swift reputation. Although Grimsby publicly apologized for his misadventure, it was clear that he continued to hold a deep grudge.

And, here was a woman who appeared to be his granddaughter, bent on revenge for imagined acts that had never happened and angry for ones perpetrated by her own family member.

She listened, first with obvious disdain, and then with grudging curiosity.

"That can't be right," she declared at one point. "Grandfather swore that your father had lied to Congress in order to get the contracts for a project away from his business that would have saved it!"

"That may be your grandfather's version," Harlan spoke up, "but I can guarantee that the reason he didn't get those contracts years ago is that he attempted to undercut the Swift Construction Company where everyone knew that his intent was to get the contract and then suddenly incur major cost overruns. His partner so much as admitted to that. His people even left a paper trail indicating precisely that. He was called on that tactic by the subcommittee involved and revoked his own offer."

Tom continued, "Neither my father nor myself have ever tried to damage anybody's reputation or to put their companies out of business. We feel that there are enough contracts and programs to go around to reputable companies just as long as each company concentrates on their area of specialty. Your grandfather was bidding on something he had never done before and didn't have the equipment or personnel to even get started."

Gabrielle Grimsby sat in silence digesting what she had just heard. She raised her head and addressed Tom.

"If what you are saying is true, can you prove it?"

Tom promised to get her access to the appropriate files from both Enterprises as well as the Congressional committee that had been involved. "I am pretty sure we can get everything under the Freedom of Information Act," he told her. "Is that the only reason you were after us? Were you actually going to harm us," he asked.

"If you bring me the proof, then I will have to apologize and I will confess to everything. But, until you do, I have nothing more to say." She crossed her arms and looked away.

They tried a few other questions but she remained good to her word.

Tom and Harlan left and went back to Enterprises in their own cars. They spoke on the way there via TeleVoc, the amazing silent communications device that picked up on jaw motion, muscle movement and brainwaves to transmit the wearer's unspoken words to any other Enterprises employee, in the sender's own voice, when equipped with a similar pin. Tom had recently added a special security measure that meant nobody but the supposed sender could use the pins. If the user's brain's alpha waves didn't match those programmed into the pin, nothing functioned. And, a recent upgrade meant that any two wearers within one hundred feet, even when off Enterprises' grounds, could still talk.

Hank agreed to follow up on the requests for all of the records. "I think that I can even get the Grimsby company records. I seem to remember that they were impounded by his state's Attorney General when he defaulted on a couple projects toward the end of his business days. I never was sure why his political party allowed him to run for office or why he had been voted in nine straight terms. Oh, well. I think his state still has all of the microfiche spools from back then. I'll let you know what I find."

Tom went straight to the office he shared with his father. Damon Swift had returned from his morning meeting and was sitting at one of the large desks dictating into a speech-to-text program running on his computer. Tom knew that his father preferred to enter his journal entries this way, while Tom found that he could let his fingers do all of the work while his mind came up with the appropriate words by typing everything manually into his computer.

Presently, his father removed the small headset he used for the purpose and turned to Tom.

"Do we know anything more about the man from last night?" he inquired.

"Well, we know that he is a she and that she is Senator Grimsby's granddaughter!"

The older inventor was stunned.

Tom gave him a rundown of the entire visit to the police headquarters. At the end he told his father that Harlan was trying to get all of the records.

"I think I can help there, Tom. Grimsby had his company in a different state than the one he used to represent. He came from New Mexico originally. In fact, GrimsbyTronics was once just ninety miles from the area we now own out there. The Citadel!"

Tom surmised that the former senator must have kept his business involvement and failures secret from the voters in Nebraska. Mr. Swift agreed, then picked up his phone. "Trent? Can you get me the office of

Senator Quintana in Washington, please? If he isn't there, try his office in Albuquerque. Thank you."

Moments later his phone buzzed. "I located the senator, Mr. Swift. He is in D.C. but he is on the Senate floor making a speech. His assistant believes that he will be back in the office in about three hours. Did you want to leave a voice message?"

Damon Swift declined, asking Munford Trent, his efficient secretary, to ask that the senator's assistant call when the legislator returned.

Tom soon left to go to his private office and lab located in the underground hanger where his first major invention, the *Sky Queen*—a three-deck super jet in which Tom jetted around the world on his various adventures—was usually kept. He glanced at the huge empty space with a trace of nostalgia. The *Queen* had been removed and taxied over to the Swift Construction Company. Most jets could have been flown, but the scorching-hot jet lifters would have destroyed the landing surface there. Only at Enterprises, where a special area covered in heat resistant tiles was installed, could she fly up and on her way with no visible damage left behind.

After an interesting job including the temporary removal of a wide section of the eastern wall of the Enterprises grounds, the brief closure of the county highway that ran along side so that she could be pulled down the road by a powerful 'tug' vehicle, and the rerouting and replacing of a major power trunk line that would have been torn out by her high tail, the giant jet finally arrived at the location where she was now undergoing a major retrofit. Her jet lifters were being removed and replaced by an array of powerful repelatron, Tom's invention that could be quickly set to repel against almost any element or group of compounds.

She would return to her rightful place in about two months time. Until then, if Tom needed to travel to distant lands he would be using the *Super Queen*, an aircraft built along the same sleek, practically wingless, lines as the *Sky Queen*, but almost twice as long and featuring large bays in front of and behind the central repelatron lifter group. These bays could be outfitted with interchangeable 'pods' custom built for various purposes. Tom had already designed a set of cargo pods, a hospital pod and his newest, a pod containing a complete laboratory with more than five times the equipment as the lab cubicles in the original *Queen*.

Entering his small office Tom pulled out a copy of the messages from their space friends and sat down. He felt that there were some nuances in the symbols that he was missing. Some additional meaning to the message that he needed to know in order to fully understand what needed to be accomplished. In moments he was lost in thought. An hour later he phoned his father.

“Dad. I’m working on the original messages right now. Can I run something by you?” His father gave his permission. “The forth symbol on line two. It’s totally new to us. Am I right in thinking that it might indicate the concept of politics? Like this whole thing is a political issue?”

Mr. Swift had pulled out his copy of the message looking at the circle bisected by a line with stylized arrowheads at both ends. He pondered for a moment and then replied, “In context that might make sense. But *can* we apply our sense of context to their way of communication? We know that their word order is vastly different from the way we speak in English. Where we might say, ‘we went down the street and had dinner’ they might word it more along the lines of ‘to consume nourishment point A opposed Point B distance was traveled’.”

“Put that way, Dad, it sounds more like German or even Japanese.” Tom paused, a sure sign that he was pondering something. Finally, he continued, “I wonder what would happen if we applied foreign sentence structure algorithms to this and previous messages?”

Damon thought for a minute. *It might make sense*, he decided. “Give it a try and see what you get. We already know the eventual meaning of many of the past messages. I’ll be very interested to see the outcome of this experiment.”

Tom spent the following two days deeply engrossed in developing a new program to augment the computer translations of the space symbols. Within the first few hours of the second day he came to the realization that he needed to check translations against the grammatical and structural designs of all Earth languages and then let the computer translate that against English. He was almost certain that changing the context of some of the message symbols would change or enhance the actual meaning. It was a breakthrough, but took him so deeply into ‘non-stop programming mode’ that he developed a splitting headache many hours before he completed the algorithms necessary to power his program.

The pain became so intense, and completely took away his appetite, that Chow finally summoned Doc Simpson. “I’m worried jest about sick myself,” he told the young medical man. “You got to git over to Tom’s underground office and help him, pronto!” the former chuck wagon cook had insisted.

Tom was rubbing his temples trying to lessen the pain when Doc Simpson popped by. “Uh, hi, Doc. What brings you here?” he asked, squinting through the obvious discomfort.

“Well, I sure know that you’re not feeling well,” he replied. “Otherwise I would expect to hear ‘What’s up, Doc?’ !”

“Sorry,” Tom said standing up and stretching. “I’m a little off

today. Nothing too bad. I've been thinking in odd sentence structures. It has my brain a little twisted." He sat back down, his face going pale.

"I can tell a lie when I hear one, Tom. You look terrible. Eyes with dark circles. Pale skin. Obvious headache. I know you and your dad are working feverishly on the space beings issues, but I am supposed to keep you from actually *getting* a fever. Right now it's well past 4:00 in the afternoon. I'm going to have to pull rank and send you home for a good night's sleep and a couple of your mom's great meals!"

Tom stood again and started to protest but suddenly felt dizzy. Doc Simpson stepped forward and helped him to sit back down. He checked Tom's eyes with the small flashlight he always carried, and then took Tom's pulse.

"You wait right here, skipper. I'm getting a scooter and putting you in my car. I'll drive you home 'cause you're in no fit condition to do it yourself."

A half hour later Tom was laying in his own bed, his mother and sister puttering around while the young doctor completed an exam of Tom. Turning to Mrs. Swift he stated:

"Tom needs a good but quick meal, Anne. Can you prepare a good chicken or turkey sandwich on whole grain bread? And, perhaps a small smoothie of banana, yogurt and some other fruit or berry? I'm going to give Overworked Boy here a little sedative and a vitamin B injection, but he should be able to eat his food in the next five minutes or so."

Sandy and Mrs. Swift hurried to the kitchen where Tom's sister set to creating the requested smoothie and his mother made a tasty sandwich. They returned to the bedroom with seconds to spare.

Tom was already looking a bit sleepy but the trio prompted him to eat. He discovered that he was ravenous and devoured everything in short order. He thanked them and said, "I feel so much better, Momsie. Smooth, nicie, San-y. Think I'll jus take a quick nap and then ge-back to the... uh, office..."

With that, the boy inventor dropped back into his pillow and was sound asleep.

Sixteen hours later, Tom came bouncing down the stairs in his pajamas and into the kitchen. "Is it dinnertime, yet, Mom?" he asked.

"Hungry, dear," she said with a slight grin.

"You bet. I had a little something at the office before I came home for my nap. Guess I'd better have a proper meal before I head back. I should be able to get in a few hours of work before bed time."

"Tom, dear," his mother said, pointing at the wall clock. "I am not sure how to tell you, but it is not 8:20 in the evening. It is 8:20 in the

morning. You've slept for almost sixteen hours."

Perplexed, Tom vaguely remembered his visit from Doc Simpson and then something about his mother and Sandy feeding him and...

Then it all came back to him. And, he realized to his delight, that his headache had disappeared completely.

"Mom. I feel great. Can I have a big breakfast, please? Bacon, eggs over easy, hash brown potatoes and a couple of fried tomato halves?"

Mrs. Swift loved cooking for her family. She went to the well-stocked refrigerator and pulled out the necessary ingredients. "Why don't you take a nice hot shower, Tom while I get things cooking," she suggested.

He left the kitchen for his shower. Fifteen minutes later he reappeared, fully dressed with only damp hair to show for his efforts. "Smells wonderful," he offered.

He sat at the breakfast table and was soon tucking into the full plate of food. Sandy joined him half way through his meal sitting beside him and inquiring how he was doing. Between mouthfuls Tom told her how great he felt.

"I even think I got an idea in my sleep about how to better and more rapidly translate those space symbols."

"Don't take any time explaining it all me," she said. "Eat and then go back to the plant. But," she warned with the wag of her finger, "don't you dare forget that you and Bud are taking Bashi and me to a movie tonight and then dancing at the Yacht Club."

Tom admitted that it had slipped his mind but promised to be ready by 6:00 that evening.

Anne cleared her throat, getting Sandy's attention. "It might be best if you told Bashi to keep the dancing to a minimum, dear." Pointing at Tom, she added, "If you get my meaning?"

Sandy realized what her mother meant, so she nodded. "Maybe just dinner and a movie, Tomonomo. I'll see what Bashi is up for."

Tom headed for work ten minutes later. He launched back into the translation program upon reaching Enterprises. Thirty minutes later he excitedly raced into the shared office to present his father with the news that he had cracked the problem.

"And, get this, Dad. Here is the way the latest message comes out." He handed the page to his father.

**URGENT... ARE BEING RECALLED
BY THE MASTERS. THEY SAY WE
HAVE FAILED IN OUR MISSION TO
VISIT YOUR PLANET. WE HAVE**

**BEEN (ARE) UNABLE TO OVERCOME
PROBLEMS OF AIR AND GRAVITY.
THEY ARE ANGRY. EXPECTATIONS
ARE UNREASONABLE. UNLESS WE
SUCCEED WITHIN 52 OF YOUR
PLANET'S ROTATIONS, WE MUST
LEAVE. WE ARE DISTRESSED.**

PLEASE ASSIST (HELP/RESCUE) US.

After reading it a second time, the older inventor asked, "Is this all of it?"

"That's it, Dad. The new computer program takes a few liberties with sentence structure but I believe it to be a relatively accurate translation. Oh, and I adjusted the number of days to be as of today."

"Can we do it, Tom?"

"I'm going to try sending them a message using the new translation software to see if we might get them to finally understand how vital it is to know more about them."

He read off his proposed message and the older Swift quickly agreed.

Tom went straight to the communications building and enlisted George Dilling's assistance. While George got the transmitter up and tested, Tom entered his message on the computer's keyboard. As he did so, symbols began appearing on the screen, a few of them unfamiliar to Tom. Was the computer devising them itself, he wondered?

He pointed to them and asked Dilling what he thought. "A couple of those look like the newer symbols your father added last month. I thought you might have a copy so I never forwarded them to you," he admitted.

A minute later they had the all clear signal and Tom pressed the SEND button. He had carefully prefaced the message with a sentence informing the space beings that this might be full of flawed words. If they didn't understand it, they should disregard it and he would send another message later using the old translations.

He needn't have bothered. Within a few minutes the alarm signaled an incoming message. Tom went to the computer to see what the new translation might be. He was astounded when he read:

**FRIENDS. WE HAD NOT UNDERSTOOD
OTHER (PREVIOUS/FORMER) REQUEST
FOR DATA ABOUT US IN SPECIFIC. WE**

**IMMEDIATELY RETURN TO PLACE
(OUTPOST/STATION/ABODE) NEAR
PLANET FOUR SO TO DEVELOP
(INVENT/EVOLVE) COMPLETE DATA.
CAN YOU ASSIST (HELP/RESCUE)
US. {UNKNOWN TERM} WOULD BE
POSITIVE OUTCOME. MASTERS MIGHT
OFFER NEGATIVE ANSWER BUT WE
WILL VISIT IF YOU BELIEVE
(KNOW/THINK/PONDER) YOU
CAN SOLVE.**

“Well. We still don’t know what that ‘unknown’ symbol might mean, but it’s pretty clear that until now they never knew how badly we needed to have information about their bodies, their atmosphere and their gravity requirements.”

“I thought that we believed the gravity on Nestria might be like theirs.”

“It might be, but until they can verify it, we just don’t know. It might be at their upper limit but just enough for us.”

Tom wrote a new message full of encouragement and suggesting specific kinds of information. He also asked if they might have a way in which to provide the Swifts with an image of their race. That was a difficult concept for even the new software to tackle, and Tom had to try just about every word in a thesaurus that might be similar to ‘picture’ until the computer accepted ‘visual physical body icon’ as a concept it could turn into symbols.

Tom sent the message and then asked George to contact him if anything else came through.

His TeleVoc beeped five minutes later and the radioman told him they had simply received a message of ‘WE UNDERSTAND’ from the space friends.

Elated by the turn of events, he went to the office he shared with his father. Damon Swift was just as happy as his son when he heard the news. He promised to take on the task of the untranslatable symbol while Tom began to work on the way to help their friends visit the Earth.

CHAPTER 3 /

THE LITTLE HEADACHE

IT REQUIRED another two days before the preliminary information started coming through from the space friends. It was sketchy at best, which Tom put down to language differences. At least five times they requested examples of similar information from Tom, presumably so they could use it to model their own responses.

He sat in Doc Simpson's office describing what he knew and getting some ideas from a medical perspective.

"Where I first described humans as bipedal, they responded asking for information about the word base. Then, once I believed that describing mobility might help, they came back with a negative response, basically stating that they could not travel 'in a bipedal type of device.' It's been like the proverbial pulling of hen's teeth!"

"Did you ever get it across to them?"

"Oh, in the end I'm almost sure I did. The biggest impediment to accurate communicating with them is their total lack of the concept of visual forms of communication. It looks like once they figured out faster-than-light transmission of their symbols they never investigated anything else. If I could just get them to send me an image I'd be miles further along. Even if they could only receive images of us, that might help with the concepts." He shrugged, looking defeated.

Doc nodded, mostly to himself, as he thought the matter over. He glanced up at Tom. "Send them a TV and a video disc player," he suggested.

Tom slowly shook his head. "No. They can't play anything we—" He stopped. A perplexed look flashed across his face before it was replaced by a smile. "If you decide to give up medicine, I could use you as a scientific advisor, Doc."

"What did I say?"

"You said it all. Why *not* send them a small video system complete with visuals and even their own symbols so they can relate one to the other? I've got to go!" Seconds later, only Greg Simpson sat at his desk, two half-empty cups of coffee steaming in front of him.

When Tom got back to his underground office he put in a call to George Dilling. After explaining the basic idea that Doc Simpson had helped put in his mind, he told the Communications man, "Since you have done everything from keying in telegrams to making all of our

complex marketing, sales and operations videos, it seems that you're the ideal person to make a video for me. I am going to send off a rocket to our space friends, hopefully day after tomorrow, and I want a video disc with lots of images about what human look like, how we move, maybe even animations of how things work inside out bodies."

"And you're fairly sure the animation thing isn't going to stump them? I mean, if they don't communicate visually to begin with, shouldn't we stick to live images?"

Tom thought this over for a moment.

"Yeah. I guess you're right. Okay. Just remember that we are trying to get them to either show us or to articulate as much as they can possibly tell us about themselves. Let's be certain to show them as much as we can about us. I'll send a list over later today. Maybe we can get some of the old Voyager video presentation and use that as a model."

He referred to the self-playing videodisc that had been attached to the side of the Voyager space probe on the infinitely small chance that some alien race might find it and be curious about the origin of the beings that sent the probe.

Tom next turned to going through the Swift catalog of rockets he might use to send the video as quickly as possible to Mars. As there would be no chance of a traditional rocket getting all the way to the Red Planet and back again before the space friends were due to leave, he decided to ask them to intercept a super fast repelatron-powered rocket somewhere in the vicinity of the Moon.

It took three messages to get the idea through, but in the end they agreed to pick up the speeding rocket within a half million miles of Earth's largest satellite, the Moon.

For the basic rocket, Tom decided he would take the first off the assembly line of a new class of small rockets Enterprises was beginning to build for schools and universities that wanted to launch their own experimental packages into low Earth orbit but might not have the wherewithal to build their own.

He made a call to the Construction Company and arranged to have the first one delivered to his lab the following morning. "You do realize that it will be Saturday, don't you skipper?" the production manager had reminded Tom.

"I know, but I've so few days available to me that I have to work weekends."

"That's okay. I've got a half crew on for tomorrow anyway. Have it there by nine if that's all right with you."

Tom agreed and thanked the man.

After looking up several items on his computer and placing a couple calls, Tom turned to the matter of the video player. Although he could use an off-the-shelf video disc player, he felt that it might prove to be too fragile given the enormous pressures it would encounter on take-off, and the deadly cold it would experience in the depths of space.

“Not to mention that I have no idea what the conditions will be like wherever they intend to play the video back,” he muttered to himself.

That left him with the idea that an all-in-one player and screen would be best. He could build it inside of a pressurized case with just three buttons on the outside. *I can use existing symbols to represent ‘play’ and ‘pause’ and stop* he told himself. *That should be all they need.*

Five hours later he had the rudimentary player constructed. It was going to be completely digital with no chance of a tape or disc being damaged or displaced. A seven-inch flat profile screen sat next to the circuit board and small Solar Battery power supply.

Tom called up a video from his files and transferred it to the memory bank on the board. He tapped the first button once and the screen came quickly to life. The wisest thing to do, he had decided, was to use the same button to turn the system on, power up everything and then—after a pause of less than two seconds—play the video.

Looking over at the screen Tom grinned as he saw the video of his girlfriend, Bashalli, smiling at him from the side of Tom’s sailboat out on Lake Carlopa. He had taken the video just a few months before. As he watched, Bashalli smiled and waved and then blew him a little kiss.

Tom blushed as he caught himself wanting to reach out to take the offered kiss.

When the thirty-second video was finished, he replayed it using both the ‘pause’ and the ‘stop’ buttons several times. Everything worked just as he hoped.

After turning the system off he removed the battery and checked its strength. As he would tell his father that evening it would do no good to have the battery only capable of powering the system for a minute or so. He envisioned that the final video provided by George Dilling’s people would be at least five minutes long.

The results were very good. Although he had played a total of four minutes of video time, the battery still held over ninety-nine point eight percent of its charge.

“That will do nicely!”

“What will do nicely?” the voice of Bud Barclay inquired from behind him.

“What? Oh, Bud. Hey. I was just thinking out loud.” Tom told his friend about his progress with the video player, and then demonstrated it.

“If you send them that video of Bash in her blue bikini, skipper, what in the world will they think of us? I mean, we’re not all dark-haired and gorgeous... well, she and I are, but you and Sandy are just pale blondes and *don’t you ever repeat that to her!* I’ll swear I never said it.”

Tom laughed. He got up and stretched his arms and back. “I promise. Actually,” he said turning serious, “I’ve asked George Dilling to put together a video showing our space friends exactly what we look like—including lots of different examples to show various skin colors, feature types and both genders. They should be able to interpret from that mix that we all look different from one another.”

Equally as serious, Bud asked, “How detailed are you going to get on the gender thing?” He raised one eyebrow.

Tom blushed suddenly realizing that the dark-haired flyer’s question was not only valid, it was also a possible source of misunderstanding.

“Honestly, Bud, I don’t know. I don’t think George will put in any pictures of a nude man or woman, but I might ask him to include pictures of people dressed differently including some photos of people in bathing suits. That ought to get the shape difference point across. We’ll just leave it unsaid what the different curves and things mean.”

They stood in silent thought for a minute before Tom motioned for Bud to sit down.

“I could use your help, flyboy,” he said.

“Shoot!”

“Well, tomorrow morning I’m going to take delivery of one of the new Swift PriRocs.”

Bud held up a hand. “Whoa! Pry Rock?”

Tom spelled it out. “The PriRoc is our new Private Rocket line. It is going to be sold as a two-stage rocket capable of getting a payload of up to fifteen pounds into a low Earth orbit of about eighty miles and at a speed sufficient to keep it up for at least three days of orbits. Then, after checking its own GPS location, a small computer onboard sets a re-entry point for the payload section that will bring it down within about a mile of a pre-selected landing point.”

“Jetz! Sounds great. What are you sending up?”

“I’m going to replace the second stage liquid-fueled engine with a repelatron and enough Solar Batteries to power it full tilt for a thirty-minute push toward Mars. Our space friends will be out there to

intercept it somewhere outside the Moon's orbit and then will return it to a Moon orbit a few days later once they—”

Sensing that his friend was realizing something important, Bud waited.

“Bud. What a goof I am. I made my video machine a playback only. I need to make it record our space friends so we have a video of them. So, unless you've got something else on the rest of today and all day tomorrow, stick around.”

Together, the two spent the final three hours of Friday rigging up a small, color video camera on a separate circuit board and then tying it into Tom's playback circuits. Tom did the layout and indicated all of the components to be used, and Bud—more accomplished at soldering than he believed—assembled most of electronics. Before they departed at six, Tom tested the recorder. He had included enough memory, along with a wide-spectrum LED light ring, to record two hours of high-definition video.

“I only hope that the light source doesn't hurt their eyes,” he stated as they left the underground hangar and headed for their cars.

That evening, after explaining both his progress as well as his concern about the lights, he asked his father for his thoughts.

“If you want to be certain, my suggestion is to add a little extra to your set-up. First, I'd use a camera that can work in very low light all by itself. There's one from VisionForm USA that Harlan Ames uses in the night vision cameras out on the perimeter walls. It can auto-switch to use different light sources by sensing the wavelengths available.”

“I'll call him right after dinner, Dad,” Tom said. “I just hope he has an extra one I can get tomorrow.”

“I'm certain he does, Son. I signed a requisition for a case of twenty-four of them just two weeks ago. Anyway, the other thing I'd do is to add the major four different wavelength light sources as separate LEDs and give each one an ON/OFF switch.”

“So, if any one or more of them bother our friends, they can turn that one off?”

Damon Swift nodded at his son.

“I can certainly do that. There will be plenty of room in the case to add that. Guess I'll put the associated button right under its light so they know what ones to press.”

They talked for another hour about Tom's plans before the older inventor said goodnight. “I'm off to The Citadel at six tomorrow morning. I have a meeting with our Safety Manager and then I'm heading over to pick up some of those records from our old friend

Senator Grimsby's files still being held by the Attorney General.”

Tom heard his father leave at about five-thirty and lightly dozed another hour before getting up, showering and heading to Enterprises. He arrived at a few minutes past seven and was amused to see that Bud's convertible was parked next to the entrance to the hangar.

“Morning, flyboy,” he greeted a yawning Bud. “You're up and in here early. What gives?”

“I had a couple of ideas last night,” the flier admitted, “and I wanted to get in here to see if I could do anything with them before you got here. Actually, I just arrived five minutes ahead of you so I haven't had any time to do anything.”

Tom asked what sort of ideas Bud might have had. When his friend related them, Tom began laughing.

“You and dad, Bud. You and dad. He had the same idea about the separate light sources and switches. I was going to make that your first assignment today.” He then told Bud about the camera Harlan Ames had agreed to leave for pickup at the front desk of the Security offices. “In fact, while I get things ready here, could you run over and get that camera?”

“On my way.” With that, Bud jogged out the door.

He returned ten minutes later with two small boxes. “Harlan left two of the cameras, skipper, along with a little note that said to take them both in case you needed one for anything else in the future.”

Tom drew up a list of new components for Bud to pull from the storage cabinets along the right wall of the lab. While those were being collected and laid out on the bench, Tom read through the specifications of the camera.

“It's an amazing bit of equipment, Bud,” he said. “All I need to do is hook up a plus five-volt power lead and a ground, and then take the video output from a built in mini-jack. It even includes audio.”

The two set about making the changes to the circuitry for Tom's video system. By the time 9:00 a.m. rolled around, they had everything complete and tested. Bud left the lab to go get a couple of coffee drinks at the commissary.

The rocket arrived just minutes behind Bud's departure. Two men wheeled it up to the doors of Tom's office on a special dolly. It was divided into three sections, the longest one being the first stage which was just over ten feet long and sixteen-inches wide. Five thin aluminum fins lay flat against the sides near the back end of this stage. Tom knew that they would pop out automatically when the countdown reached T-minus ten seconds.

A set of three, slightly smaller fins were also located at the back end of the second stage. These, he explained to Bud after the flier returned with their drinks, popped into position upon separation of the stages so they would not be an impediment to safe flight until actually needed.

“I know I say this a lot, skipper, but Jetz! She’s a real beauty. What sort to fuel does she use?”

“Liquid oxygen for the oxidizer, and then any of about five other possible propellant fuels. Kerosene, JP-6 jet fuel and one-hundred percent ethanol are the three main and safest ones, but we also made the tanks capable of using dimethylhydrazine and even liquid hydrogen.”

“No room for your Solarizer or fuel kicker I guess,” Bud said referring to two of Tom’s inventions that made their flight into space as the first privately funded orbital rocket possible.

“Hardly. We had to sacrifice a little space in the tanks for a fine carbon fiber mesh to keep fuel from sloshing around as it is. Anyway, the second stage is a three-quarters version of the first using the same fuels. Well, for most flights. Today, you and I are going to gut that stage and install that repelatron over on the far table,” He indicated the dish emitter antenna that looked like one-third of a basketball with a cube mounted to the top of it.

Like all of Tom’s repelatrons, it combined a small, inner antenna that transmitted a special signal out that bounced back with information about the elemental makeup of whatever the antenna pointed at. Once the computer in the cube computed the main composition, it adjusted the outer ninety percent of the antenna to send out a repelling ray to push against that element or elements.

All in all, it took less than a second to adjust to any new setting and to continue the ‘push’ of the field. The only variable was the distance the antenna was from something solid.

“So, the rest of the second stage is going to be... what? Batteries?”

“Yes. The Outpost has been building a special round version of the batter especially for this rocket. It fits snugly inside the bottom of the payload section, normally, and powers the entire electrical needs of the rocket. I had five of them delivered last night. You see those small crates outside the door when you came in?”

Bud nodded.

“Well, that’s the batteries. Between the five of them, the repelatron will be able to operate at maximum power for thirty-one minutes. And, since we don’t have to worry about inertia and hurting anyone inside, it will accelerate up to a velocity of two hundred and ninety-eight thousand miles per hour before it runs out of juice. It will get to

the moon about an hour and a half after it launches.”

Bud whistled. “And, the space friends will be able to sort of catch it even at that speed?”

It was Tom’s turn to nod. “They seem to have the technology. Hopefully we might learn about that someday. If I can get them down here and if their masters let them stay, that is.”

By the time Tom called a halt to their work at five that afternoon, both boys were tired and hungry. They were about to turn off the equipment and leave when they both heard the tell-tale clomping of cowboy boots on the concrete floor of the hangar, and a familiar whistling.

“Howdy, youngin’s!” boomed the voice of Chow Winkler as he came through the door. “Vittles is here. Your mother called me and asked me ta bring in some food fer ya both,” he told the astonished boys. “She said ta make certain ya got a good meal in ya before ya get ta overworkin’ yerselves too bad.”

Tom didn’t have the heart to tell the old ranch cook—now Enterprises head chef and personal cook for Tom, his father and most of Enterprises’ executive staff—of their eminent departure.

“Great, Chow!” he exclaimed giving Bud a look. “We were just going to grab a burger or something. This saves us the trip.”

“Yeah,” Bud said with a malicious grin. “Why go out for heartburn when we can have it delivered right here?”

Chow stopped uncovering the several dishes and pots on his cart and looked at the flier with narrowed eyes. “Jest you wait, mister smarty-Buddy-boy-pants. Jest you wait. One o’ these days I’ll make ma special Sneaky Pete soup fer ya. Ya’ll take a bite and absolutely love it. Ya’ll take another and be amazed at the flavor. Then, it sneaks up on ya and yer throat’ll swear someone set fire to it! I’ll give ya hearburn...”

Tom stepped forward. “Bud’s just joshing ya, Chow. He’s as grateful and I am. What have we got?”

Still grumbling under his breath, the former chuck wagon cook—which was the origin of his name, Chow, rather than his given one of Charles—finished uncovering everything. “I figgered ya could use a good piece o’ steak, so I broiled up a couple eighteen ounce rib eyes, medium o’ course, with au jus and a special steak sauce and horseradish concoction I been makin’ fer a long time, mashed taters with a hint o’ garlic and sage, and steamed and buttered Brussels Sprouts.”

Bud made a face.

“Them’s fer Tom, Buddy-boy. I know yer a picky hombre ‘bout

vegetables so I fixed ya some green beans with red pepper slices. Anyways... cherry pie fer dessert and I know ya both like *that* pretty good.”

Truly touched, Bud could only whisper “Thank you, Chow.” He now felt bad about kidding the older man.

Three seconds after taking the first bite of his beans, however, Bud roared out at the departing Texan. “Chow! You put red pepper *flakes* in there! It’s hot!”

Over his friend’s gasping and gulping of water, Tom could hear a few chuckles from Chow as the elevator doors closed and he rose back toward ground level.

“Serves you right for being nasty,” Tom told Bud.

They both ate, with Bud pushing his beans to one side, in silence. With renewed energy, they worked on another two hours before calling it a night.

“Why don’t we take my car and you can sleep at our house tonight. I can use your help again tomorrow,” Tom suggested.

They climbed into his little sports car and were soon roaring out the main gate and down the country road. Tom turned left onto a narrower road, one that he often walked along between home and work when the weather was good. It made the three-mile drive on normal country roads shorter by almost a full mile, even if it was a bit winding and narrow.

In the dusk light Tom could see a bright green hatchback car parked half on and half off the road. He slowed thinking that they could skirt around it. As they got closer, both boys could see a pair of legs—obviously a woman’s legs—sticking out from in front of the car.

Tom stopped the car and they both rushed to see what might be the matter.

As they came around the front of the car, the woman sat up and blinked at them.

“Hello,” she said with a beautiful smile. “I broke down and was just trying to see if there is anything wrong under my car.” She rose and dusted her short skirt off.

Bud got down on his knees and peered under the car. As he reached over to check a dangling hose, he heard a dull thud and then saw his friend hit the ground. Before he could get up to his feet a sharp pain scorched through his brain, and everything went black.

CHAPTER 4 /

THE NAKED GIRL

TOM AND BUD awoke to darkness. Both were bound and gagged to some sort of wooden chairs. The air around them was dank and musty. It made Bud sneeze which served to cause his gag to loosen. He has soon able to push it out of his mouth with his tongue.

“Skipper? You with me?”

“Ymmph,” came the muffled reply.

“I suggest sneezing. It knocked my gag loose. If not that, then maybe we can swing these chairs around and I can undo yours with my teeth,” Bud offered.

A couple of tries later and they both realized that the chairs were firmly attached together.

“Well, skipper, there’s nothing to do but to try to get up and then smash these chairs on the floor. It works in the movies.”

Together, with Tom grunting agreement to Bud’s suggestions, the two boys maneuvered their chairs—still attached to them with the ropes that bound their hands and feet—up about ten inches from the floor. Bud counted down from three and the two slammed their chairs down to the floor.

It took three tries before Tom’s chair splintered, and another two before it fell apart, but they were soon undoing the ropes and letting them drop to the ground. Finally, Tom pulled his gag out.

Whispering, he said, “I hope that nobody is outside. They’re sure to have heard that.” Then, realizing that his low tones were silly given the possible situation, he continued in a normal tone of voice. “Go see if you can spot anyone out of that back window and I’ll check the front.

Neither spotted anything, so Tom tried the door. It opened without problem. He peered all around and then motioned Bud to join him. They stepped outside where Tom turned to look at their former prison.

“Spot anything recognizable, flyboy?” he asked jerking his head back toward the one-room shack.

Bud look over the entire structure. “Looks a little familiar now that you mention it. “Say,” he exclaimed as it hit him. “That’s the same shack we got tied up in, gee, way back about two years ago, isn’t it? I seem to recall we got clobbered that time, too.”

Tom nodded. It was, he was certain, the very same shack they had been imprisoned in almost two years earlier. "I'm going to have Harlan figure out who owns it and see that it gets torn down," he said with a rueful grin.

They crept across the small clearing and peered through the bushes at the edge of the area.

To Tom's surprise, his little sports car sat parked there, covered with a few broken branches, almost as if it were waiting for them. The boys looked at each other and shrugged.

"Let me check it out, skipper," Bud told Tom. Five minutes later, and with absolutely nothing out of the ordinary spotted, the boys were speeding toward the Swift home where Tom called to his Security chief and reported their recent attack.

"I'll get right on that car and the woman, skipper. Any chance you or Bud got a plate number or saw whoever hit you?"

Tom asked Bud if he remembered any of the license letters or numbers. "Harlan? Bud is pretty sure that it was a New Jersey plate and began with Alpha Romeo Golf and them possibly the number seven. Nothing on the guy with the club!"

Ames promised to get right on it, so Tom and Bud headed off for some aspirin and then to bed.

The following morning they borrowed a small electric transport vehicle, carried the first stage to the elevator and then out of the hangar where they placed it in the vehicle's cradle. A short drive to the other side of Enterprises took them to the small rocket engine test area. Completely surrounded by a twelve-foot high concrete wall, the test area featured an adjustable mount, fuel sources and an underground control bunker.

Within an hour they had the rocket stage mounted, hooked up to the fuel and oxidizer lines and were counting down the test fire from the bunker.

When Tom reached "Zero," he pressed the FIRE button. With a rumble that came through the reinforced walls and over six feet of compacted dirt and stone, the engine came to life. On their screens the boys could watch from six different angles. While Bud kept an eye on the screens, Tom checked the readouts.

"Everything looks great, flyboy," he said as he hit the STOP button. The engine immediately shut down and the smoke began to dissipate as it was sucked into a vapor recycling system. This separated the incredibly hot air from any unburned particles in the exhaust. What exited at the other end was still capable of burning through thin metal plates, but more than eighty percent of the pollutants had been removed.

“How’d we do?” Bud inquired.

“Smooth, powerful and steady,” Tom proclaimed. “Just the way we want things. As soon as she cools down, maybe a half hour or so, we’ll unhook things and then head back to the lab. It’s about time to finish assembling the second stage and mount the payload.”

Within the hour they returned to the underground hangar and recommenced their work.

By the time noon came around, Tom announced that everything was ready. “All we need is George’s video and then we can take this out to Fearing and launch it.”

Tom’s TeleVoc pin announced an incoming call. He tapped the pin to activate it. Without vocalizing aloud, he said, “Yes? Tom here.”

In his mind, rather than in his ears, he heard, “Hey, skipper. George here. I take it from the earlier roar and thunder that you are here at Enterprises and testing your rocket.”

When Tom verified this, Dilling continued. “We got the electronic file from NASA from the old Voyager videodisc. It’s pretty basic and appears to be designed to give some indication of how we are constructed, but not enough so that anything out there might be able to spot weaknesses.”

“Okay. What does that mean for our needs?”

“Basically this. There’s more about Earth music and architecture and cities and transportation than about people. There’s Da Vinci’s sketch of man and outlines of male and female bodies, but no hard facts like the ones we hope the space friends will be able to provide us with.”

“Yeah. I was afraid of that. So, what can you do? I’d really like to get this thing launched tomorrow if possible.”

Dilling cleared his throat. “We’ve been working around the clock, Tom. If you have the time, I could use your eye to see what we have and then let me know what I’ve missed.”

Tom agreed to head over immediately. “Is it okay to bring Bud?” he asked.

“Just so long as he doesn’t smirk when he sees the naked girl.”

The boys walked into the Communications building five minutes later. Tom had not mentioned the “girl” to Bud.

“Oh. Hello, skipper. Bud,” George greeted them and led them into the video edit suite down a short hallway. “I just had Barry drop in a scene regarding how our oxygen comes from plants and trees and the oceans.” He placed a hand on the video technician’s shoulder and asked, “Are we ready?”

Giving his boss an 'OK' sign, the tech pressed a button and the large flat screen above his station came to life.

For the next twenty minutes the boys saw a series of scenes interspersed with some of the symbols both recognized as coming from the alphabet used by the space friends. They saw high speed footage of plants and animals growing along with how humans grew and matured (including tasteful nude photos of a man and a woman), the "where air comes from" video including demonstrations of inhalation and exhalation—George had included a realistic CGI-rendered animation of how lungs work—plus views of different species and their relative sizes to each other. That sequence finished with a photo of Tom standing next to the one thing Tom realized the space friends would already know the exact dimensions of: the projectile that had crash-landed at Enterprises more than two years earlier and had been the first communication between the races.

The video ended with several photos of Tom, his father and of Earth with an arrow pointing at Enterprises.

"I'd like to add a personal greeting to this, skipper. From you, of course. If you've got another ten minutes we can step into the sound booth and get that."

"Just audio? How about video as well?"

"If you've got a few more minutes so we can set that up, sure."

Tom agreed. Eighteen minutes later he and Bud left the building with the promise from Dilling to send over the compressed video/audio file to Tom's computer in about two hours.

When it did arrive, Tom and Bud watched in once more. George and his editor had made a few refinements to the flow of the presentation including adding a piece of video of Tom when he had recently made an address to a group of incoming college interns. In it, he introduced himself and welcomed them to Swift Enterprises. This snippet was followed by a flyover of the Enterprises complex and then launched into parts they had already seen.

When it ended, Bud turned to Tom. "Just promise me you won't tell Sandy that I saw the naked girl and I won't tell Bash. Okay?"

Puzzled, Tom asked, "Why?"

Now, Bud was puzzled. "Didn't you recognize her?"

"No. Not really. Pretty woman and a really nice body, but I don't think I've seen her before. Why?"

"Because, professor, that is Alicia Avedis from George's happy little group of employees. His secretary. And, she's a friend of Sandy's. That's why."

Tom turned bright pink. "Oops! I didn't make the connection.

What about the guy?"

Shaking his head not believing that his friend could be so dense, Bud told Tom, "You were looking at the back of his head the entire time we were in the editing suite."

Tom was totally nonplussed. He couldn't think of a thing to say for several minutes. Finally, he said, "I think that we just never talk about this, ever again. Right?"

"Got it!"

Tom uploaded the video into the system. A quick test showed that it was all there and would play on command.

He checked his watch. "Let's go grab a sandwich and head over to Hank's workshop. The outer housing for this thing should be ready in another half an hour or so. Once we get that cured, we can put the payload together and head home."

Earlier in the morning he had transmitted a 3D image to one of Hank Sterling's large 3D printers. It had been built up, micro layer by micro layer, from clear acrylic polycarbonate.

As they ate, Bud asked about the other components in the payload. "I saw a lot of other fiddling bits and bobs that aren't part of the video system, skipper. What are they?"

"Well, there's a gravity sensor so we have a good idea what their normal level is along with a vacuum flask that will automatically open once it detects a positive and stable atmosphere. That will give us a sample of their version of air. Then there is a mini-spectrograph. You remember that part of the video where George picks up a piece of meat and eats half then puts the other bit into a small box?"

"Sure. I wasn't certain what that was but forgot to ask. Is that the spectrograph?"

"It is. I'm hoping they will understand that I want a sample of what they eat so we can determine basic protein structures. Anyway, there is also a tiny refrigeration box filled with about a dozen slides. That part of the video about pricking a finger and smearing the blood on a slide is a reference to that. With any luck, we'll get several samples from them all safely stored in a sealed and cooled version of their atmosphere."

"What else?"

"See that flip top cube? That holds samples of several types of fabrics used in our clothing. I hope they understand that they are to take those out and put some of their own inside. I've created a note and put it in there with symbols I believe will give them the idea."

They ate the rest of their lunch in silence except for a few small burps from Bud after he drank two cans of club soda.

Hank's workroom was their next stop. On entering, Tom could see that the 3D printer against one wall was nearly finished creating the two pieces of the outer case. Each one, shaped like a boxy letter 'U' would be oriented ninety degrees from their mate and would slip together to form a cube. Small holes for the control buttons adorned one while the other was mostly solid.

A bell rang signaling that the process was complete. The boys watched as the liquid medium inside the tank drained away leaving just the two clear pieces. A fan roared to life blowing off all residual liquid, and then the top opened and the two pieces rose up on the tank's bottom platform.

Tom transferred the platform over to a tank of ice-cold water where the pieces were washed and then dried. This was followed by a five-minute trip into an oven where the pieces set to full strength.

Had Tom tried to pick one up before this, it would have warped and been worthless.

Now, however, both were stiff and strong.

They returned to the underground lab where Tom did the final assembly beginning with the addition of a special silicon seal ring that would seal the parts together, and silicon seal washers for all of the external buttons.

He plugged the completed package into the payload stage's power pack and ran it through a series of tests. Everything passed perfectly, so he closed up the payload section and the two went home.

When he arrived, he was greeted by his sister. She hugged him and kissed his cheek. "Hey, Tomonomo," she said, happily. "Boy, am I glad to see you. I had a phone call about an hour ago from a woman who claimed to be in great distress."

Tom had a momentary shock as he recalled the woman and the green car. Seeing her brother suddenly look a little panicky, Sandy hastened to add, "She said to tell you that she yearns for the feel of your arms around her and the view of your eyes looking into hers."

"Uh... she...um... what?" Tom was confused.

"Bashi, stupid! Bashi called and asked whether I might talk you and Budworth into a quick date tonight. Nothing strenuous. Just a deli dinner or something. She misses you, ya lunkhead. Do you realize that she hasn't seen her guy for almost four days? That's practically forever."

Tom chuckled. "Okay. If you can get Bud—"

There was a knock on the front door.

"—who I assume is on the other end of those knuckles..."

Sandy's head bobbed up and down as she raced to the door. There stood her favorite—and truth be told, only—date, Bud with the beautiful woman Tom considered to be the best thing that had ever happened to him.

“Corned beef on rye, anyone?” Bud asked. “I found this lost young girl wandering aimlessly around the greater Shopton area calling out, ‘Will nobody hear my calls. I am lost and lonely. Is there no man who will rescue me from a life of loneliness?’”

Tom grabbed a cushion from the end of the sofa and hit Bud in the chest with it. Next, he stepped forward and took Bashalli in his arms and gave her a hug and a kiss. She responded by holding him firmly in her grasp for almost ten seconds.

“Wow,” was all Tom could say stepping back a foot and taking her hand. “I hear that Bud and I need to pay attention to you and Sandy, but that I am probably the worst of the two of us. Can I make it up to you?”

The Pakistani girl smiled coyly and replied, “I may have to think about this for a few hours. And, I can only think about this important issue if you are within just a few inches of me during the entire time.”

She and Sandy giggled. Even though there was almost three years difference in their ages, they were very best friends. Sandy held out hopes that the older girl would become the sister-in-law that she always wanted and the wife she knew Tom deserved.

As for Bashalli, her family and national roots made things a little tricky at times. Her parents and brother, Moshan, held out hopes that she would meet a nice Pakistani man and be swept off her feet and away from Tom. Her mother knew that such a ‘broom’ would need to be unbelievably perfect and that the time for even that had probably passed. Her father was almost as certain as his wife about Bashalli's future—and that it would include Tom Swift—but knew that it was expected of him to continue putting up protests.

Her brother was the most staunchly verbal about his hopes for his sister. The only problem was that he actually liked Tom and only wanted Bashalli to be as happy as possible. While he grunted and grumbled, he secretly hoped they would ‘get it over with’ soon and get engaged so he could go back to smiling most of the time.

“Where are we going?” Tom asked.

“Rosenbloom's okay with everyone?” Sandy inquired. The delicatessen had been a fixture at the north end of Shopton for over thirty years. The first time Tom introduced Bashalli to chicken soup with matzoh balls had been there. “Lightest matzohs in New York!” she reminded them.

Ten minutes later Bud's car pulled into a convenient parking spot

directly by the front doors.

“Parking karma!” Sandy declared.

Inside, the place was full with several couples and one large family waiting in the entryway. Sandy plunged between a very large woman and her equally large male companion and made her way to the desk. She spoke with the hostess who smiled and nodded.

Sandy returned. “Come on. Table’s waiting.” She grabbed Bashalli’s hand and pulled her along while the boys followed close behind.

Once they sat down, Bud said, “I thought Rosie’s didn’t take reservations.” He was eyeing his date who was trying to look as innocent as a newborn lamb as she studied her menu.

“They don’t,” she replied, not looking up. “However, their daughter, Lyda, is a year younger than I am and for some reason thinks I’m a glamorous and wonderful person. That, and the fact that I promised to take her up flying this next weekend. She magically discovered this one was empty and waiting for us.” She giggled and continued studying her menu.

They decided to order six dishes and to share. Everyone enjoyed everything except Bud who did not partake in the chopped liver, sweet onions and sour cream with blintzes appetizer. During dinner he made a disparaging comment about the origin of the main ingredient.

“Cow guts or not, Budworth,” Sandy said to him as she punched him in the arm on the way out to the car, “Rosie’s chopped liver is to die for. One day I’ll get you to try some. You’ll absolutely fall in love. For the second time in your life. I, obviously, am the first.” She doubled up her fist and waived it under his nose.

Holding up both hands in mock surrender, the flier said, “I give. I’ll try it next time. Now, just what was the order of things I’m supposed to fall in love with?” He darted back just in time to avoid a second arm punch.

They drove to the lake and parked as far away from lights as possible. It was a beautiful night, so Bud had put the top down on his convertible. They sat looking up and the stars and talking about the forthcoming alien visit.

Tom told them all about the latest developments and how he felt that at least two of the obstacles were being addressed. “We have the start of real dialog about what they need and the agreement to let us send the probe. Plus, the advances dad and I made in translating incoming and outgoing signals will mean better communication. I just hope we get all of the samples and the video we need.”

“Daddy told me you did that all by yourself. You should be proud,” Sandy said to them all.

He was about to continue when he detected a small vibration and noise near his shoulder.

Bashalli, who had placed her head there as she listened to her guy talk, had drifted to sleep and was lightly snoring. Tom kissed the top of her head as Bud started the car to drive everyone home.

THE BOYS FLEW to Fearing Island the early next morning. Tom wanted to run another full inspection of the unmanned rocket before sending it to streak toward the pickup point. If everything went well, it would quickly be taken to the space friends' Outpost near the red planet where it would deliver the self-running video system and other items. After being there less than one full Earth day the aliens were to return it as fast as possible with its payload of an example of the atmosphere in which their space friends lived, video of what the space beings looked like, and perhaps a clothing, food and blood sample or two.

While the cameras would be videoing its surroundings, the screen would also display a combination of symbol messages explaining what sort of video Tom required. Along with the photos and video of Tom and Damon Swift, they would be treated to a fly-by of the Swift's space station in orbit 22,300 miles above Earth and images from Nestria and the Moon. For the Nestria photos, Tom had asked George Dilling to include the pictures taken of the small cave in which Tom first discovered a mysterious stone that appeared to be associated with the artificial gravity on the planetoid.

As he believed that they were responsible for placing it there, Tom hoped that they would recognize it.

"When is this going to get back home, Tom?" Bud asked eyeing the now twenty-foot-tall rocket sitting on its small gantry. "I know you told me they should have it in a few hours, but when do we see what they've sent us?"

"It gets rocketed straight out heading faster than escape velocity. They pick it up and take it to their Outpost, which I've been led to believe will take them just about four hours. Assuming they keep it for around a full day and then do the reverse trip to drop it off into lunar orbit, we'll have everything back in less than two days. They signaled last night that they plan to be in a position fairly close to the Moon sometime around eleven, our time, which is just two hours from now. Once they get it they have promised to signal us with the symbol they use to indicate success."

"So, they get it, watch it, fill it and bring it back. Then what?"

"Then, you and I go up there in the *Challenger* and retrieve the capsule and bring it home."

"So, why don't we personally deliver it to them up there," Bud inquired. "Maybe we could just meet up and hand it to them?"

“For starters, remember that this is going to accelerate at speeds that would crush us. They also have asked that we don’t get too close to them for the time being. It seems that their masters can detect when an alien ship is near and they have been ordered to avoid all contact until they depart the solar system. We’ll just play their game for the next few days and hope the capsule is too small to get noticed.”

Tom supervised the attaching of the small rocket to its fueling pipes and electronic launch systems. Returning to the launch blockhouse, he ran everything through a systems checkup and pronounced the rocket good to go.

A short countdown followed during which Tom contacted both the Swift’s Outpost in Space to advise them of the launch as well as sending a message to his space friends giving them the exact takeoff time.

His final call was to the control tower. “How are we looking, Leo?” he asked the chief controller.

“Cleared, skipper. Whenever you’re ready.”

A minute later the rocket shot into the sky with a roar. One minute after that, the first stage emptied and separated, its recovery parachute billowing open as it dropped away. The repelatron kicked in and the rocket accelerated at high speed. It was almost immediately lost to sight but remained on the Fearing Island radar until it passed beyond about twenty thousand miles.

“We have her on our tracking system,” Ted Ellert radioed from the space station. “She’ll be passing our orbit in about one minute, thirty seconds.”

“Well, that’s that,” Bud exclaimed. “What do we do now?”

“Head back to Enterprises and wait. And work, too.” Tom said.

Following an uneventful trip back, the two boys went separate ways with Bud heading for a flying date with Sandy, and Tom going back to his underground office and lab. He wanted to start working on a new device based largely on the principles of his repelatrons, but one that might be used to provide a version of micro gravity. It would be necessary to take a small tissue sample of each being who would be supported by the device, but it was the only way Tom felt he could conquer the forces of gravity. He hoped that the blood samples returning on the rocket might give him the necessary information.

An hour later, a knock on his door brought him out of his concentration.

Standing in the doorway was the beautiful Bashalli Prandit who Tom considered not only his favorite date, but had been developing greater and deeper feelings for.

She smiled and did a short curtsy holding out the edges of the shiny, blue silk dress she was wearing. “Hello, stranger,” she said crossing to him and giving him a peck on the lips.

Tom smiled but reddened. He really loved Bashalli but was basically a very girl-shy young man.

“Hi, Bash,” he said, recovering his composure. “Uh, how did you get in here?”

“I had an escort,” she explained standing aside as Bud and Sandy entered the office.

“Hey, ho, Tomonomo,” Sandy greeted him.

“You know, Tom,” Bud began. “It recently came to my attention that our little date last evening was... what is it I’m supposed to say,” he stage whispered to Sandy. She made a face at him and stuck out her tongue.

“Bud was supposed to tell you that he feels very strongly that one quick date, no matter how great the reuben was, is not enough. You’ve been so stuck in this office trying to work on the space visitor problem that you have become...”

“... Uh?” Bud contributed with a helpless shrug.

“Too pooped to party?” suggested Bashalli with a laugh that they all shared.

“Okay. I give in. I haven’t been exactly Mister Social these past couple weeks, have I?”

Sandy said, “You remember Mrs. Trunbridge at the Junior High, Tom?”

He said that he did. “Sure. She was the one that gave me the idea for the Endless Rain Barrels.” These wonders of science were a combination tall icy-cold chrome column that collected moisture like a tall glass of iced tea, that then purified and stored the water that ran down the outside and held it for later dispensing to people living in areas with little or no potable water. It had been Mrs. Trunbridge’s ice tea glass that had given Tom the original idea.

Well,” his sister continued, “she told me how you used to sit in class and just start into space. You wouldn’t go out to play with the other kids sometimes. She even told mother that you had problems playing with others.”

“Like I said. I give.” He looked at Bashalli and realized how much he wanted to spend more time with her. “What’s on the schedule? I’ve got a day or two until we get back that probe. If you can just give me an hour or so this afternoon...”

“It’s already six. Tonight the Carlopa Reparatory Theatre group is putting on a buffet dinner followed by a performance of a British

farce. *Taking Steps* is the name of it. And, if we hurry we might even get there before all the food is gone and the play begins!”

“But I’m a mess,” Tom replied. He realized he wasn’t going to get a reprieve on time, so he began saving his files.

Bud held up an index finger and reached around the door with the other hand. “Observe. Nothing up my, uh, sleeve,” he said noticing that he was in a short sleeved shirt. He brought his other hand back into the room holding a garment bag. “Pants, shirt and loafers. Catch!”

Tom took the bag into the small apartment attached to the office and lab. He sometimes spent the night there when work kept him from going home. Minutes later he emerged to applause and another kiss from Bashalli.

They took Sandy’s four-seat convertible and made it to the Lake Carlopa site in plenty of time to eat, talk with a few friends who were also there, and to get to their seats for the performance.

As the curtain rose and the house lights darkened, Tom moved his hand from his lap over to gently take Bash’s hand and gave it a squeeze. She responded by leaning her head over to rest on his shoulder. And though her head moved around during the performance, her hand never left Tom’s until it was time to applaud the actors for their exemplary work.

By the time the final curtain went down they were almost hoarse from laughing.

“What a wonderful play,” Bashalli remarked as they walked toward the car.

“Mother said that she and daddy saw this in a theater in Connecticut a couple years ago. She really knew we’d love it.”

The four drove back to Shopton agreeing on the way that a nice soda and an ice cream would top off the evening. They soon arrived at a local hangout where they ordered their late evening desserts.

When Sandy and Bashalli went off the powder their noses, Bud leaned over to Tom and said, “I saw you holding hands with Bash. Is it true that love comes finally to young mister Swift?”

Tom only smiled. “Ha-ha. You’ve seen us holding hands and kissing before. No news here, flyboy.” Bud couldn’t get anything more from his best friend but knew that Tom was smitten with the dark-haired dark-eyed girl as he was with Sandy.

The evening ended when they dropped Bashalli off at her home. Tom accompanied her to the door. This time when she rose on tiptoe to kiss him he didn’t flinch. Parting several seconds later she backed up, smiled warmly at him and then entered her house. As Tom headed back to the car he could hear Bashalli’s mother questioning her. He caught words like ‘relationship’ and ‘only him’ before he was out of

earshot.

He was still floating on air the following morning when he sat back down and returned to the problems involved in creating a low gravity environment for their hoped-for visitors.

I wish I could understand how they do the gravity trick on Nestria, he thought. *Maybe they could supply us with some sort of device like the gravity thing up there.* He was thinking about the mysterious object buried deeply in a cave on the little asteroid, now Earth's second moon. It evidently enhanced the low gravity for the planetoid, far greater than the small chunk of rock could generate by itself yet lower than even the Moon's gravity.

He sent out a message that morning to ask if they could provide such a thing. While a little unclear, the answer that came back seemed to indicate that such a device only worked to create low levels of gravity but could not overcome existing gravity.

Disappointed but understanding that it had been a long shot, Tom continued to work on the device he thought he might call a GraviTron. It was very different from his Gravitex used in his space kite and cyclonic eradicator. Perhaps the names would be too similar.

Chow wheeled in a cart holding a pair of covered dishes at a few minutes past noon. "Git up and git it in ya," he commanded the teenager he almost thought of as a son.

Rising reluctantly, Tom went over to the table Chow was setting up for him. "What have we got today, old timer," he inquired.

"Got ya some tamale pie with some o' that cee-lantro infused sour cream you like for the top, a fresh tomater salad with balsa—balsoo—ah, that Eye-talian fancy vinegar. And for dessert I made up a peach crumble. Dig in."

Tom realized that he had been too overjoyed from the evening before to eat much of his mother's breakfast offerings, so he was now quite hungry. He dug in.

Chow, who had been standing by his cart, now came to the table as sat down. "You mind if'n I ask you somethin'," he inquired.

"Go ahead," Tom said wiping a bit of sour cream from his mouth. "You can ask me anything."

"Wahl, I know yore all set to bring your little space critters down here, and I got no problems with that. It's just that I got no idea what I'm gonna be able to fix fer 'em. What do they eat?"

"I plan to have the answer to that question once our rocket probe returns from Mars tonight," he told the loyal cook. Chow Winkler had been working in New Mexico when Tom and Damon Swift had met him during their development of the Citadel, the atomic research

facility they owned in the New Mexican desert. He had become so attached to the then sixteen-year-old Tom that he asked to be hired by Swift Enterprises so that he could cook for them.

He accompanied Tom on almost all of his adventures and had proven himself a deft hand under the ocean as well as deep in outer space. Though his balding head, weather-beaten face and rotund stomach made him look older than his actual years he was just over fifty years of age and in fairly good shape.

“So, you sayin’ that they are gonna give us a menu or somethin’ like that?”

“Not really. What we have asked them for is both a description of their nutritional needs as well as a sample or two of the foods they currently eat. I hope to either find things down here they can eat or to create the basic foods using my Solartron matter creator. One of the things they sent us months back in that rocket greenhouse looked very much like a red broccoli.” His Solartron was a marvelous device that could produce almost anything given enough free hydrogen and carbon atoms and energy.

“All right, but you be shore to tell me what I can make for ‘em in time ta git some proper in-gree-dee-ants in my larder,” Chow said rising from the table.

Before he left the office Tom asked him for a favor. “You’ve helped me name several of the strange contraptions I’ve come up with. Well, I am trying to create a new one that will reduce our Earth gravity down to the level our friends can tolerate, probably about a tenth of ours. I’m kind of stumped for a name. You have any ideas?”

“Makes fer lighter things? Like people from here as well as the space people? Kinda like an electronic diet then.” He pondered for a moment. “Grav-o-trim? No-pull-you? Sorry, youngin’. I’ll put my thinkin’ cap on. Might come up with somethin’ soon.”

He departed leaving the inventor to return to his designs. Tom began thinking out loud. “I really wish I didn’t have to remove a physical sample of blood or tissue to calibrate this kind of device. What happens if our visitors are like hemophiliacs and they can’t stop bleeding?” he muttered as he thought over the initial sampling stage of the device. “Of course,” he said as a new idea hit him, “we should be able to take a virtual sample using a variation on the sampler we use with the current repelatrns.”

He stopped and thought for a minute. No, he said to himself, the scan would only pick up the makeup of the epidermis of those entering the sealed environment. While that could provide an upward pressure, the effect would be like laying on a contoured board and being hoisted in the air on wires. The skin would bear all of the force and the underlying tissue might still feel the ravages of full Earth’s

gravity.

There had to be another way. But with time running out, Tom was hard-pressed to think what it might be.

An hour later he ran into his father in the hallway of the Administration building. Tom absent-mindedly muttered 'hello' as they passed on opposite bands of the ride/walk belt. They had reached a distance of more than eighty feet when a thought in Tom's mind suddenly clicked.

He jumped to the opposite belt and sprinted toward the older inventor.

"Dad," he said in a raised voice.

Damon Swift turned his head and saw Tom approaching. "Hello, Son. Keeping busy with the upcoming visit I hear."

"I am stumped, Dad. I've run into a wall and can't see how to get over it!"

"Let's go up to the office and talk it over," his father suggested. "I was just heading out for a little walk. I have a few cobwebs up here," he tapped his head, "that need clearing. Your problems may do an even better job."

They took the elevator at the end of the hallway to their office's floor and were soon sitting in a pair of the comfortable chairs that sat in one corner of their shared office.

Tom told his father of the issues surrounding reducing gravity to meet their friend's needs. He told him of the vague answer to his request and the different approaches he had thought to try only to have run into difficulties with each of them.

"You're right, Tom. I don't think that we can expect them to want to give us core samples before we can accommodate them." He chuckled. "They aren't trees after all."

"What's left," Tom moaned.

"Why couldn't you use the same technology you created when we needed to train people to work in space? Your zero-gravity chamber makes you feel like you weigh nothing, doesn't it?"

"I'm pretty sure that it would be the same as trying to use a form of repelatron energy. The force only affects the outer part of the being and the suit they wear; their insides will still be as heavy. For us, that's not an issue—we're used to it—but it could be for our friends."

Damon rubbed his jaw in thought. "Ah. Yes, I can see that. Well, what about an approach where you keep them up in low orbit and let them virtually experience things down here?"

"Such as?" Tom inquired.

"Such as having a series of remote cameras they can fly around

down here so they can see things close up. As far as live things go, you could have examples up there with you. Humans, obviously, and plants and some other flora and fauna.”

“Would that be enough to keep their masters from recalling them, though?”

“Let’s ask,” Damon suggested.

Tom composed a message and showed it to his father:

To Space Friends. Still working on gravity issue. If it is not able to be overcome, second plan is to provide environment and Earth life examples in orbit plus video capacity. Will this be satisfactory to your masters?

The two Swifts walked to the Communications building and sent the message. Tom and Damon looked through the message trying to ensure that it said and asked the things they wanted it to. In the end, they agreed that is was the best they might do.

Ten minutes later, Damon excused himself for a meeting with the Propulsion team manager.

“Let me know when we get something. I’m very interested to see if it can be handled that easily.”

It required an hour before a return message began coming through. Tom had been discussing a few things with George Dilling when the alarm went off.

“Here goes!” he said, turning back to the screen.

Images began coming through. Instead of copying them off manually, Tom decided to let the computer do everything. If there was some sort of confusion or contradiction, he would do things manually.

Five minutes after the message ended on the screens, the computer began printing out the results. As Tom read them, he nodded his head in recognition of the response.

SWIFT FRIENDS. REGRET TO COMMUNICATE THAT MASTERS CAN NOT BE CONTACTED TO ASK FOR PERMISSION. ORIGINAL MISSION IS TO VISIT PLANET SURFACE. NO OTHER.

IF IMPOSSIBLE, WE LEAVE AREA IN 47 DAYS. OTHER PLAN FOR VISIT TO ORBITAL STATION WILL NOT

**SATISFACTION MEET MASTERS
DEMANDS. APOLOGY.**

**YOUR DEVICE HAS BEEN ASSISTING.
NOW HAVE UNDERSTANDING US OF
METHOD OF COMMUNICATION OF
IMAGE. VERY HAPPY TO IMAGE YOU.
RETURNING DEVICE TO BE AT YOUR
LARGE SATELLITE IN ONE FORTH DAY.**

Tom sat there a little dismayed at this news. He was so used to inventing new things to meet new needs that he truly was sad he might lose the opportunity to finally meet the mysterious beings.

“Dad? I think we’re in trouble,” Tom told him when they spoke twenty minutes later back in their office. “I feel like I’m failing them. My brain is going in ten different directions these days but coming up with nothing.”

His father smiled, grimly, and replied, “Oh. I can think of at least one good reason why you shouldn’t feel badly about this. A very good reason, in fact.”

“Why?”

“Because you, and I for that matter, have tried and tried for almost two years to get them to communicate more about themselves. Now, whether because of a language issue or their stubbornness, they have barely scratched the surface. You can’t be expected to pull off a miracle with practically nothing to go on. Plus, there is another subject that your old father has noticed happening. And, don’t think that this has anything to do with the space friends issue.”

Tom looked confused, so Damon told him. “You’re in love, Son! Plain as the nose on your face.”

Tom blushed. He was about to stammer out a denial when the older Swift reached out and took his hand. “Tom? When I was your age I spent the better part of a year with my head in the clouds over a pretty girl. I pined for her when I went off to do my Graduate studies. Luckily, she transferred to another school just an hour away. Cost me a lot of gasoline, but it was worth it. I don’t know what I would have done if she had refused to marry me right after graduation!”

“Mom?” Tom asked.

“Who else? I’m not saying that Bashalli is absolutely going to be the forever love of your life, but for right now, she is probably one of the best things that could have happened to you. Don’t beat yourself up when thinking of her gets in the way of thinking about work. You can always rely on me to help you.”

They spent another hour talking man-to-man about life,

relationships and other matters. In the end, Tom felt better. He spent thirty minutes on the phone with Bashalli before they were interrupted by a call from George Dilling.

“Skipper? We just got the message that the probe will be back in orbit around the Moon in an hour. The translation also states that our friends request that we give them three additional hours before we retrieve it. Not sure why.”

Tom knew and thanked the communications man. He called Bud on his TeleVoc pin.

“Be ready to head to Fearing in about fifteen minutes. We’ll take the *Challenger* up and bring back the probe.”

Then, Tom headed back to the shared office to tell his father what was going on. “By the way, Dad. Thanks for the pep talk. I kind of needed that. Listen. Do you want to come up with Bud and me to pick up the probe?”

“No, Son. You go on. I’ve got a pretty girl to go home to. I think I’ll take her to a movie and maybe a nice walk along the lake. I guess I reminded myself that romance is an important thing, even at my advanced age.”

They both laughed and Tom realized how young his father looked when he was relaxed and smiling. Damon Swift, seen from about twenty feet, could easily be confused as being Tom’s older brother.

Before Tom could leave the office the phone buzzed. He pushed the speakerphone button. “Damon and Tom Swift here.”

“Tom. Mr. Swift. This is Ted Ellert out at the Outpost. We’ve been tracking the space probe and it was right on track to arrive at the Moon in less than an hour, but *it’s disappeared!*”

CHAPTER 6 /

LUNAR TREASURE HUNT

TOM WAS shocked at the news. “When did it disappear, Ted?” he demanded.

“We had it on the scope for the past hour,” he replied. “I saw a larger blip first come into range, the smaller one, our probe, separated heading inbound and the large object raced back off less than a minute later. Our package was coming in at the correct angle to the Moon and got to a point about ten degrees left relative to the lunar face, just about where it should have swept around and into orbit, when it just stopped showing up. It was there one sweep and gone the next. Sorry, skipper. We’re trying both the Megascopé and the SuperSight out there.”

Letting out a sigh, Tom told the man, “Just keep me advised. I’ll be heading out to Fearing in a little while and then will go out there. Thanks.” He signed off.

Giving Bud a call on his TeleVoc, Tom outlined their course of action. The flyer had been completing a post-flight check of the latest *Racing Pigeon* airplane off the assembly line at the Construction Company having just made the two-minute hop from the airfield at that facility and landing at Enterprises.

“Let me have about five more minutes and I’ll meet you at the hangar. What are we flying?”

“We’ll take that experimental job Hank and Art and the turbine propulsion people did on the prototype *Toad*.”

The *Toad*—more properly known as the SJ-11—was an over wing, twin-engine commuter jet. With the engines mounted on the top of the wing, and the rather wide and squat body slung underneath, a front-on view would tell anyone why Bud had given it the nickname. This new test version featured two additional turbines mounted directly below the upper ones, and a slightly wider and longer fuselage capable of carrying eleven passengers and two pilots ninety knots faster than the original. It had been certified for flight just two days before.

“See you as quickly as possible, then,” the eager flyer told his friend.

Tom next called Zimby Cox and Hank Sterling. Cox was one of the duty pilots at Enterprises and ranked as one of the best available. He held the dual distinction of being one of the most decorated test pilots in all the military branches where he proved his mettle flying high-

speed prototypes, and as one of the most accident-prone pilots on the Swift's payroll. He had 'crashed' more than half a dozen aircraft in two-plus years working for the Swifts.

None of the crashes had been his fault, and the fact that he had been able to make all but one a "controlled" crash only proved his skills behind the joystick.

Hank Sterling was not only the head of Enterprises' Pattern Making group—the people who took the many and varied invention designs and created the patterns and jigs and forms used to create each and every piece made of metal, plastic, tomasite, carbon fiber and other non-electronic items.

He was also a top pilot and had been involved in many of Tom and Bud's adventures.

Both men were rated to pilot all the space, ground-based, flying and seagoing vessels create by Enterprises. They agreed to meet Tom at the Barn, an open-ended hangar near to the underground hangar.

Ten minutes later the foursome were climbing away from one of the runways at Enterprises and winging toward Fearing Island.

As they reached cruising altitude Hank stated, "You and Bud get to have fun on the way out. This is an amazing adaptation of the *Toad* even if I do say so. Zim and I get dibs on the front seats on the way back. Okay?"

"Deal," Tom told them with a grin.

And hour later, as they lost altitude to come in for a landing on the former scrub grass strip of land off the coast of Georgia, Tom and Bud were telling their passengers about how great the new jet was handling.

"Just remember that promise," Zimby reminded them.

The large repelatron-powered cube-within-a-circular-rail ship, *Challenger*, sat waiting for them. A crew of four technicians was waiting along with a familiar bulk standing right at the bottom of the ladder.

"Hey, Chow. You coming along?" Tom called out on seeing his cook.

"You betcha, youngin'. I was out here ta see 'bout bringin' back some o' those sea cumbers fer a salad idea I have, but then I heard 'bout you and Buddy boy gettin' ready to head skyward. As long as ya got room fer me, I'd like ta come along." He looked hopefully at his young employer and friend.

"I wouldn't have it any other way, old timer. Just do me one favor, okay? Check up on what sea cucumbers really are. I don't think you'll want to put any ranch or blue cheese dressing on those."

With everyone onboard ten minutes later and the computer signaling that everything was ready for take-off, Tom radioed the tower of their immediate departure. Thirty seconds later the ship lifted silently from the tarmac, picked up speed and disappeared from view within a minute.

Two hours later they were slowing down on their approach to the Moon. Bud asked, "What's the plan of action, Tom?"

"For starters, we're going to make six or eight orbits to see if our probe is in some odd orbit or if our space friends put it inside something we can't detect."

"What if we don't see anything?" Zimby inquired.

"I've been inputting all of the coordinates we have into the computer. By the time we finish our swings around, it should give me some idea where the probe might have landed, or crashed, if it failed to stay in orbit. We'll check that first, then we go into panic mode."

"We're certain the space friends actually brought it back?" Hank asked.

Tom nodded. "They sent a brief message announcing their departure from Mars orbit, plus we know it takes them only a couple hours to get here. The folks up at the Outpost spotted the larger ship on approach to the Moon and then something separating from it before the mother ship zipped around and disappeared. I've got no reason to believe they came here only to pick it back up and take it away with them."

Bud asked, "Could these masters of theirs be responsible?"

"Until we're certain the probe isn't here I don't want to consider that!"

"You boys got time fer a quick sandwich?" Chow asked the assembled crew as he came into the control room. "If'n yer gonna spend hours lookin' fer this Martian Tee Vee thing o' yours, then yer gonna need some food in ya!"

Everyone grabbed a sandwich from the plate the cook was holding. Taking the final one for himself, the chef smiled. It made him very happy to be with Tom on this adventure, and even more happy to be serving food to the men onboard.

Nine orbits later, all on overlapping angles designed to cover almost ninety percent of the area above the Moon, Tom decided to call a halt to their flying search and sent the *Challenger* downward toward the surface.

"We'll make another few slow orbits but at an altitude of just two miles," he announced as he flattened out their descent and the mighty ship began traversing the terrain below. "Bud. Keep a good look on

the SuperSight screen. Set it for a field about a quarter mile wide. Zimby?”

“Yeah, skipper?”

“Take Mike and Peter out onto the porch with digital binoculars. Keep sweeping all around below us.” Nodding, the three men headed down to the hangar deck where they climbed into space suits. After depressurizing the nearly empty hangar the three men hooked safety lines from their suits to points on the outside of the ship. They lay down and began scanning below the ship using the high-magnification binoculars Tom had developed a year earlier.

An hour later Tom asked Hank to take the other two crewmen out to spell Zimby and his men. “I know it’s micro-gravity, but they must be fairly tired of just hanging over the edge. I want every eye to keep sharp.”

“What about me, Tom?” Chow asked, concern evident on his weather beaten face.

“You, Chow, I need to have up here. For starters, Zimby, Mike and Pete will want a nice hot drink. Then, in the next hour or so we’ll be setting down for a rest before we—”

He didn’t get the opportunity to finish his sentence before Bud called out, “Skipper! I’ve got something down on the surface. We just passed over it, about fifteen degrees to lunar south.”

“Hey, Tom!” Zimby’s voice came over the radio. Swing—”

“Got it, Zim!” Bud interrupted.

“Oh. You saw it too?”

Tom’s hands flew over the controls as he called out on the ship’s intercom system, “Lookouts hang on. We’re turning around!”

Out on the ‘porch’ or the giant spaceship, the three men grabbed onto support beams and their own safety lines. Even with the micro-gravity, inertia was still capable of sending them right over the side.

The *Challenger* slowed quickly and began a wide, right turn. In two minutes the ship was directly over the spot Bud had detected.

“Put the SuperSight picture up here on the main monitor,” Tom commanded. A second later everyone in the control room could see the shiny cylinder partly covered with lunar dust. “It looks to be in pretty good shape,” he said. “Give us the best close-up you can.”

Bud manipulated the SuperSight controls. This combination high-power video camera and computer enhancement system zoomed in on the target. In seconds Bud had the picture in so close that the capsule—they could all see that it was the returned probe—seemed to be just a few yards away.

“Looks to be in very good condition, skipper,” Hank commented.

Tom was puzzled. “Yeah... it does, but I wonder why it is down here on the surface and not in orbit.”

Fifteen minutes later *Challenger* landed and the men, already suited up, had clamored down to the surface and returned with the probe. As soon as the hangar had been filled with breathable air, Tom and the rest of the crew entered. Hank was just pulling his helmet off.

“Not a scratch, Skipper,” he said pointing at the gleaming, tomasite-covered shell.

Tom pulled a small Geiger counter from a storage cabinet and ran it over the surface of the probe. “Well. Good. Other than normal background radiation, it seems to be clean. Let’s get it back to Enterprises and see what we’ve got.”

He was so eager to get the probe to his lab that Tom did something he rarely did; he landed the *Challenger* right on the tarmac at Enterprises. As the repelatrions were turned off and ship settled down, Tom knew that the landing pads would be pushing down into the relatively soft asphalt material. On the two other occasions the ship landed at Enterprises it sank almost five inches, leaving four two-meter-wide circular indentations that had needed filling.

In just a few minutes he and Bud had the probe on the ground along with Chow. Zimby waited until they retreated a few hundred feet and then zoomed skyward with the remaining crew. He would deliver the ship back to Fearing and then bring the modified *Toad* back with Hank.

The boys hustled the probe into the elevator while Chow waddled back toward the Administration building where he had his own private kitchen and office.

They set the probe on Tom’s lab bench, and Tom retrieved a special cable that would attach the output port of the probe to his computer.

A quick look at the status showed him that the probe’s power pack was still providing electricity to the instruments.

“In about twenty minutes we will see what they sent us as audio and video. While that is being downloaded let’s open the case and see what samples we have.” He picked up a special ten-pointed tool, pulled off the twenty small covers over the attachment points and began carefully unscrewing them. After the first three had been removed he realized that he was courting potential disaster. Quickly he replaced the screws.

Bud looked on with a worried look on his face but said nothing.

“We need to put this thing into the isolation chamber before opening it, Bud,” Tom finally told him. “I almost pulled a stupid stunt

there. Dad would rake me over the coals if there is something inside the capsule that leaked out and endangered lives.”

“As in, yours and mine?”

Tom nodded. They waited until all of the data had been downloaded before continuing. With his friend’s assistance, he carried the capsule into the small isolation chamber at the rear of his lab.

With a pair of remote artificial hands, he used the special tool to remove all the screws and then lift the outer shell off. Setting it aside, he activated the cameras on the ‘palms’ of the hands and did a complete look-over of the interior.

“Looks pretty clean to me, skipper,” Bud told him.

“To me, too.” He glanced at a readout panel and smiled. “Looks like there’s nothing organic or nasty inside. I’m not sure what I want to look at first,” he admitted. “The sample trays or the video?”

Bud pulled an imaginary coin from his pocket and flipped it into the air. “Heads or tails?”

“Heads,” called Tom with a grin.

Bud deftly caught the invisible coin and slapped it onto the back of his other hand. He peeked under his hand, then asked, “You want to change your mind?”

Tom shook his head. “No. Heads.”

Bud uncovered his hand and showed Tom the results. “Looks like heads to me, skipper,” he said with a goofy grin. “And, I’d say that means we look at the video.”

They sat down at Tom’s desk and the inventor punched in a series of access codes. Finally, the video sprang to life. The camera focused and ran through all the available light sources before evidently turning them all on.

Tom and Bud gasped together as what Tom would later tell his father was an uncomfortably close picture of an alien face came into the camera’s field of view. However, it looked nothing like a face human. There was no mouth and no nose visible on the smooth, light brown surface. On short stalks were what Tom assumed were eyes; they swiveled independently of each other and seemed to be looking over the probe. An appendage came into view. It was vaguely human-like and featured four long digits and two shorter, more angled but obviously opposable thumb analogies arranged around the upper half of a wide, concave palm.

Tom had to grin as the alien flexed all of the ‘fingers’ on the ‘hand’ and appeared to be waving at the camera.

“There’s no audio, skipper,” Bud said.

Tom listened carefully and then adjusted the volume to a higher setting. “No, there’s a little background noise, but no vocalization. I’m beginning to understand that our friends may not communicate verbally with us because they can’t speak, at least not as we know it.”

“Jetzt!” was all the flier could say in a whisper.

The image on the screen shifted as the alien evidently moved the probe around so that it was facing a glowing, flat surface suspended in the air. As the boys watched, a series of symbols began appearing on this surface. With a huge smile, Tom recognized them as the exact symbols etched in the small missile that had crash-landed at Enterprises way back when Tom was finishing his *Sky Queen* jet.

Even Bud recognized them. They appeared on a plaque in the mail entrance of Enterprises’ Administration building that he passed almost daily. “Hey, those are the—”

“They sure are. I bet our friend there is showing them as a way of verifying who he, or it, is.” Tom was awestruck as he watched the entire set of symbols come and slowly fade away. At the end, the probe was swiveled back around and the alien reappeared.

Tom made a decision to refer to it as a ‘he.’

The alien repeated the hand gesture, and then added a new motion. The four long fingers curled into the palm. As they did, Tom saw that they contained four joints each. Once the fingers were flat in the palm, the two thumbs slowly came together over the fingers, then moved in and out slightly like pincers.

Again, the screen moved to reveal the floating screen. A single symbol appeared. Tom let out a hearty laugh. Pointing at his monitor he told Bud, “That’s the symbol for ‘friend.’ And, that means the hand gesture is their physical symbol for the same thing.”

“They speak sign language?” Bud asked incredulously.

“I’d bet on it.”

For the next five minutes of video the alien showed them more than twenty hand motions and the associated mathematical symbols. Tom had been making notes and had a list that now contained such concepts as: friend, masters, Earth, planet body—which Tom believed was the asteroid, Nestria—Enterprises, space ship or rocket, assistance, and many others.

“Bud. This means that if we can meet them face-to-face we might have the possibility of communication.” Tom was overjoyed.

The video blanked out for over ten seconds. Tom was alarmed at first and then realized that the lights had been shut off. The ambient light in whatever location the probe was in was shifting.

“What gives?”

Tom shrugged, but replied, “My guess is that they either don’t want us to see something, or, more likely, they have problems with quickly shifting visuals and want to spare us if we have that same issue. Ah, see? He’s turned the lights back on.

The scene now showed the two a different room. This one, rather than being devoid of any wall decorations, contained several horizontal planes filled with what Tom assumed were books. Instead of being paper based, these also appeared to be made of something floating and glowing like the symbol screen previous used by the alien.

They watched the entire video before taking a food break. Looking at his watch Tom realized that it was past dinner time; they had returned to Enterprises at about five that afternoon and had been transfixed ever since.

Bud could only shake his head in wonder. “How different they are from us.”

“That’s why we call them aliens, Bud. And, now that I see what they look like, at least from what I believe to be mid chest up, and given that the very first hand symbol they have taught us is the one for ‘friend,’ I can also see why we think of them as our friends.”

He turned to look over his shoulder at the capsule in the isolation chamber. “Want to see what else they sent us?”

Bud’s huge grin told him the answer.

They walked to the chamber and Tom slipped his hands into the ‘Waldoes,’ a pair of mechanical hands that mimicked every move the operator made in control gloves and named for a character in an old science fiction story. The hands inside the chamber moved in an exact match to his own hands. They pulled the six sealed containers out of their slots and set them next to an array of equipment.

Each one he opened yielded both surprises and nods of recognition.

The first contained seven different objects. These were samples of foods the space friends provided to show Tom what they ate. One by one a small sample was cut off and placed inside small vials. These, in turn, went into a mass spectrograph for complete analysis. Tom would check these results against the basic analysis from the probes own instruments.

Of these, two samples were complex carbohydrates that would easily be matched by a combination of whole grains, specifically a lightly malted barley plus a soft wheat found in the Pacific Northwest.

Another proved to be mostly a single-cell organism that the machine determined was about a ninety-nine percent match for a naturally occurring Earth yeast.

Number three was an oily substance that Tom decided was plant based.

“Chow’s going to be happy about that. At least he can fix them toast,” he told Bud once the readout was complete.

The final four samples had all the earmarks of proteins, but were not a match for any known meat or vegetable protein. “Wait,” he said jumping out of his seat and shucking off the Waldo gloves. “I’ve seen that recently.” He raced over to his computer. In minutes he remembered where he had seen something like that protein signature.

“Ah-ha!” he exclaimed. “Gotcha!”

Tom pointed to the screen as Bud leaned over his shoulder. “Say. Isn’t that the stuff you smear all over a clay head or rhino and it grows green hair?” the dark haired flyer asked.

“That’s it exactly. And, it is in pretty good supply these days. There are farms all over Central and South America, even a few popping up here in the U.S., that are growing these chia seeds. Really nutritious, protein rich and full of fiber.”

Before calling it a night, Tom checked the sample of atmosphere from the vacuum flask that had opened, sucked in a sample, and closed automatically.

Very high in oxygen, it held a disappointingly high level of carbon monoxide, sulphur dioxide, plus a few rare gasses. Nothing, Tom realized, that he couldn’t manufacture, but it would be nauseating to humans at first and then deadly with exposure of more than a few minutes.

The final experiment he checked was the gravity measurement. As he anticipated, it was about one-twelfth Earth’s normal gravity.

“That,” he told Bud as he shut down the computer for the night, “is going to be the big problem.”

CHAPTER 7 /

WITH APOLOGIES AND TEARS

“YOU AREN’T going to believe this, Tom,” the voice of Phil Radnor, Security’s second-in-command told the young inventor when Tom picked up the phone line. “We have a visitor out at the main gate and she wants to talk to you about a job.”

“Who is it?”

“Gabrielle Grimsby. Would-be stalker. Evidently she’s out of jail on bail and wishes to make nice with you. I’ll have a team of men there to intercede in case her intentions are less than honorable. Do you want either me or Harlan there?”

Tom thought about it before answering. “I think I’d like one of you, but no other security forces. Just be sure to have an eGun... in case. Meet you out there in five minutes.”

He hung up and left the office. On the way out he told Trent to let his father know about the unexpected visitor. “Dad should be back from his meeting in a few minutes, but I can’t wait for him. Tell him we’ll be at the main gate waiting room.”

He jogged out of the room and onto the ride/walk belt in the center of the corridor. It swept him down to the elevators three times the speed of walking. Moments later he was heading out the Administration building door and across the tarmac. Phil Radnor pulled up in one of the Security vehicles at the same time Tom arrived. They went inside together.

Her hair pulled back in a loose ponytail and dressed in a flattering business suit, Gabrielle Grimsby looked totally different than the last time Tom had seen her. She stood up, barely able to meet Tom’s eyes with hers, and offered him her right hand.

“Mr. Swift. My name is Gabrielle Grimsby and I have been an incredible fool. I have come to offer my apology for the way I behaved almost two weeks ago and to tell you, if you will hear me out, my side of the story. After that, if you wish I will leave and never bother you again.” She glanced up into Tom’s steel blue eyes and he detected a small shudder go through her.

Tom took her hand and carefully shook it. He could see Radnor tense up when their hands touched and then relax slightly as their grip broke.

“Should I call you Miss Grimsby or Gabrielle?” Tom inquired, motioning for the woman to sit down.

“I suppose that if you are very angry with me—something I can’t imagine that you are not—then you may want to grit your teeth and call me Miss Grimsby... or even Lucy.” She looked to see his reaction to this.

Tom laughed. She seemed to relax.

“Or, if you wish, Gabrielle. I really dislike Gabby and only my grandfather calls me that. Even he knows it bothers me but he does it anyway. Of course, I will sit here and take it if you wish to call me that. I deserve it.”

“I’ll make it Gabrielle then,” Tom told her.

She took a deep breath before continuing. “I’ve been an incredible... uh, you know. Rhymes with ‘itch.’ That evening I’d just received a call from Grandfather. He was drunk and I had already had a couple tequilas so I was on my way there, too. He was spouting hatred and I guess the alcohol let the anger sort of slide through the phone lines. Pretty soon I was promising him that I’d take his revenge on you and your father. Of course, I’ve heard about you all my life—Grandfather can hold a life-long grudge—but I had never even seen you except on TV and in journals.” She paused for a few moments, evidently collecting her thoughts.

“I knocked back a couple more shots and pulled an old starter’s pistol out of a lockbox in my apartment. That’s the weapon they took off me that night. Before I realized it, I was parked down from your company entrance waiting. Grandfather gave me a description of your father’s car and the license plate.”

“Where did he get those?” Radnor demanded, making the woman flinch.

“I... uh, I don’t know. Anyway, when you came out I followed. The only problem is that my car has a bad fuel pump. I could barely keep up. Whoever was driving did a good job giving me the slip at that corner. I drove around for ten minutes before I spotted you in that driveway. You know the rest I guess.”

“Well,” Tom told her scratching his head, “I’m not certain what to say. If you are honestly sorry, and can assure me that this was a one-time, alcohol-fueled thing, then I suppose I could accept your apology. But, I’m not so sure that’s what you want. Is it?”

She slowly shook her head. Quietly, in almost a whisper, she replied, “No.” Her face that had been downcast rose so she could look at Tom. There were tears running slowly down both cheeks and her eyes had begun to turn red. “No. I’ve really messed up my life with this.” She paused and took a tissue out of a package in her purse. After blowing her nose and wiping away the tears she looked at Tom.

“Alcohol has been a problem in the Grimsby family for generations.

Grandfather had three brothers and one sister who all died from alcohol. Two drank themselves into the grave, one as killed in a fight, and the sister drove into a tree after passing out behind the wheel. My aunt and uncle died a couple years ago when they went flying along with a bottle of bourbon.”

The tears were cascading down again, this time faster. Gabrielle began sobbing lightly. Tom got her a cup of water from the cooler in one corner of the room. She took it gratefully.

“So now, Demon Rum has sunk its claws into yet another Grimsby. Me. Because of this little stunt I’ve just lost my job. I lost my security clearance because everyone knows that drunks can’t keep secrets. I understand that. But now I have nowhere to work. Oh, I’ve got enough money to last me a half year or more, but part of my bail agreement is that I need to have a job to go to at least five days a week.”

“And, you want Tom here to forgive you and provide you with a job at Enterprises?” Phil asked incredulously. “I’d call that some nerve!”

She sniffled. “I was hoping you’d call it gutsy or brave. I can see that I’ve overstepped my welcome.” She started to rise. “I am truly sorry for what I did to you and your father. My trial is set to begin in five weeks. You will be called to testify against me. Goodbye.”

As Gabrielle Grimsby turned to leave Tom made a decision.

“Wait. I can’t promise you an immediate job. You would have to provide a résumé and references. What is it you do... or did before all this?”

The woman reached into her purse and pulled out a folded two-page document. Handing it to the inventor, she answered, “I earned my doctorate in Biology last year from LSU and have... or rather had a position as a research biologist at Applied Genetics in Rochester. Not exactly a stellar seven months, but it was a steady income and now I’ve ruined that. And my life.”

She looked up at Tom. He stood there with his lips pursed rubbing his jaw. Glancing at Radnor to see if the Security man had any input—Phil almost imperceptibly shrugged and shook his head—Tom came to a decision.

“If, and I mean that should the very big ‘if’ regarding whether we have an actual position and if, again a pretty big one, if your story checks out, we might have something for you in a couple of months. Can you make do until then?”

She lowered her eyes again and shook her head. “Yes and no. Yes, I have enough money set aside to make it, and no, I don’t have two months. As I mentioned, as a condition of my bail I have to have a full-time job and attend an alcohol abuse course three evenings a week until my trial.” She stood and offered her hand to the inventor.

“I’m truly sorry about my actions. If you need to talk to me, I suppose I will be back in jail. Goodbye, and I apologize for bothering you today.”

She quickly strode out of the waiting room and toward the guard booth. Tom and Phil came out of the door in time to see her hand back her temporary badge and walk out the gate.

“I guess she’s found herself in an un-winnable position, skipper,” Phil commented. He placed one of his large hands on Tom’s shoulder and then walked to his waiting car.

Tom slowly walked back toward the Administration building. As he neared the side door his father came out.

“Oh! Tom. I was just on my way to the guard station. I hear from Trent that we’ve got a visitor.”

Tom shook his head. He explained Miss Grimsby’s apology and her soon-to-be-rescinded bail. “I know Phil doesn’t have a good feeling about her, but I’m on the fence. She really seemed to be honest about her apology, Dad. I wish there was something we could do. Something that would let her prove how sorry she is.”

Giving a single chuckle, Damon Swift told Tom, “You know there *is* something we can do. Right? We can offer her an unpaid apprenticeship for the next few weeks. Harlan and Phil can keep close tabs on her and our security badge tracking system can tell us where she is every minute she’s on the premises. Give Bob Robbins in the Life Sciences department a call. See if he could use her. Non-security projects or course.”

Tom smiled at his father. When they reached their shared office Tom asked their secretary to call the Shopton police and inquire about where Gabrielle Grimsby was living. “They should have her address as part of her release papers. Thanks!”

He made a quick call to the department head his father had mentioned and made a small request.

“Happy to have another grunt, Tom. I just hope she understands that we’ll be dropping a lot of the mundane stuff in her lap for the first few weeks until I can get a good reading on her abilities.”

“I’m certain she’ll understand. Thanks!”

Three minutes later he not only had her address—a small tourist hotel on the other side of Shopton—he also had both her room phone and her cell phone numbers. He dialed the latter. After five rings he was about to hang up when Gabrielle’s voice answered.

“Yes? Sorry but I had to pull over. Can’t drive and talk. Who is this?”

“Miss Grimsby. It’s Tom Swift. I’m sorry that you felt you had to

rush off like you did. Would it be possible for you to turn around and come back? We may have an internship position. Because it will be an unbudgeted position, at least for the first month or so, it will need to be a no-pay position. However, as you will be working on site and full-time, there will be an interview to pass and a background check.” As he heard her breathing begin to tighten, he quickly added, “And you will be accorded a certain level of latitude given your current situation. Is this satisfactory?”

She agreed and enthusiastically said that she could be ready the following morning.

Tom headed back to his underground lab and office to get back to work on the issue of creating a low gravity environment for their hoped-for visitors.

Before leaving for the day he stopped by the radio room and sent out a message telling their friends that they had recovered the capsule on the Moon’s surface and that everything came back to Earth in usable condition.

Over dinner at the Swift home that evening, with both Bud and Bashalli joining them, Tom told everyone about the briefly missing probe and what he and Bud had discovered once it had been recovered.

“That’s amazing, Tom,” his mother remarked. “To think that they developed with no mouths and have to do all their, uh... do we call it talking?” When Tom told her that was as good as any term for now, she added, “Right. Signing with their hands. How do they eat?”

The question stumped Tom. Finally, he admitted, “That completely passed me by. But, since they provided food samples for us to analyze I have to assume they have another orifice for food intake. Hmm?”

“Show them some of the sign language,” Bud urged.

Tom complied first showing the hand sign for ‘friend.’ “That’s the first mathematical symbol on the rocket they sent us way back when,” he told his audience.

“I’m very glad you wrote down all of those hand gestures, Son. It will make a great start to a visual dictionary once we get them down here.”

“If we get them down here,” Tom said glumly.

“I have every faith in you, Thomas, that you will come up with the perfect solution at just the right moment,” Bashalli told him, giving his knee a little squeeze under the table. Tom blushed.

“Any ideas, Tom?” Sandy inquired. “I mean, other than the ideas Bashi just put into your brain,” she teased.

Again, Tom blushed.

“I think I see a problem here, skipper,” Bud said turning serious. “They have two thumbs and four fingers. Even if you fake it using your little finger for the other thumb, that leaves you one digit behind. Some of those hand signs used just two of the long fingers, but most used all four in different positions.”

“Uh... well, on the drive home tonight a thought hit me. It should be possible to build a device that can act as a translator—a hand-held translator—about the size of a cell phone with a camera on one side and a full screen on the other. Oh, yeah. And a microphone.”

“How would that function,” his father asked.

“As you can imagine, Dad, if one of our friends is signing to us, you train the camera on their hand. A visual database compares what the camera sees and translates that into English that comes out of a speaker or earpiece. To talk to them, it goes in reverse. Speak a message into the microphone and a series of pictures pop up on the screen. You just have to turn it around for them to see.”

Immediately seeing both the function as well as other, non-alien, possibilities, Mr. Swift nodded his approval. It took several more minutes of explanation until everyone else understood.

“Seems really simple once you understand it,” Sandy said patting her brother on the shoulder. “Good job, Tomonomo.”

“Well,” he admitted with a lop-sided grin, “it was either come up with that or make some sort of glove with the extra digits in all the right places.”

As the girls were telling everyone else what they thought the aliens should do when they came to Earth, the phone rang. Mrs. Swift, the least interested in the current conversation, got up and answered it.

“Tom? It’s for you. It’s the duty radioman at Enterprises. He says the space beings have sent a reply.”

The young inventor jumped up and took the offered handset. “Tom here.” He listened for a moment. “Hmm? That doesn’t sound correct. Have you run it through the translator a second time? Oh. Three times, huh? Okay. Dad and I will be there in about a half hour. Send the standard acknowledgment message please.”

He returned to the table and explained the situation. “The message seems garbled and full of errors. The gist of it is, ‘We can’t send our probe. The masters destroyed it. Call with instructions.’”

Mr. Swift got up from the table. “Sorry, Anne. No dessert for the Swift boys tonight. Bud. Please stay here and keep the girls occupied while Tom and I go to the plant.” He and Tom left a minute later having each received a quick kiss from their respective ladies.

Reaching the Enterprises’ radio room twenty minutes later Tom

picked up two copies of the message, handing one to his father. It read:

**SWIFT FRIENDS. ROCKET PICKED UP
AT COLLECTION POINT. ARRIVED
PLANET 4 LOCATION GOOD. ALL
INSIDE/ENCLOSED EVIDENT TO US.
CONCLUDED WITHIN SCHEDULE.
UNDERSTAND TROUBLE ON
ORBITING OBJECT. MASTERS TO
DESTROYING IT. ANGRY AT
COMMUNICATION. UNABLE TO FLY
IT. UNCERTAIN COLLECTION.
UNCERTAIN OUTCOME. UNCERTAIN
RETURN. NOW SUCCESS. NOW
UNCERTAIN PLANS/STEPS
TRANS-PICKUP.**

ADVISE.

Tom looked at his father. “As crazy as this seems at first, I think I understand. Let me try this interpretation on you. ‘To our Swift friends. We picked up the rocket on schedule and brought it back to our location. Everything inside was self-evident. We finished what you needed and understand that you had problems finding the capsule on the Moon. Our masters are angry at us for our continued communication with you. If we left it in orbit, they might have destroyed it. We didn’t know if you found it. Now that we know you did we don’t know what else to do. Help.’ Does that sound reasonable?”

Damon Swift had been following Tom’s interpretation while reading each word of the message carefully. He nodded. “I’d still like to do a manual translation of the symbols, but that sounds very much like what it may mean.”

Over the next hour the two scientists worked on separate pages. In the end, both came up with primarily the same message, and it matched Tom’s verbal rundown very closely.

Tom scribbled a message in English and showed it to his father.

“Yes. Absolutely. Do you need my assistance or can I leave you here? I’ll go home to mollify your mother and send Bud and the girls to pick you up.”

Within fifteen minutes Tom had devised the new message in space symbols.

Friends. Message received.

Understand your problems. Are working on solution. We now can give you nourishment, give you an atmosphere at correct temperature. We have start of physical communication solution. Only issue is gravity field. We are uncertain how to lower our own to match your needs. Any concept from you helpful.

“Let me know when we get an answer,” he told the radioman. He turned and was about to leave when a thought hit him. Five minutes later he beamed out a second message.

Additional Message. We understand some of your nourishment requirements. Can you send additional examples of proper nourishment. Or can we send you samples of possible matches. Also, if we return previous probe to you, can you provide additional examples of your visual communication. We wish to be capable of visually communicating with your now, during your visit, and in the future.

“Okay. Now I’m heading out,” he said seeing Bud and the girls waiting for him in the outer office.

As they drove out the main gate he told the other three of the message and his responses.

“Need help fixing up the old video system?” Bud asked. “Maybe give them a good look at two of Earth’s most beautiful young women?” He grinned at Tom as Sandy playfully punched him in the arm.

“Just as long as you don’t spoil it all by sending them a picture of your mug,” she declared.

The foursome drove around for an hour and then returned to the

Swift home.

“A message just came in, Son,” his father informed them as they were closing the front door. “It’s in pretty clear terms. It reads,” he said pulling out a piece of paper he had written the message on. “Swift friends. Masters will be angry if second probe picked up. Nourishment requirements to be supplied by us. Visual communication will come to you in one planet revolution. Not required your equipment. We have duplicated.’ I suppose that means that you asked them a bit more than your first message indicated.”

Tom admitted to sending the second message. “It really looks like their masters are going to make this about as impossible as they can. It would be so much better if we had their support.”

Mr. Swift shook his head. “They haven’t proved to be very helpful or sympathetic in the past. I recall that they even tried hijacking a wonderful older scientist only to strand him out near Venus. That doesn’t bode well for their wanting to play nice with others.”

Tom well recalled his rescue mission when a spaceship his father was on mysteriously disappeared from Earth orbit only to reappear near the second planet. Tom had been in time to make the rescue but it had been a close thing. The space friends’ masters appeared to be a separate race that exerted some control, and interference, over the friendlier aliens.

It had been their interference that had almost caused a disastrous loss of life.

CHAPTER 8 /

MORE SURPRISES

A MESSAGE came through the following afternoon announcing an incoming rocket. It simply stated:

**VESSEL COMING. ARRIVE THREE
HOUR PERIODS. COMING SAME
LOCATION AS FIRST. NO
COMMUNICATION TO OR
FROM FOR FIVE ROTATION PERIODS.
NEGATIVE ANSWER NOW.**

Tom was slightly nonplussed. Did “same location” mean the spot on the Moon where they located the first probe? Or, did it mean the location at Enterprises where the original missile from the space friends landed?

He could easily guess at the request or command of no communications. If the masters were listening in, any further message might be intercepted and the probe destroyed.

Or, worse.

After calling Bud, Hank and Zimby to alert them of a possible trip back to the Moon, he placed a special call to Fearing Island. “Please have the *Challenger* ready and waiting with a pilot and skeleton crew. I may need to have her brought over to Enterprises at a five-minute notice.”

Within the hour Tom knew what their space friends’ last message meant. A sweep of the RADAR system at the Outpost in Space showed a small object streaking past the orbit of the Moon and heading on a course that would bring it to Earth. Fifteen minutes later it made a noticeable course correction and was definitely headed for the vicinity of Shopton. Ten minutes later the object made a final correction and it now was pointed for a crash landing right at Enterprises.

After a message to Fearing canceling the need for the space ship, a call to Security got the ball rolling and every fire and rescue vehicle at Enterprises was quickly manned and was heading to the north end of the facility. Tom surmised that this missile would hit the ground very near where the first missile from their alien friends had almost two years before.

Anybody looking skyward could see the fire trail left in the wake of the missile as it hit and streaked though the atmosphere. The show lasted for about twenty seconds until the missile slowed down. It

touched the ground less than a dozen yards from the original impact site. This time, however, the missile landed tail end first and did not bury itself deep in the ground.

“Stand back,” Tom directed as he pulled up in an Enterprises jeep. “It’ll be hot even though it isn’t glowing. Give it ten minutes.”

At the appointed time he moved forward, one hand outstretched to check for heat. And, although slightly warm to the touch, Tom had no trouble placing his hand on the outer casing. This one, he noted, was a little shorter than the original missile and about twice as thick. Five objects looking more like French Curve drafting tools than fins stuck out from the aft end and held the base about an inch above the tarmac.

A recovery team gently tipped the missile into a sling on the back of a utility truck and soon had the entire missile in Tom’s underground hangar’s lab where he felt for, and quickly found, four release points. They were, he realized, spread out about as far as the finger spread of the alien hand he had seen on the previous video.

He wondered if this small piece of information might have been helpful when dealing with other missiles and artifacts sent by the aliens.

The upper conical area easily slid away revealing a coal black payload space. He set the top to one side after checking to make certain it contained nothing.

The interior of the missile ran the entire length making Tom wonder—and not for the first time—just how the thing was powered, steered and controlled. He reached in and began taking the items out, arranging them on the test bench as he did.

The first item out was a semi-clear tube with some sort of sealed top, nearly the width of the interior. He decided to figure out the opening mechanism after emptying the missile’s body.

Next out was a piece of some ultra-light metal or plastic that Tom surmised was just something to hold, separate and protect the contents. *Alien packing materials!*, he told himself with a smile. Beneath that was a cube that appeared to be made entirely of some sort of soft, dark blue rubber-like substance. Turning it over in his hands Tom had to laugh. On one side were replicas of the audio and video connectors from his own probe. *Those tricky devils*, he thought. *They’ve duplicated our video gear and sent me their version I’ll bet!*

The cube went onto the bench followed by another separator and then a set of five, smaller tubes just barely able to be withdrawn from the tight interior. That was it, other than another spacer that filled the back half of the missile. He shown a light down the large tube and could see that it was now completely empty.

With great anticipation he examined the cube. Other than its soft and smooth surface, the only features evident were the connectors. Tom mentally crossed his fingers and took the cube over to his computer where he plugged in the appropriate cables.

Then, he stopped. He had no idea how to siphon off the data or how to even activate the cube. There were no visible buttons. As he sat there, his questions became moot. A soft, yellow glow began pulsing on what Tom figured must be the 'top' of the cube. He pressed it. A second glowing button appeared. He pressed this one as well.

With a soft beep, his computer screen changed. Instead of his desktop picture—Bashalli, of course—he could see the same room that had appeared in his own video probe's pictures. The screen was divided across the middle with an alien hand on the upper portion and a black rectangle on the bottom.

The hand began moving. At the same time the rectangle began showing symbols.

A visual dictionary, Tom realized. He hoped that the cube could be replayed as he was not recording anything. Unsure if he could interrupt the display to activate a screen capture application, Tom quickly set his cell phone on the desk with the camera aimed at his screen and began recording everything.

Many times during the fifty minute 'show' he recognized symbols and even a few of the hand gestures from the first probe. He also found himself mimicking the hand gestures and stating out loud any known translations.

He realized that this video would make it possible to create the visual translator he had envisioned.

It also gave him reason to believe even more than ever that their friends had no way to communicate verbally. While there definitely was audio—slight background noises were evident throughout the presentation—at no time was there anything that might be considered to be speech. Tom even took a few minutes out to sample some of the audio and test it for ultra-low or ultrasonic sounds that might indicate speech outside of the range of human hearing.

Nothing.

He sat at his desk looking at the cube, stifling an urge to cut into it to see if one of two theories might be true. At first he considered that the aliens would have simply recreated all the electronics, including a power supply, and wrapped it in this rubbery covering. That is what he would do if the situation were reversed.

Then, he thought how terrible it would be to cut it open only to discover that they had created it from scratch and that it might be something organic rather than electronic.

That decision would wait. He experimented by pressing on the area where the first button had appeared. As before, it glowed and then lit the second button. Tom opted to not press the other one, yet. Instead, he touched his keyboard and was rewarded by the return of his desktop view. A few clicks later and he had started the screen capture application. Then, he hit the two-button sequence and watched as the presentation began anew.

While that was being recorded he turned to the set of tubes. He could see that each one was completely sealed, yet featured some sort of pliant plug at both ends. Holding them up to a light one at a time, he saw that each one seemed to contain nothing solid—light passed right through the translucent tubes and their contents.

Tom considered what he was doing. If this had been something from an unknown source he would have placed everything, including the missile case, inside the isolation container. The big question was, *would* his space friends send him something in these tubes that could not and should not be opened right here?

He pulled open a drawer in a cabinet against the wall and extracted a small, plastic-wrapped item. Breaking the seal he removed a syringe and then took out a box of sterile needles from another drawer. Locating the size he wanted he took it out of its sealed pack and twisted it onto the end of the syringe.

“Here goes,” he said to nobody in particular, and picked up the first of the alien tubes. He pushed the sharp needle end against one sealed end and watched as it easily slid through. When it was completely inserted he pulled back slowly on the plunger.

Immediately, the syringe began filling with a thick and light yellowish liquid. After taking a small sample he slowly withdrew the needle. To his relief the end seemed to self-seal with no loss of its contents. He capped the needle and took out enough syringes and needles to sample from the other small tubes.

Moments later he had five samples ranging from the light yellow fluid to what seemed to be a dark gray vapor. He placed a call to one of the departments at Enterprises.

“Can you send over someone to pick up five samples that need special and fast spectro- and microscopic analysis please?”

Six minutes later a technician in a lab coat knocked on the door. “I understand that you have some samples, Tom,” the young man stated. “Wow. What’s that box with the cables on the desk?”

Tom explained about the video dictionary sent by the space friends. The tech, a five-year Enterprises employee, knew of the space friends. He had been one of the team to analyze the space serpent and some withered plant life previously sent to Tom. He promised to have

the results back within the hour.

The video was still running. Tom checked the clock and saw that it had another fifteen minutes or so to run, so he turned to the contents of the large tube. Unlike the sealed small tubes this one had some sort of top that might even be hinged on one side. Tom closed his eyes and tried to picture how one of the aliens might grasp and open such a device.

While holding it in his left hand he stretched his hand wide and reached the thumb around one side and the little finger around the other. As he slowly twisted the tube both appendages sank into slight indentations.

He smiled to himself. There had been an almost imperceptible click. Using his remaining three fingers Tom reached up over the top, and in a second his middle finger felt another indent. He pressed it and was rewarded by having the top give a second click and then swing open.

He carefully peered over the open end of the tube. An even bigger smile came to his face. Slowly, in case his guess was incorrect, Tom reached inside the tube and closed his fingers around the enclosed object. He extracted it and placed it on the table.

Seemingly made of some type of stone and with miniature and recognizable symbols engraved in its surface, it appeared to be a scale version of the gravity stone on Nestria. In fact, it was just about as perfect a duplicate, only about one eighth size, as he could imagine.

Tom shook his head in wonder. Could the space friends have anticipated his difficulty in overcoming Earth's gravity and given him this? Or, was this something they built in response to his request?

Of course, that brought another question to his mind. If they have these small gravity controllers, why not just come to Earth and use them? What could possibly keep them from that seemingly simple solution to their long-time problem?

A much larger and more important series of thoughts hit him. Why wasn't it working right now? How could he turn it on if it was in some sort of standby mode? What sort of range did it have? How was it powered?

He set it back down and rubbed his eyes. He was getting that headache back. The one that started behind his eyes and felt as if someone was tugging at the backs of his retinas. It was a sign that he needed to get up, go outside and clear his head.

Just as he reached the elevator to go up to ground level the doors opened to reveal Bud and Doc Simpson.

"Hi," Tom greeted then, a little startled by their arrival. "What brings the two of you down here?"

“A better question is why are your eyes so bright red, Tom?” the young doctor asked on seeing the inventor’s face. He stepped forward pulling out a small flashlight from his shirt pocket. “Look up, please,” he commanded, shining the light into Tom’s squinting left eye and then his right. “Hmmm? Headache?”

Tom could only nod.

“Right.” Turning around to look back at the elevator, Doc said, “Step into my vertical office, please.” The three entered the small elevator and headed to the surface. Once outside even Tom realized that something was going on. Although it was late afternoon, and the sun was to their backs, he immediately shut both eyes.

“What’s going on, Doc?”

“My guess is that you’ve got a little of what we in the medical profession call an eye boo-boo. Actually, it’s probably a little infection known as Uveitis. You had it a couple years ago. Come along and I’ll get those drops in there to kill the pain. And, some others to help you get better, but you really need to take some time off. Yeah, yeah, yeah, I know,” he said sensing Tom’s forthcoming reaction. “You have to get a lot of things done in a very short time. All standard stuff, skipper. I’ll keep you going for now, but promise me on... on...” the doctor looked around for something, “...on Bud’s continuing friendship that once you get your space friends down here and back home that you’ll take at least two weeks off. Promise or I might just let you suffer.”

Tom grinned in spite of the pain. He knew that Doc Simpson would do everything to help, but he also knew that the medical advice was sound. He did need time off.

Five minutes later the drops had taken away practically all of his discomfort and Tom began to feel better. He was about to tell them both about the wonderful find from the alien missile when he decided to ask, “So, why were you two coming to see me?”

Doc laughed. “Oh, that. I heard through the grapevine that you received some samples of fluids from our space friends and I came by to see if I could get a drop or two to study. I guess your eye thing made me forget.”

Tom readily agreed and offered to send over the samples as soon as he returned to his lab.

He and Bud headed back a few minutes later. As they walked Tom described everything that had come in the missile.

“Jetz!” Bud exclaimed. “You mean that they built some sort of video device and sent it to you? Even though they have never shown any indication or the ability to do it before?”

“Yeah. I think that they copied our set-up. I also had a thought as Doc was putting those drops in my eyes. You know how I said I had no

idea how to turn on the gravity stone?”

“Is that what we’re officially calling it?”

“Well, for now. Anyway, when we get down to the lab I want to try something.” They continued walking until they reached the small building that housed the elevator to the underground hangar.

Once in the lab, Tom reached over to the pile of packing and spacer objects he had removed from inside the missile. He placed one of the pieces on his workbench, looked at it and then turned it over. He smiled. Reaching for the gravity stone, he told Bud, “This is where we hope I’m right.” He lowered the bottom of the stone into the recessed area of the spacer. It snapped into place and both boys immediately felt the results.

“Hey!” Bud called out joyously as his weight diminished. “Just like on Nestria!”

Indeed. Both boys’ weight dropped to the point where they could easily push off from the floor and touch the ceiling, twelve feet overhead, before descending to the floor. Tom picked up the gravity stone and its holder and headed out to the floor of the hangar.

“I want to see what kind of range this thing has,” he explained. Moments later they both knew. “About twenty feet from the stone and then gravity comes back to normal within a matter of a few inches. Looks like that will dictate the space we can cover in the environment area.”

Tom noticed that Bud had a strange look on his face. The flier seemed to be in some distress. Then, he noticed that he was feeling light headed. In an instant he knew what was happening.

He bounded over to the stone and carefully disengaged it from the holder. Normal gravity was restored.

Bud was panting, bent over with his hands on his knees. Finally, he took a deep breath and raised his head. “What the heck happened?”

Tom gave his friend a wry grin. “I just learned a valuable lesson. The lower the gravity around us, the less dense the air became. And, unlike Nestria where everyone had time to get used to it, we were suddenly breathing the equivalent of, I’d guess, the sort of air you might get at twenty thousand feet.”

Bud nodded. “I see. Less oxygen means woozy heads. Right?”

“Yep!” Tom told him.

They re-entered the lab where Tom locked the gravity stone away in the large safe that swung from the wall behind his bookshelf. He would take the activator stand to the safe in his shared office a little later.

With Bud's help he extracted samples from the five small tubes and they delivered them to Doc Simpson.

Looking at his watch, Tom suggested that he and Bud head to the Swift home. "I'll call mom and tell her to expect one more for dinner." When they arrived twenty minutes later, and much to Tom's delight, they both saw the small Japanese runabout driven by Bashalli parked in front.

"Well, well, well, Bashi. Look what just dragged themselves in?" Sandy said looking up from the card game she and Bashalli were playing. "I sort of recall the blond one. He sometimes sleeps here, but the scruffy dark-haired one is almost a stranger to me!"

Bud walked over to the blond girl and gave her a kiss on the tip of her nose. Sandy smiled coyly and set her cards down, reaching up to hold the flier's head. "Ugh! You need a shave, Bud." He pulled back.

"Wouldn't want to scruff you, miss. Perhaps this blond stranger will let me borrow a disposable razor. If I'm really lucky he'll have some shaving cream, otherwise I'll just have to scrape and cut what I can."

Sandy lurched up and grabbed him around the neck and planted a kiss on his lips. "I'll take you clean or scruffy, Budworth. At least for the time being." She winked at Bashalli who missed it as she was receiving a kiss from Tom at the time.

Over a dinner of stir-fried vegetables and sweet-and-sour chicken Tom told everyone about the missile contents and especially about the gravity stone.

"My word, Son," his father told him. "Talk about good fortune. That just about completes your 'must find' list, doesn't it?"

"Pretty much. Now all I have to do is come up with the environmental room or whatever for our friends to occupy. Well, that and create the atmosphere machine, build everything into something that can travel on its own, and figure out where to take them."

Forking in one final bite of chicken, Bud said, "Easy for you, skipper."

Tom smiled but thought to himself, *I hope so!*

CHAPTER 9 /

HEADACHES AND LIGHTNING

BY NINE IN THE MORNING the following day, Tom had made adjustments to his calculation regarding the breathable atmosphere for his friends. He now understood that his first test of the mixture of gasses was flawed as it occurred at Earth-normal gravity. So, he repeated the measurements and density tests using the gravity stone inside of his isolation and test chamber.

The results were startling.

“Tell me that again,” his father requested when Tom fairly blurted out the results over the conference table as they sat having a mid-morning coffee.

“The effects that gravity stone has on their atmosphere is amazing, Dad,” the young inventor told him. “For starters, it seems to have a profound effect on the carbon monoxide and CO₂. And, it isn’t in proportion to the lower gravity. Both gases plummet right to the lowest point they can find. In my test chamber that meant they formed a two millimeter layer right on the floor of the test tank.”

“That appears to mean that they absolutely have no reason to have those gases in their breathable air,” Mr. Swift concluded.

“Unless they breathe through their feet,” Tom said, “they have either figured out how to avoid having any meaningful interaction with them, or it is just a byproduct of their artificial gravity.” Tom stopped and looked thoughtful. “I wonder if that means that their atmosphere in the Mars station is different from on their home planet...” He tailed off in contemplation.

“Well, then, let’s hope we get the opportunity to ask them.”

Tom returned to his lab and began a new series of experiments. He first added a fan to the sealed glass tank in which he had created the alien atmosphere. After turning on the gravity stone he left the chamber, sealing the door behind him.

A flick of a switch activated the fan. During the following fifteen minutes he took small samples of the air as the different gasses swirled and intermixed. Because the testing equipment was inside the chamber and was under the influence of the gravity stone, each sample showed the same results. Without the influence of the fan, all CO and CO₂ dropped to the bottom of the test vials within a matter of one or two seconds. He made a number of notes on the outcome of the tests.

Finally, he hit on an idea.

I wonder how much CO2 I can introduce and still have it simply drop out of the rest of the gas mixture? he murmured to himself.

After turning off the testing equipment, he slipped in through the door and deactivated the gravity stone. Next he wheeled a large cylinder of Carbon Dioxide gas into the chamber, attaching a heavy hose to the valve of the cylinder and also to a one-way intake valve on the glass test tank.

He was too busy, and his mind was racing ahead to what various results might mean, that he didn't notice the door to his lab open.

He reached over and depressed the gravity stone back into its holder, turning it on. Next he opened the valve on the cylinder and could hear the squeaky rush of the gas through the tube and into the glass tank.

What he failed to notice was the arm that swung a heavy pipe down onto the back of his head, and the pair of shears that cut cleanly through the hose allowing the dangerous gas to begin filling the isolation chamber.

He already hit the floor before any of this happened.

Something in his brain rallied all his energies, and he opened one eye. He could see across the floor of the chamber. Rolling his eye upward, he watched, helplessly as the intruder's back disappeared out through the lab door.

With the high concentration of CO2 now forced down to the floor, Tom only managed another few seconds of consciousness.

He blacked out.

* * * * *

Arv Hanson, the chief model maker for Enterprises and the man responsible for making all scale replicas of Tom and Damon Swift's inventions, was standing in the parking lot next to the Security building with Phil Radnor, the second-in-command of that department.

"So, Harlan had coffee with her the other day, and then again today?" Arv was asking. "Interesting."

With a big grin, Radnor's head bounced up and down. "Isn't it great? Harl has been a bachelor for way too long. It's about time he got back into the dating scene." His face suddenly showed concern as he glanced over Arv's shoulder. "Hey, see that?" he asked, pointing at a figure dressed in all black who was now sprinting away from the elevator and stairway building for the underground hangar.

Arv looked at the retreating figure. “Bud Barclay?” he asked.

With a shake of his head, the slightly plump security man replied, “No. Bud’s taller and broader in the shoulders. Come on,” he exclaimed giving the model maker’s shoulder a tug. “Let’s go see what’s up.”

By the time they had covered the five hundred feet, the figure had disappeared around another building. Both men ran into the building. Seeing nobody in the vicinity they returned to the underground hangar and recalled the elevator that had been sent back to the lower floor. Impatient, Phil practically ripped open the door to the stairway and the two men sprinted downward.

Reaching the lower floor, they took no time to catch their breaths before racing across the large underground hangar floor and to Tom’s office and lab.

A quick glance around the front office showed nothing so they opened the door to the lab. With a tortured groan of anguish, Phil dove forward and yanked the door to the isolation chamber all the way open. Grabbing the first part of Tom’s clothing he could reach he heaved the young inventor out of the door. Once clear of the effects of the gravity stone, Tom’s body weight instantly returned to normal and he was wrenched out of the larger man’s hands, flopping to the floor.

While Arv made an emergency call to the dispensary, Phil tossed Tom over his broad shoulder and carried the young man out of the lab, kicking the door closed behind him. He didn’t stop until he had Tom inside the elevator and—once joined by Arvid—they headed to ground level.

“Come on, skipper,” he kept muttering. “Breathe the fresh air!”

He laid Tom’s limp body on the ground outside of the elevator building and loosened his clothing. Placing his ear against Tom’s chest he gave Arv a thumbs-up sign. “He’s breathing. A little raspy, but there’s air moving in and out.”

They both heard the siren of the small ambulance Doc Simpson kept handy. Screeching to a halt, the young medico hopped out of the passenger side heading their way while the driver, a young woman Phil knew was Doc’s number one nurse, raced to the rear of the vehicle to pull out a small oxygen tank.

As Phil explained what they had found, Doc strapped the mask onto Tom’s face and turned the flow up to maximum. He held the mask firmly over the inventor’s mouth and nose with one hand and plugged the exit vents with finger of the other.

Tom’s chest could be seen inflating. Doc released both hands and Tom’s chest went back down. This was repeated ten times before Doc

allowed the inventor to breathe normally.

Phil told the doctor about the CO₂ tank.

“Hopefully that will saturate his lungs with oxygen,” the doctor told the others. “If we got to him in time, and the fact that he’s breathing on his own is a good sign, then I’ll get him into a hyperbaric chamber with pure oxygen for about ten hours and he should be good to go.”

They loaded the still unconscious young man on a stretcher and placed him in the back of the ambulance. Before departing, Doc looked at both Arv and Phil. “Your fast action saved Tom. I just wanted you to know that!”

Phil, now that the emergency appeared to be over, became angry. “If I ever get my hands on whoever did this to the skipper—”

“Any chance of surveillance video around here?” Arv asked. “Someone might recognize that person I saw running away.”

With a rueful grimace, Phil told him, “Nope! That part of the video system has been down for the past day or more. We’ve got a team trying to trace where the fault is, but those specific cameras have been off-line since around midnight, night before last.”

“Okay. I’m just the guy who carves and shapes plastic and metal into little toys, and I’m not in on all the ‘keeping an eye on things’ that you guys do, but isn’t there some way to track who might have been around here using these?” He pointed at the TeleVoc pin every Swift Enterprises and Construction Company employee wore on their shirt collars.

Phil nodded. “I’m heading back to the office to do just that.”

An hour later both Phil and Harlan Ames put in a visit to the Dispensary where they waited at Tom inside of a large metal and glass tube. The inventor had regained consciousness fifteen minutes after entering the chamber and was now resting on his right side, facing any visitors. Although there was no intercom in the chamber, Tom had a pad of paper and a pencil. He wrote and showed them:

WHAT HAPPENED?

They shrugged back at him. Phil picked up a similar pad and wrote: *YOU. UNCONSCIOUS. LAB. HIT ON HEAD. CO₂? HOSE CUT.*

Tom nodded, evidently a little painfully from his grimace, then responded:

OH. TURN OFF CO₂ AND GRAVITY STONE PLEASE

DONE!

Tom gave them a weak smile and closed his eyes.

“He’ll have a whopper of a headache when he gets out,” Doc told them as they left the room. “But, his blood test showed little saturation of carbon dioxide. Thankfully, he wasn’t working with carbon monoxide, or we wouldn’t be talking about his recovery!”

Harlan and Phil next went to Damon’s office.

“We seem to have a pair of holes in our security system, Damon,” the Security chief explained. “First is the video feed cut. We discovered a cable had been injected with acid, probably sulfuric, inside of one of the switch cabinets. Couldn’t see anything from the outside but the insulation inside got dissolved and shorted out that set of six cameras. It’s a locked cabinet with only five keys, all accounted for.”

Mr. Swift looked serious. “We obviously have either a bad employee, a sloppy security team or a locksmith. Which one is it?”

Harlan looked embarrassed but was turning red-faced. “We don’t know. I don’t know. Yet!”

Drawing a deep breath in through his nose, Damon Swift asked, “Okay, so what is the other thing? The other *security hole*?”

Phil stepped forward seeing that his immediate boss was getting even redder in the face, not a good sign from past experiences. “The badges we give out to temporary workers, visitors and all other non-employees.” When Damon Swift’s eyebrows came up in a silent question, Phil continued, “Our TeleVoc pins keep tabs on employees. You can’t take someone else’s because the brainwave patterns don’t match and it kicks off the alarms.”

Nodding wearily, Damon concluded, “And the temp badges, although we can trace them and their wearers, we have no real idea if the person wearing badge A is actually the individual issued badge A. Right?”

Harlan, now a little calmer, said, “Right. I should have seen this coming—”

“No! Dammit, Harlan, it isn’t *your* problem,” Damon exclaimed with uncharacteristic anger. “I am the one who said to keep the old badge system for temps and others. I’m the one who said, ‘Let’s save a few thousand dollars on this,’ and I’m the one who almost killed my own son for the sake of a couple of bucks.” He took another deep breath. There was a tear in his right eye as he continued, “Harlan? I’m sorry if I made it sound like it was your fault. It wasn’t. You’re the best at what you do. I need to stop acting like the old-fashioned airline pilots who had godlike powers in the cockpit. From this point on, you do what you see fit for the security of Enterprises, our other facilities, and all our employees.”

Harlan and Phil left a few minutes later.

That night Tom went home to his own bed and the care from two beautiful young women, his sister and his girlfriend. While one got his food and fluffed his pillows, the other sat by his side holding his hand as if she never intended to let it go.

Damon popped his head inside Tom's bedroom around nine. "I don't want to chase you girls off, but I need to ask Tom something about his experiments." Sandy and Bashalli smiled, did little curtsies, and left the men to their talk.

Tom looked at his father. A silent meaning flashed between them. "You don't want to talk about the experiment, do you, Dad?"

"No. Not really. I read through your notes so I know pretty much what you've been doing. What I wanted to ask is whether you have an idea who might have attacked you?"

Tom rubbed his jaw. "No," he said quietly. "I was inside the isolation room, just getting ready to turn around when I got clobbered. The next thing I knew I was looking at the floor. Everything was in gray shades. I stayed awake just long enough to look out the door at whoever it was that hit me. Just got a glimpse of black shoes and black pants and then... just blackness. The next thing I knew, Doc was leaning over me in that pressure chamber and I had another splitting headache."

"That's the CO₂ and the little trace of carbon monoxide down on the floor. Doc tells me you're lucky the attacker left the door partly open. Enough of it leaked out so that you weren't breathing pure poison."

Tom felt considerably better the next day so he went into work, first stopping off to let Doc Simpson perform a quick once-over. "All I can tell you is that the only residual thing is that goose egg on the back of your head. Take it easy for the next day or so. Okay?"

Tom grinned. "Promise. Sort of."

He headed to his lab. Once there he looked over the isolation chamber. The attacker had done more than just whack him on the head. He had smashed the atmosphere sample provided in the first probe and had knocked the gravity stone to the floor. Someone must have turned it off as there were no lights on its surface. With a sudden empty feeling in his stomach, Tom picked the stone up and turned it over. He carefully pressed the buttons.

Nothing!

He tried again. Still no lights. With dismay he realized that it had either been damaged or left on and had run out of power. *I told them to turn it off but I never told them how*, he thought, recalling the written exchange the day before.

After reporting this development to his father, and asking his opinion, Tom headed to the radio communications building. There, he composed a brief message to the space friends. "I realize that they asked us to not call them for a while, but this is vitally important," he told George Dilling. "Dad agrees that it is worth the chance of being intercepted."

Dilling looked over the message. "My guess is that if they do actually have a spy or if their masters are intercepting things, this message is obtuse enough to keep them from getting its meaning."

Tom typed the message into the sender:

**Assist me. Gravity stone in
negative function for unknown.
Is power small or large and
internal stone. If small how to
increase.**

Waiting.

He re-read it and then pressed the send sequence.

An hour later Dilling called him in the shared office. "You'll want to come over, Tom. The answer we received may require another message from you."

When Tom read the received answer he broke out into laughter. "Oh, George. This is great. It's just what I hoped to get. No return message. Thanks!"

He rushed out the door and back to the office to show his father.

On reading the message, Damon also laughed.

**SPEEDS. LIMITS. PLACE/LOCATE
CLOSE TO HIGH SOURCE.
MORE LATER.**

"So, I guess all we need to do is set the thing close to a high-voltage source. Evidently it will do the right thing," observed Damon.

"It appears that our name is known outside of what they believe to be a comfortable number of people. And, 'Speeds' is a great leap for them from 'Swifts,' don't you think?"

They shared a smile and a few other words before Tom headed back to his lab.

On the way across the tarmac he espied Bud talking to a woman. Not that it mattered to Tom who Bud spoke with, even those of the

opposite sex, but he knew that Sandy would have a little snit if she found out her guy was talking to some other female. Tom sauntered in their direction.

The woman looked his way, said something to Bud and headed toward one of the buildings in the central cluster. By the time Tom reached his friend, the woman was disappearing around the corner.

“Sandy’s gonna give you a bad time, flyboy, if she hears about you chit-chatting with another girl,” Tom teased.

“Not chit-chat, my jealous girlfriend’s brother. That’s the Grimsby woman. She was asking me about your condition and if there had been any damage to the project.”

Tom was puzzled. “She could have waited for another minute and asked me herself. Why did she take off suddenly?”

“Said she had an appointment. I didn’t know you wanted to talk to her or I would have suggested that we meet somewhere in the middle.”

Shaking his head, Tom replied, “No. I didn’t especially want to talk to her, I just think it is strange that she saw me and immediately walked off. That’s all.”

They headed to the underground hangar where Bud watched from his favorite stool while Tom made some notes he remembered about from before the attack. Finally, Tom looked up.

“Can you go out to the far end of the hangar and bring over that HCAPS, please?” He referred to a High-Capacity Power Supply, a powerful electrical enhancement device that could increase standard 440-volt power up to over twenty thousand volts. In lieu of refreshing via direct exposure to solar radiation, it was used to fast charge the bank of solar batteries that were one of the main power supplied on the *Sky Queen*.

In this case he hoped that it would do the trick of re-powering the gravity stone.

When he finally walked into the hangar area, Bud was just taking the power cable over to one of the special sockets on the far wall. “Tell me when,” he prompted Tom.

Tom walked around the power supply. About three feet wide and five tall, it looked more like a refrigerator. An old-time one at that as it featured a circular cooling assembly on top to keep the inner workings from melting.

“I guess that putting this thing close to the power out port is the best I can do,” he called to his friend. Setting the stone down, Tom nodded and Bud plugged the unit in. Tom pressed a series of buttons on the small control panel and then strode over to Bud’s side. Seconds

later the cooling mechanism began roaring as the turbo fans spun up to speed forcing thousands of cubic feet of air per minute through the coils, capacitors and other components in the main box.

“How long do you think we’ll have to wait?” Bud yelled over the noise.

He needn’t have asked. With a thundering *crack!* a bolt of electricity seemed to be more yanked out from the port than coming of its own accord. It moved straight out for a foot then swiftly curved down and onto the top of the gravity stone. A second later it was all over. The HCAPS sensed the overload and shut itself down. The cooler unit ran an additional few seconds and then it too shut off.

Bud looked at Tom with wide eyes. In a whisper he asked, “Was it supposed to do that?”

In spite of the unknown, Tom had to laugh. “How in the world would I know? This is the first time I’ve ever done this. Unplug that thing, please.”

They carefully approached the power supply and the gravity stone. Neither boy could feel any heat although they both could smell the strong ozone stench in the air.

Tom moved one hand nearer to the stone. It also seemed to be at a normal temperature so he touched the top. As usual, it was slightly cool to the touch, not at all to be expected from something that had recently had a man-made lightning bolt flow into it. He located and depressed the first of the two buttons. To his delight it lit, bright and strong. A quick test of the stone showed it to be working perfectly.

They secured it in the safe in Tom’s office and then sat down.

“So, just another day in the life of our intrepid young inventor and his sidekick, huh?” Bud asked with a grin.

“Pretty much,” Tom said. “And, my headache’s gone!”

CHAPTER 10 /

UNEXPECTED PAIRING

DURING WEEKS three and four, work progressed at an incredible rate. Especially incredible given that Tom still had not settled on the design for the vehicle or aircraft that would be used to usher their space friends around during their visit.

“I saw something really neat on one of the cable channels that show a lot of science and engineering programs,” Bud exclaimed as he came through the door and into Tom’s large lab in the Administration building.

Tom finished soldering a connection he was making on one of the circuit boards he had designed to control the breathable gasses mixture that would be pumped throughout the sealed environmental chamber. “Uh-huh?” was all he could ask.

“No, no. Now, don’t press me so fast, professor,” Bud said in mock defense. “Give the poor kid a chance to get his behind onto a comfy seat and collect his thoughts, will ya?”

Tom laughed. “Sorry, Bud. I’ve been concentrating so hard on these boards that I forgot my manners. In your own time...”

“That’s better. So, anyway, I was watching this program last night when they started showing a bunch of new airships that have been designed in the past couple of years. Some really futuristic jobs, too. And, a few glorious failures from the past.” He looked expectantly at his friend. When Tom failed to speak, Bud added, “And, it was one of those failures that got me thinking.”

Tom tilted his head to one side, looking at Bud. Finally, he asked, “What was it about this *failed* airship that made you think about our problem?”

“Ah. Glad you asked. You see, this airship was built more like a giant stop sign but with six helicopters mounted all around both sides. Well, not the whole helo, just the cabin and engine and the rotor. So, what they did was to wire all of them together so that a single pilot in a little cabin up front could control them. Everything going through a computer to help him, you know? When it came time to launch, he grabbed a single joystick, pulled out the throttle and engaged all the rotors. With no tilt and no wiggle, up it went.”

Tom nodded. “I know about that one. From maybe five years ago?” Bud nodded. “If I remember correctly, all the pilot was supposed to need to do was fly it like an airplane using a joystick, rudder pedals and the throttle. I also seem to remember that they didn’t factor in

enough strength inside the gasbag and when he tried to quickly gain altitude, it all folded up in the middle, the rotors all swung up and into one another, and the entire thing came crashing down. That one?”

Bud was smiling. “Yep. What do you think?”

Tom was about to chide his friend for wasting his time when an idea came to him.

“Did this program tell you the results of the investigation into the crash?” Bud told him it did. “And, you still think it is something I should look into?” Another, more vigorous nod. “Why?”

“Because, the only thing wrong with the whole approach was the lack of strength in the bracing. Otherwise, the almost neutral buoyancy of the helium coupled with the tremendous lift of the rotors meant that it could, technically, carry almost twice what any other airship of that size or gas capacity could!”

Tom got up and walked to the desk in one corner where he kept his computer. Motioning his friend over, he began searching through the Internet for information on this particular airship. They first spotted the article about an even earlier attempt at such an airship-helicopter combination using four surplus Sikorsky heavy lifting helos and an old Navy blimp. Called the Piasecki PA 97, it had a few successful flights, but crashed, disastrously, a few months after completion.

The most recent incarnation had improved on the design by incorporating the rotors into the air envelope, placing them inside of four thirty-six foot wide holes where the airframe could properly support the engines and rotor weight. What the aero-architects had neglected to take into account was the tendency for the rotors to want to accelerate upward more quickly than the central body—both due to air resistance as well as inertia—and this ended with the craft literally folding itself in half, lengthwise, and dropping the one hundred or so feet to the ground.

Fortunately, the pilot survived since the crash had been incredibly slow. In fact, he had jumped the final ten feet and had been able to run out from under the falling blimp before it touched the ground.

After a full hour of research, Tom sat back and rubbed his eyes. Stretching, he asked, “So, do you still think we should look into that sort of aircraft?”

“I do. And, I’ll tell you why. First,” he pointed to his index finger, “you are much smarter than those guys so you won’t forget to account for all the bad lifting stuff. Two,” he ticked off another finger, “you have some amazingly strong materials to use so there won’t be any folding problems, and finally, I thought of a great idea. You put the four sets of blades out in the corners, but you also cut a big doughnut-shaped hole in the middle so that air can escape up and down through

it as you move the ship!”

Tom was impressed. He knew that Bud was a top-notch pilot and an impressive diagnostician when it came to shaking down new aircraft—second only to another Swift pilot, Zimby Cox. What he had not known was how far through Bud could think an issue such as this.

“Color me intrigued, flyboy. I can’t say that you’ve convinced me, but you have taken away one of the huge negatives I could see coming. Give me a day or so and I’ll let you know if I need your help designing such an airship.”

He was about to say something more when there was a knock on the door.

“Come in,” he called out.

“Hi, Tom. Oh, hello, Bud.”

“Hi, Harlan. Tom and I were just talking about you and your new lady friend,” Bud teased.

Seeing Harlan redden, Tom hastened to assure him, “Bud’s kidding. We were talking about an airship for our space visitors. What’s up?”

Harlan took a chair. He cleared his throat, wiggled around a little and cleared his throat again. “Uh... I want to run something past you before I go see your dad. And, let me tell you that if you say ‘no,’ I’ll drop it.”

Tom looked concerned. He liked the burly Security man and had ever since their first encounter when Tom was much younger. “What is it?” he asked.

Harlan took a deep breath and spoke. “You see, I’ve been a widower for about seven years and my daughter has been without a mother or any solid female influence in her life since she was eight. Her one aunt lives in Hawaii and we only see her about every other year, and... um... I’ve kind of been thinking about getting back into the dating scene, and...” he sputtered to a halt, unsure how to proceed.

Both Tom and Bud suppressed smiles. They realized how serious this was, and even though they both believed they knew what was coming, they gave him time to blurt it out.

“I’ve started dating Gabrielle Grimsby!” Ames looked drained by the effort of getting that out. Then, he realized what he had said and added, “I mean, I think I’ve started dating her. I mean... ah, Tom. I don’t know what I mean.” Harlan looked miserable.

“Why don’t you start from the beginning?” Tom suggested.

The story began pouring out. Harlan had taken on the responsibility of checking deeply into Gabrielle’s background, her

affiliations and any other troubles she might have been in before he would allow her to start working at Enterprises. This included several direct and lengthy interviews with her in his office.

It had been during the third and final interview that he found himself looking at the pretty redhead across his desk and wondering if she could possibly find him attractive.

They had gone to coffee several times and even ate a few lunches together outside in the picnic area between the Propulsion and Administration buildings.

“Gee, Harlan, That doesn’t exactly sound like romantic evenings in dark restaurants,” Bud said in all seriousness.

Ames nodded. “Yeah, I guess you’re right, but I want to take it to that next level. I want to start dating Gabrielle Grimsby. Now, I know all about her past and the Grimsby family issues with the Swifts, but I get the feeling that she is over her anger and above that, especially since she gave up drinking.”

The three men talked about this for a couple more minutes before Ames asked, “Do you think your dad will hit the ceiling?”

“I think,” Tom began slowly, choosing his words, “that dad will listen to what you have to say, will offer something along the lines of, ‘I think you know the possible complication of dating a fellow employee, Harlan, but since she doesn’t work with you or for you, I can’t say anything other than be very careful with this,’ or something like that.”

Both Bud and Harlan had grins on their faces from Tom doing an impression of his father’s voice.

“Thanks, skipper,” Harlan said getting to his feet. “I’ll go down the hall and tell him now.”

After he left Bud looked at Tom. “Has love come to our little boy?” he asked in a falsetto voice.

They both laughed and Tom shrugged. “Seems so. I hope it works out for them. Harlan deserves a good relationship and his kid needs a mother figure.”

Bud left Tom to go back to his circuit boards. Soon, the inventor was deep in thought and surrounded by a light haze of the smoke from the flux.

By the time he left close to midnight, Tom had the atmosphere controller finished. It was currently a maze of metal cylinders, a mixing tank, wires and controller boards that would eventually be rearranged and housed inside of a special, single container that could be wheeled into and out of whatever airship or aircraft or ground transportation Tom might wish to use.

Before continuing he sent an email to one of the technicians responsible for taking such a mess of pieces and packaging it for use. That person would have it completed by noon the following day.

Tom stood back to admire the device.

Using a special spectrographic analyzer and a series of micrometer screens to trap various gases, the unit could turn a room full of standard Earth atmosphere into the breathable atmosphere of the alien visitors in a matter of minutes. It would separate and store off any gases it might need to use later and shunt off anything it would not use into a 'recycle' tank. With the current set of cylinders, it could set up and maintain a sealed room about twenty feet square and six feet high for more than twelve hours.

He knew that the same control and screening mechanisms could be removed and installed in the final vehicle along with larger supplies of gases.

Early the next morning Tom put the atmosphere machine through a two-hour series of tests. And, with one small exception it passed. The single issue it had was in dealing with the small amounts of neon gas in the decreased gravity that would be present in the final vehicle. The neon seemed to get slightly excited and vibrated in such a manner that it could not be accurately screened—the molecules vibrated around the microscopic holes they should pass through and tended to slip into the same holes that the Krypton gas was designed for.

The technician arrived at ten and promised to return everything within two hours. "It'll look all sorts of professional," the tech told him as he loaded the last of the cylinders on a self-propelled moving platform.

The only suggestion his father had once Tom brought up the subject over their lunch was to move the filtering equipment out of the area of influence of the gravity stone and to vent all of the gases out to it.

"That does seem like my best bet," Tom admitted.

He returned to his large lab and saw that the technician was good to his word. A gleaming aluminum case sat in the middle of his floor with the control panel mounted in a Plexiglas case on one side. Tom added about thirty feet of flex conduit to the intake system to make certain that everything else worked under those conditions. He brought in the gravity stone and performed a brief test.

It was perfect, and Tom was very pleased with his progress.

He pulled out his pocket organizer and checked the list of items that needed attention. Scanning down he was able to tick off two more items and that completed eight of the top ten. The missing items were the vehicle/aircraft and some sort of translator.

Bud arrived back from a test flight late in the afternoon only to see the eerily familiar sight of Tom hunched over a circuit board, soldering components together.

“Didn’t we do this scene a few page back in the script, mister Director, sir?” he asked as he walked over to the bench.

Tom chuckled. “Seems like it, doesn’t it? Actually, this time I’m working on something entirely different. Smaller, too.” He showed Bud the almost complete board packed tight with components except for one corner, and the LCD flat monitor screen that was leaning up against a pile of books.

“I thought we were through with the send-a-TV-to-Mars project. What’s this?”

“This is part of the guts of the new English to Alien to English visual translator. Once I get it assembled, it will have two cameras, like my tablet computer, but it will be meant for one purpose. One camera will shoot our friends as they sign something to us. The processor will check that against the library of more than eight hundred hand signs we now have from them and then translate it into verbal English that will play over that little speaker on the lower corner of the board.”

“So, the matching doohickey on the other side is a microphone to do things in reverse?”

“Exactly. You win a cookie. I don’t seem to have any right now,” Tom said, looking around for something he already knew he would not find, “but I’m sure that Sandy will bake you a batch of those chocolate, marshmallow and pistachio things you seem to be fond of.”

Turning serious, Bud asked, “Will the computer create the image of each hand sign for whatever you say or will it call up some photo from a visual database?”

“Glad you asked. It will take actual video from what they sent us. I think I have to do that in case one or more of their signs need to include the motion of the digits, and not just the final hand pose.”

“When will you have it ready? I’d love to borrow it to learn a few words. Things like ‘hi’ and ‘friend’ and ‘don’t you think Sandy is cute’ and such.”

“Well, I’m going to need to test this one pretty thoroughly. If you’re available, I’ll have it ready tomorrow and you can take it home for the weekend. This isn’t going to be the final one, anyway. Not that I’m suggesting that you break it or anything, but don’t sweat it if a soldering point comes undone.”

Bud excused himself saying he’d be back before quitting time to check on Tom’s progress.

After making a set of connections, the inventor hooked up a small six-volt battery and turned the system on. The screen came to life and he could see himself.

“Going to need to put in a little better resolution camera,” he muttered making a note about it.

Straightening up he held his right hand out, centering it in the camera’s field. He stretched out his thumb and pinky finger, curled the other three over slowly into his palm and then folded the outer digits over the fingers.

He almost had to laugh when the screen showed the final sign plus the “translation” underneath: UNKNOWN. SIMILAR TO—FRIEND / MINERAL / SOLAR

Tom then pushed his index finger from his other hand between his index and middle fingers, tucking it under his thumb. Now, the translation brought a real smile to his face: FRIEND

A good idea of how to test the unit, automatically while he worked on the audio circuitry, came to him. He stood up and stretched his back before sitting down and calling up the stored videos provided by both his probe and the video device the space friends had provided. He turned his computer screen to face the circuit board, aligned the camera with the screen, and started playing the video. He watched for several minutes while sign after sign was shown by an alien hand and its written translation came up on the LCD screen of his makeshift device.

Keeping an eye out for any errors, he slid over a small tray of new components and a second, smaller circuit board. It only took him ten minutes to complete the audio board. He removed the battery from the main board, grounded it and himself, and then soldered the five wires from the small board to the large board. He completed things by pushing four small screws up through the bottom of the empty space on the large board, adding spacers and placing the small board on these. Small washers and nuts served to hold the two boards firmly together.

Once the battery was replaced, Tom realized the need to add an On/Off switch, but the translator started right back up. As soon as he realigned the camera with the computer monitor, not only was he seeing the written translation, he was hearing it coming from the small speaker.

Tom placed one finger against his lips, sat and thought about something, made a decision and picked up his phone.

“Hey, Bash. It’s Tom.”

“Hello, Thomas,” came her soft voice. “Are you calling me to ask to see if I might be available to be taken to dinner and perhaps a movie

this evening?”

“Uh... well, I was calling to see if you would like to spend the evening with me, but over sandwiches provided by Chow and helping me with a project.”

After he explained what it was he wanted, she agreed to be there in an hour. “See if Mr. Chow might have some of those marinated artichoke hearts, roasted peppers and some turkey breast. He will know what sandwich I wish.”

Tom made arrangements that the old chef was more than happy to oblige him with. “Kin I make a fresh pear tart fer ya as well? Young Miss Bashalli seemed ta like the one I made a month or so back.”

When she arrived, Tom met her at the main gate and they walked, hand in hand, back to the Administration building.

“So,” she said sitting in Tom’s desk chair, “what is this project I can help you with and will it mean we get to spend many hours together?” She smiled.

Smiling back he replied, “I think it is going to keep you here for at least six hours. That puts it past midnight. Will your folks be alarmed? Or, will Moshan be angry with me?”

“I have had a very heart-to-heart discussion with my father and mother and a second one with Moshan. I have told them that I am now making enough money from my job with the advertising company that I can afford to move out on my own. I can also afford to not work for Moshan at The Glass Cat, although to tell you the truth I would miss my Saturday and Sunday morning customers.”

Tom gulped. “Um, are you thinking of moving out?” he asked.

Bashalli smiled at him and took his hand in both of hers. She looked Tom straight in the eye and replied, “I could not enjoy moving out unless it was to be with someone I could call my room mate. Do not worry, Thomas. I am not trying to pressure you. I am simply using the possibility and the implied, er, *enhancement* to our relationship as a tool to make my parents understand that I am now over twenty-one years old and must be allowed to make up my own mind. Do you mind?”

Tom shook his head. “No. I think it is admirable. I just don’t want Moshan knocking down my door and dragging me through the streets in anger, but I understand it all.”

“Moshan was actually the easy one. After I told him of my ultimatum to mother and father he hugged me with tears in his eyes and told me to make myself as happy as possible, and that he loved me.” She looked at Tom, her eyes getting moist. “We cried in each others arms for ten minutes.”

Tom was thunderstruck. He had truly believed that the giant Moshan Prandit resented Tom's affections toward Bashalli and was only behaving in deference to his sister.

"So, he's happy about us now?"

She nodded. "He is happy that I am happy and I am happy if I am with you!"

A clomping could be heard from down the hall. Seconds later the door opened and Chow wheeled his ever-present food cart into the lab.

"Evening Miss Bashalli," he softly boomed. "Howdy, Tom. Food's on. Tom told me how ya liked that ar-tee-choke an' turkey an' peppers san'wich, so that's what ya got agin'." He set out the dishes on a table in one corner of the room where Tom had a small coffee table.

Turning back to the couple, Chow's eyes strayed over their shoulders and onto the screen of the translator. His jaw dropped down and his eyes popped out. "What in tarnation is that?" he gasped, pointing.

Tom looked back and saw that he had the translator still working on the continuous loop of alien hand signs. Bashalli turned and her mouth also dropped open.

Tom explained to them both what they were seeing.

"I've asked Bash here to help me put a voice to the translator instead of the droning computer-generated one."

"Yer little alien friends'll like Miss Bashalli's voice, Tom. She's got one humdinger of a nice way o' speakin'."

Tom explained that the aliens only communicated visually. "I'm not certain that they can even hear anything, Chow. The voice is for me or whoever else from Earth is trying to communicate with them."

As the cook was attempting to digest the latest information there was a second knock on the door.

Harlan Ames poked his head inside. "Oh! Sorry, Tom. Didn't know you were busy. Hi, Chow. Hello Miss Prandit." Looking back to Tom he said, "I was just heading out for a, uh, an evening out with you-know-who. I actually wanted a little advice but I can see you're busy."

Tom motioned him to come in. Harlan looked at the assembled small group and gulped. "Uh, what I came in to ask is sort of a matter of etiquette. It's been so long since I was on a date, and times have changed and all, so... well..." He glanced back at all of the faces and blushed.

"If you'd like, we can go out in the hallway," Tom offered.

"No. Okay. Here goes. If we have a good date, do I try to kiss her

tonight? I mean, when I used to date you waited until something like date two or three to even attempt a good night kiss. It was handshakes until then. I'm so out of date, I don't know how to date!"

Bashalli rose and walked over to the flustered Security man. She reached out and straightened his tie, saying, "I am certain that if the young lady has enjoyed her evening that she will make it clear if she wishes to be kissed or not. She might even kiss you first. You can never tell with we modern women." She favored him with a dazzling smile that made him blush all over again.

Chow left with Harlan and Tom and Bashalli had their dinner while the inventor explained how he wanted her to voice the individual words to match the symbols.

"I want this to be as pleasant an experience as possible, Bash and your voice is the most pleasant one I can imagine."

They spent more than five hours recording all of the known translations plus individual words that might be needed to make sentences make sense. And, although the evening included several breaks when more kissing than speaking was involved, most of the time was spent doing serious work.

NEWS LEAK

“TOM. DAN PERKINS at the *Bulletin*,” said the editor of the local Shopton daily newspaper. “Listen. My private sources tell me...”

Tom cut him off sharply. The previous evening had been wonderful and the last thing he wanted right now was to be interrupted by a noseey newsman. “Dan. You know how badly Dad and I react to being confronted by unnamed sources. If you have a legitimate lead, tell me who provided it. In fact, tell me exactly what it is, not *your* interpretation of it. If it is a real story, I’ll give you any info that isn’t classified. If not...” he left the rest unsaid.

“And you should know how I hate to be cut out of a good story. So, you need to come clean with me or I’ll just print what my sources say. And, they don’t make you Enterprises folks look any too good!”

“Okay, Dan. If that’s the way you want to play this, I’ll make you a deal. I know that you have already delivered today’s papers and that it takes your crew about ten hours to reset for the next edition. If you continue to make threats to me I go on TV in about an hour at the local network station and tell all of Shopton, Essex County, all surrounding viewers and the world what you have said, *and*,” he emphasized that word, “I tell them everything that you will be reporting as old news tomorrow. Or rather, what you won’t be reporting because you have decided to print some old drivel. The world will have the facts and you’ll have egg on your face. Like that, Dan?”

Tom could hear the newsman sputtering on the other end of the line. Tired of playing game, he quietly hung up the phone and waited. Fifteen seconds later Trent buzzed him. “It’s that man, again.”

“Tom Swift here. If you are going to try to bully me, Dan, I’ll just hang up and the *Shopton Bulletin* will never get a scoop or cooperation from Swift Enterprises again. Your turn.”

There was a silence at the other end of the line. Finally, the paper editor took a deep breath and said, “Okay. We got off on the wrong foot here. Obviously there is a story you don’t want to talk about, but I have a paper to feed and it only runs on stories.”

“That’s fine, Mr. Perkins, but I will remind you that lawsuits run on lies and innuendo. So, we do things on my terms. Firstly, you haven’t told me what this story is supposed to be. Secondly, my statement about not wanting to respond to unknown sources stands. Thirdly, we have only ever treated you well even when you haven’t returned the

courtesy. When we have a story you get it along with the rest of the world. We've even given you some exclusives. And when we have a press conference, including the ones called for only the wire services and big national networks, you are almost always invited."

"Hmmm. Okay. I guess I owe you a little apology, Tom. I'll start all over if you don't mind. A man called me about ten minutes ago with a story. He says that you Swifts are helping to plan an invasion from space!"

Tom began laughing.

"So, what's the joke," the perplexed newspaperman asked.

"Dan. There is no invasion. I have to say that I am kind of bothered to hear that there is some leak in our security here because word would not have been released for another few weeks or so regarding the truth about this."

"So you are planning some sort of big thing, then?"

"I'll make you a deal, Dan. Big exclusive for you if you keep it under your hat until about four weeks from today. Agreed?"

"Do I have a choice?"

"Well, yes you do. You can choose to *not* come over here to Enterprises in an hour and *not* to speak personally with me about this so-called story. And, to bring me the name and number of the person who called you. And you can choose to *not* have anything to go on for your story until we release the info to the world. Plus there is that little thing about where I go on TV and spoil it all for you. I could even name you personally. Your paper's owners would like that, right?"

"See you in an hour!" With that the line went dead. Tom called the front gate to advise them of the upcoming arrival and asked that he be ushered to Tom and his father's shared office. He next called Harlan Ames to tell him what was about to happen.

"Are you sure, skipper? Perkins has gone back of some promises in the past. He's pretty adept at twisting the meaning of what he says to the breaking point."

"This time, he is going to sign on the dotted line. No signature on a guarantee, no information. Ever again."

When Perkins arrived, he was almost out of breath with excitement. "Okay, Tom. Spill!"

Tom pushed a three-page document over the desk. The newsman eagerly picked it up and began reading. His enthusiasm quickly turned to confusion and then to annoyance as he read the terms being spelled out.

“Really?” he asked looking at Tom. Tom nodded and handed him a pen. After reading the terms and trying, unsuccessfully to argue about several of them, Perkins signed the contract and slid it back to Tom.

“Okay. Give!”

“First, you tell me exactly who called you and what your source said. And, if you have anything to corroborate that call.”

Dan looked vaguely uncomfortable as he related the very sketchy details of the call. Unknown caller using a muffled or disguised voice. The caller ID had only registered ‘UNKNOWN CALLER’ so Perkins had no idea who called. His message was basically that Swift Enterprises had formed a pact with an unfriendly alien invasion force, had provided them with information regarding military and civilian targets and was going to do something to hamstring any defense attempts.

Tom was almost in tears he was laughing so hard by the time the story was finished. Perkins was red-faced with an equal combination of anger and embarrassment. Even he could see how the story was falling apart in front of his own eyes.

“Dan,” Tom chuckled. “You’ve really got to stop listening to mystery calls. What if he had said that I was planning on doing a strip tease in Times Square? Would you have believed that?”

Perkins agreed that such a story would be improbable.

“So, if you’ll just agree to assume that your caller was lying to you about everything, I’ll give you the full story... at least to the point where I know it.”

Eyeing the contract with suspicion, Perkins asked to be allowed to re-read through the list of terms. Although he hated being put in a position where others dictated what he could and could not report, he fully understood that Tom and his father could completely shut off the *Bulletin*, turning it from a legitimate newspaper back into the weekly coupon clipper it has started out as thirty years earlier.

He nodded.

“Here goes. You know about our space friends?” Perkins gave another nod. “Over the couple years since we first were contacted by them we have tried to find a way to successfully communicate with them. We’ve been able to communicate in basic concepts, but a full conversation has been mostly impossible. Everything has been mathematical symbols that we think we understand, and we think they understood our responses. The only thing is, we recently found out that was an incorrect assumption. At best, incomplete.”

“You mean they’re not our friends?”

“No. I mean that they are our friends but we haven’t really understood each other very well. Sort of like a Frenchman who speaks about twenty words of Cantonese trying to communicate with an Alaskan Aleut who speaks a few words of Mandarin. A tiny bit of potential overlap but a really broad area just ripe for misunderstanding.”

He continued by telling Perkins about the new translation software and how the messages were now coming through with almost crystal clarity.

“We finally have discovered, much to our surprise, that we can speak another language that neither of us ever asked the other about. Or sort of like that. In a nutshell, they have finally given us all of the details we need to create an environment for them to live in so that they can make a short visit to Earth. They only wish to observe us for a few days and to see the sights.”

“Space tourists? I can see the headlines now,” Dan said looking dreamily at the ceiling. “And I have to sit on all this for a week?”

“Four weeks, Dan!” Tom tapped the contract.

“Not an invasion?”

“Nope!”

“Just a visit kinda like having the in-laws drive across the country to see us?”

“That’s really it, Dan.”

After Dan Perkins departed Tom turned to the problems of creating a special power supply to recharge the small gravity stone. It was number eleven on his list of twenty-three things to do. He was interrupted by a call from the paper editor.

“Tom! I completely forgot to ask when? When are they coming? Where will you take them?”

“We aren’t exactly sure, Dan, but not until I get their traveling environment finished, and that’s several weeks away at best.”

“What do I tell my readers? I mean, once I can let this out.”

“Dan,” Tom said, slightly exasperated. “You can and should tell your readers the truth, even if it is only a human interest story. I realize that sex and violence and drama sells more than fluffy bunny stories, but trust me when I tell you that this is a bunny story, not a dog bites man one. Okay?”

When Tom related the conversations to his father, Damon laughed. “You do know that Perkins is likely to blast a headline declaring, ‘Swifts Say Bunny-shaped Space Aliens Coming’ in ninety-six point

Helvetica type? Bold face.”

Tom had to smile in spite of himself. “Before he left I asked him to give us a day to review what he is going to print. He grudgingly agreed but only so long as we don’t get to edit or censor it.”

“Then, we’ll see in a few weeks. So, tell me what you’ve been able to come up with these past couple of days?”

Tom scooted his chair close to his father’s desk. “Well, I finished designs for the airship and sent them off to Hank to have the pattern pieces made.” He described how it would be a flat shape and not what Bud had suggested. “Hank got those to the fabricators over at the Construction Company this morning. My guess is that they will have everything cut out by tomorrow, and the basic gasbag finished two days later. By the way... that new glue you developed for the giant parachute on the Venus probe works great! “

“Well. Thank you, Son. I’m glad I could help out.”

The new glue, dubbed Swift-Stik by Bud, and officially referred to as Swift Fabric Adhesive 1-N, was a marvel. When used with any fabric containing at least fifteen percent nylon, it adhered at the molecular level.

Tom explained to Bashali on a quick dinner date that night, “Think of each edge of nylon as being a length of chain and the adhesive as being a set of carabiners. The adhesive opens, loops through the open parts of a link in the chains and locks closed. The next carabiner does the same thing to the next links of the chains—the next bit of nylon.” After he explained—and drew a diagram of—carabiners she grasped the concept.

“So, once this glue carabiner has both of the chains together, can it open and let them loose?”

Tom shook his head. “No. Once the nylon polymer chains are combined, and that requires exposure to a special ultraviolet light, the two pieces can’t be shifted; it is as if they had always been that way. You can only cut them apart. And, the great part is that the bond is as soft as the fabric itself. No lumps, bumps, or hard spots. In fact, there’s a designer in California who makes evening wear using a fabric that is thirty percent nylon along with silk and cotton that has no thread involved. Just the Swift adhesive.”

“Amazing,” she told her boyfriend. “So, this giant air blimp you are constructing is built from many sections of nylon fabric all held together with this adhesive?”

Tom nodded and smiled. Not for the first time he realized how incredibly lucky he was to have such an intelligent girlfriend.

Over the following two days the team cut, positioned and

permanently adhered each panel of the large gasbag that would be the main body of the giant airship. A collapsible internal frame of aircraft aluminum was installed. The team building the gondola that would hang below and contain the special gravity-controlled environment for the space visitors was nearing completion of their work. As time was going to be a factor later on, Tom decided to have them install the nuclear power pod and the gravity stone the space friends had sent along with some basic controls.

For its test flights, the gasbag would only sport the upper tail and two stubby wings on the sides. These wings would include small jet turbines to maneuver the craft during tests. Before it was complete, a second, lower tail would be added, the turbines removed, and the stubby wings sealed inside of a pair of larger wings that would house two repelatrons to replace the jet engines.

Tom had realized that there was practically no noise on the recordings that had come back from Mars. He reasoned that the space friends might be sensitive to noise, so the jet engines would be taken out before their arrival.

There was just one full month left before the masters would recall their subjects. Tom knew that the building and testing of this airship would require about one week of that time.

While he waited, he made all the necessary arrangements to secure a test area in New Mexico. Arrangements and permits were taken out with the appropriate state and federal agencies to give them a full day of unrestricted airspace in an area one hundred miles on each side. And, while he hated wasting any time, he set the test day for one full day later than everyone was assuring him they would be totally ready.

Arrangements finished, the young inventor turned to the matter of the environmental controls and atmosphere equipment. Even with the unit working in tests, Tom knew they might be difficult to keep in perfect balance once the aliens were added to the mix.

“After all,” Tom said as he and his father sat having coffee the next morning, “I never asked for information on what their bodies retain, what they exhale and in what quantities. I afraid that I may end up poisoning them before I can fix things.”

Shaking his head, the older Swift said, “There is no way they can live in an enclosed environment and be so sensitive to changes in what they are breathing. My suggestion is to set up a constant monitoring of the gas mixture and let a computer add, subtract or scrub out gases to keep a good balance.”

As he sat at his desk later that day he looked back over the list of gases in the atmosphere sample he had analyzed.

At thirty-nine percent, almost double the amount of oxygen as

Earth's atmosphere, it also contained quadruple the level of carbon monoxide and triple the amount of carbon dioxide. Nitrogen, the major gas in our own atmosphere was relegated to nineteen percent while sulphur dioxide was a whopping three percent. The rest of their "air" was a mixture of a few percentage points of argon, four of krypton, two of neon—which caused Tom's eyebrows to rise—one of helium and an equal amount of hydrogen. The remaining atmospheric component was simple water vapor.

With a realization that he was missing some important details, Tom poured through several hundred pages of notes he had taken from the two times the space friends had provided him the opportunity to step within their environment or to at least sample their air. The experience with the serpent-like creature that had died shortly after Tom had drilled into its sealed rocket capsule turned out to be an unfortunate misunderstanding. Puncturing the capsule had allowed an all-Earth version of air to enter and choke the poor creature.

But, it was the samples he had taken when he and a group of scientists and doctors had discovered what was killing the animal life on their home planet that made his heart leap for joy.

The aliens had adjusted the atmosphere in their space disc so that the Earthmen could breath unassisted. There was no sign of the sulphur dioxide in his notes from the time. Although the oxygen had not lowered, and the higher level had prevented the carbon dioxide from harming Tom and his team, the level of carbon monoxide was almost zero.

It was likely, he realized, that their bodies simply ignored the monoxide and sulphur components much like our own practically ignore the high levels of nitrogen. If this proved to be true, he would only need to monitor their levels periodically. It was more likely that the balance between the oxygen, neon and krypton levels and the carbon dioxide were the key. And, he could always add more O₂ and scrub out the CO₂.

Before departing for home, Tom diagrammed out the monitoring station and located several commercially-available products that might be needed. These included the one-gallon tub CO₂ scrubbers/filters used in his own Fat Man diving suits.

As he prepared to leave, his phone rang. The switchboard operator told him who the caller was, and Tom almost asked her to say he had already left and could not be reached. After a moment he told her, "Go ahead, Cindy. Put him through."

He took a deep breath as he waited for the phone to beep. When it did he released his breath, took another one and picked up the receiver.

“Yes, Dan? What can Swift Enterprises do for Shopton’s own version of the New York Times?” He hoped his sarcasm would register with the paper editor.

“Ah, ha-ha, Tom. I’d be laughing right now except that I just got off the phone with the same person who called with the... ummm... visitor information we spoke about before. Interested?” Tom could hear the sneer he knew the man was now making.

“Sure, Dan. More of the same? Are we supposed to be helping our forthcoming guests to overthrow civilization as we know it? Steal our pets? Eat our cars?”

“Not this time, Tom. Seriously, this guy is some sort of nut or some really dangerous individual. Either way, you came square with me so I owe you this. Oh, and by the way, I had our switchboard start a trace. We’re on the line with the phone company right now trying to see if we can narrow things down. Anyway, the guy identifies himself as ‘your safety guard,’ and then launches into a three minute diatribe all about how he has proof right from your own files that the aliens are coming in five days and that you’ve made a deal to keep you and your family safe while everyone else is either killed or subjugated.”

Tom laughed out loud. “Dan. I told you before that we’re hoping to help our space friends visit Earth. All for peaceful purposes. I still can’t tell you when, but it is a long way out beyond five days. I promise! And, I’m literally crossing my heart right now, no sarcasm. Truth.”

The newspaper editor told the inventor that his caller had gone on to say that he also had proof that the aliens had purchased the rights to all of Earth’s mineral resources including diamonds that they used as aphrodisiacs. Every married woman would be forced to give up her rings or have their fingers chopped off.

He interrupted himself to speak with his switchboard operator. Tom took the opportunity to call Harlan Ames’ office. Phil Radnor was on evening duty so Tom cut him into the conversation. They came back on just as Perkins was saying, “Hey! You still there?”

“Yes, Dan. I just brought our security guys in on this. You know Phil. He’s listening in.”

“Oh. Hi, Phil. Actually, I’m glad Tom connected you. I just got the word from our folks and via the phone company that my weird caller was using a phone registered to a Herman Philliman, that’s with a P - H and two Ls. He recently moved to 8215 Hidden Springs Road out near where Tom’s old family property is located. About a half mile north and inland from the lake by maybe five hundred yards. Do you want me to call the Police?”

Phil spoke up. “Yes. You do that and I’ll follow up with them as well.

It'll make it more official. Also, I'll be calling from my car since I'm heading over there right now. You take any other info for me, Tom. Okay?"

Tom agreed.

Half an hour later, Phil called Tom back. "Hey, skipper. Thought you'd like to know. I got to the Philliman house—well, double-wide trailer actually—just before the police. We surrounded it and they called him out." Tom could hear the security second-in-command chuckling. "Good golly. You should see this fruit basket!"

Tom listened to the description and found himself also laughing in spite of the seriousness of the situation.

"Honest to goodness tin foil hat? Is he dangerous?"

"Naw. Maybe to himself and anyone foolish enough to listen to him, but it's probably a good thing we get him under control for the time being. He's the sort who needs to get back on his meds."

Tom suggested that he meet everyone downtown at the police station. Twenty minutes later he pulled up into a 'visitor' spot in the side lot and raced inside.

"They're booking him for assault right now," Radnor informed his boss. "Took a good swing at a junior patrolman and conked the kid cold. Looks like a looney but punches like a prizefighter!"

Ten minutes later Tom and Phil were looking at the man through the one-way glass of the interrogation room. As Phil had said, the man looked the part of a lunatic. His bright red hair, such as could be seen peeking from under a crumpled foil helmet, was frizzed and seemed to point in every direction, his face was a mix of contorted features and inexpertly-applied makeup, and he was dressed in what Tom later described as a combination of medical garb, military uniform, French maid skirt, and pants partly wrapped in aluminum foil that had torn so badly that it now hung in several large tatters by his feet.

As Philliman sat there alternately answering questions by honking like an asthmatic goose and yelling in a falsetto voice, Tom realized that the man was one of two things: he was either a master at looking like an incredible nincompoop; or he was in fact an incredible nincompoop!

A Sergeant entered the room and whispered something into the interrogating officer's ear. He nodded and the other officer left.

Over the speaker, they heard the policeman ask, "When did you escape from the asylum, Harry?"

The question and the use of what seemed likely to be the man's real name stunned 'Philliman' to silence. He hung his head and refused to say or honk anything further.

Tom and Phil left ten minutes later.

“He’ll get shipped down to Albany tomorrow and be held on a psychiatric evaluation retainer for at least thirty days,” the desk Sergeant told them as they departed.

“Well,” Tom said climbing into his car. “At least that will take us to visitation day!”

CHAPTER 12 /

THE SPECIAL REQUEST

AS THE AIRSHIP was taking shape and progressing on schedule, Tom concentrated on several of the smaller items on his check-off list.

Thinking back to both a conversation he had with Chow, and also one of the messages they received from the space friends, Tom knew that he needed to address item thirteen. Food.

He walked down the hallway and into Chow's little private kitchen where the chef prepared all of the food he served to Damon and Tom and the senior Enterprises executives. He also catered meetings, made birthday cakes and cupcakes for special employees' birthdays, and created many of the recipes served in the large staff commissary and dining room.

"Well, howdy, Tom. What brings ya here?" Chow asked, looking up from a steaming pot of something that smelled like chicken and lemons to Tom.

"Need to talk to you about feeding our visitors."

"Uh, yeah. 'bout that. I started gettin' the colly-wobbles a-thinkin' 'bout how I might poison the little fellers if'n I do somethin' wrong." He looked concerned, and Tom could see how anguished he must be.

"Well, I've come to rescue you, then," Tom told him.

Chow brightened. "Oh, yeah?"

"Yeah. Seems our friends have already packed their own grub and plan to bring it here. Probably one of those 'Don't drink the water or eat the food' sort of things. I can understand that. Glad that it isn't going to ruin your day."

Chow furrowed his brow. "Could I mebbe make 'em a little treat or somethin' like that?"

"Well, let's see. One of their food samples has all the same nutrients and amino acids of chia seeds and they sent along a liquid that was mostly glucose and water. Can you do anything with those?"

Chow snorted. "I kin make 'em a green-headed dog!"

Tom smiled. "Okay. The other thing they sent is like a combination of barley, malt, wheat and yeast. Anything?"

Chow thought a moment. "Sounds like beer. No meat?"

Tom shook his head. "Not that they shared with us. Sorry."

“Okay. I’ll make ‘em some sort o’ malted grain cookies. Mebbe add some o’ them chia seeds fer texture. Yep. That’ll be it.” He smiled at his young boss.

Tom thanked him and headed back to his large lab. Once there he checked off item thirteen.

Fourteen was complete as was sixteen. Fifteen, however—build a 3D surround vision screen to let the aliens see what was around and under them as they traversed over the land—needed attention. Because of the low light levels shown in the videos brought back from the Mars station, Tom surmised that bright light might be painful to them, so it had been decided to control the light inside the environment and then bring the highest possible definition video inside.

Just in case, though, Tom had spec’d out a special room to the front of the gondola featuring a wrap-around view pane that could be darkened with the application of small levels of electricity. That small room-within-a-room would also have a special airlock to let the aliens bring items onboard for a more tactile experience. It was going to be as close to getting them outside as he could devise given the short schedule.

As he was discussing several other matters regarding the airship with Hank Sterling, he remarked, “If we had half a year or even four months I might be able to get enough info from them to help me create some sort of excursion suits, but I don’t have that luxury!”

“Remember, skipper, that they’ve been trying this for who knows how long? Years? Decades? Centuries? We don’t know. Sixty days for you with the distinct probability of them getting to experience some of the sensations of Earth is an outright miracle!”

“Thanks. I needed a little pep talk. So, back to the 3D screens. What have we got?”

“The best we’ve been able to do as one-offs is sixty inches high and one hundred wide. I can curve them about twenty degrees end to end and butt one end up against the next with only a one millimeter black line separating them. Oh, and if we push the refresh speed up to four forty a second I can give you a resolution equal to two hundred fifty pixels per inch.”

“Wow,” Tom exclaimed. “That’s great.”

“Yes it is, but it comes at a cost. I need to devote four of our fastest computers to each screen, and then another one to control multiple screens, up to six. After that I can’t promise anything. Except maybe dead screen black.”

Tom pulled out his pocket organizer and brought up the calculator

program. In a minute he looked up and smiled.

“Hank. You give me five screens all at twenty degrees of curve. I can mount them around the front forty percent of the gondola wall and connect them to a series of cameras outside. Of course I’ll have to relocate the little air lock and view room to the back of the craft, but that can be done after we get finished with the flight tests. Thanks!”

He left happy to have now accounted for item fifteen as well as having a start on nineteen, the airlock room.

Bud and Zimby Cox dropped by that lunchtime and pulled Tom out of his office and down to the commissary. After retrieving their meal choices the three sat at one of the tables to the back of the room.

“Tell him, Zim,” Bud prompted just as the other flier had forked a large chunk of chicken pot pie into his mouth.

Zimby dropped his fork and pointed at his mouth with both hands. He carefully mumbled something around the food that sounded like “mouth full” or possible “you jerk” and then swallowed. “Thank you Bud Barclay,” he said sarcastically.

“What Zim means is that we’ve cleared items seventeen and twenty one from your little list. Tell him, Zim.”

Zimby had retrieved his fork and had finished taking another bite just as Bud pointed to him. He rolled his eyes and raised his fork as if to stab at the younger flier.

Tom barely kept a straight face. When Cox finished his latest mouthful, he opened it to speak and was interrupted by Bud once again.

“So, he wants to tell you that the cockpit is all finished and checked out—scratch seventeen—and the repelatrions have been mounted to their swivel control gimbals and are going to be ready to install as soon as the ship gets back from its test flight. And, that’s twenty-one. Right, Zimby?”

Zimby had taken another fork full of food and sat there with it close to his mouth. He pulled it away, keeping the tines pointed at his own mouth, but with his opposite index finger pulling them down. With one deft motion he released that finger sending the food flying toward Bud’s face with the accuracy of a fine medieval trebuchet.

As the gooey filling hit and began sliding down Bud’s face. Tom lost it and doubled over in laughter.

“And that,” Zimby declared, “is the exclamation mark to that story!”

Bud wiped his face while Tom thanked them both for their hard work. “We’re going to pack up and go test the thing in three days. I hope you both want to come along even though we’re going to fly it by

remote control.”

Looking at one another, the two fliers eagerly agreed.

A little while later Tom was sitting at his desk in the shared office when the door opened and Harlan Ames walked in.

“I was looking for your dad on one matter, but I’ve also got something for you, Tom”

“Okay, Harlan. But first, I never did ask you how your date with Gabrielle went. So?”

“Um, uh,” stammered the Security man. “It was fine. Good. Even great. We had a nice dinner and a little dancing and she even kissed me when I took her home. All fine. All fun.”

“That’s all you’re going to tell me, huh?” Tom asked.

Giving a quick nod of his head, Harlan appeared to be anxious to change the subject.

“You remember a few weeks or so back you and Bud were conked and tied up in that old shack?”

Tom rubbed at the point on the back of his head where one of their attackers had smacked him with a piece of hard wood. Although it was much smaller now, he could still feel the lump. “I sure do,” he answered.

“Well, the good news is that the whole episode seems to have nothing to do with the visit from our space friends. You might also recall the woman you two were dazzled by—” He paused to smile, innocently, at Tom before finishing. “Well, she’s April Jackson, the girlfriend of Marshal Yablonski. In case his name doesn’t ring a bell, he is a thug for hire up from Elizabeth, New Jersey. Very well known by their P.D. And, ours. Not one of your all time nice guys!”

“Why was he here?”

“To get you, Tom.” Seeing the inventor’s shocked look, Ames continued, “He claims he received a phone call—disguised voice and all that—from somebody who offered him five grand to capture you, tie you up and then just leave you. And there is no need for anyone to take that shack down. Somebody rigged an incendiary device that burnt it to the ground a few hours after you got loose.”

Tom gulped. “And, if we hadn’t gotten out?”

Ames shrugged. “Doesn’t look like they wanted you to.”

“So, why was my car parked there?”

“You told me there was brush piled over it. Whoever set that device probably hoped that the entire area would catch fire and burn the car

as well. And, before you go too far down the ‘so what about this’ and ‘what about that’ path, I’ll tell you that the way we know about this is that the girl ratted him out after he got drunk and hit her.”

“Isn’t she afraid he’ll find out and hurt her again?”

Ames shook his head. “Nope. Yablonski has so many outstanding warrants for everything from petty theft to escape from custody to felony attempted murder—that would be you and Bud—that I’ve been assured that he won’t see freedom and non-penitentiary light for at least fifty years.”

Damon had walked into the office in time to catch the last half of the conversation. “Sounds like good news to me, Harlan. Thanks for letting us know. And now, I’ve got some news for us all.” He sat down and pulled a sheet of paper out of his inner jacket pocket and unfolded it.

“George called me over to the radio room half an hour ago. He had just received the translation of a new message from our friends.” He looked pensive, but handed the paper to Tom who had walked over.

Tom read it out so Harlan could hear:

**DANGER. MASTERS HAVE PUT A
WATCHER AMONG US. PLANET TRIP
IN PERIL. WE MAY BE IN PERIL IF
PLANS MADE KNOWN TO MASTERS.
ASSIST US IN GREAT URGENCY.
MAY NEED TO BRIDGE CONTACT
FROM THEM TO YOU.**

CAN YOU SPEAK FOR US.

Tom looked at his father. “Did you send them an answer?”

Damon nodded. “It’s on the other side of that sheet.”

Tom read it:

**Friends. We offer to speak to your
Masters. If you can create contact.
Inform us what you desire to be
communicated to them.**

“Can we trust their masters? I mean, even if they agree to communicate with us, do we have enough of a symbol vocabulary to get the point across? And, what about this ‘watcher’ they think is

among them? Does that mean a spy?" Tom looked back and forth between his father and Harlan.

They both nodded. "That would be my take," Ames told him.

"We can do some planning in case our friends do get us all in contact but in the meantime I believe you need to continue on as if we never received this message."

"Where do I start?" Tom asked.

"I know that you want to show our friends a wide variety of Earth sights, but I think we absolutely have to fulfill their request for a trip down to the Yucatan Peninsula so they can see the area where their armada landed and perished all those centuries ago," Damon told Tom.

Vigorously nodding, Tom said, "I absolutely agree. The one thing is that the State Department tells me the current Governor of the Campeche area near where that all took place is in a personal feud with the governor of Yucatan over the ownership of the border area very near to where we wish to go. Neither side wants to give in so State says we will need to petition for dual permissions."

Trying unsuccessfully to stifle a smile, Damon asked, "And, have we?"

Tom smiled. "Yes. In fact, we can go down for a reconnoiter tomorrow. They'll both give us three hours between four p.m. and seven in the evening. Do you mind? I know mom is planning to have a few friends over—"

"And, she loves to parade you and Sandy out for them to see. I think your mother will be able to get through this one get together without the entire group of prodigy there as well." He winked at Tom.

"Now, for the bad news," Harlan told them, his face growing very serious. "Last night we had a theft. Someone evidently got one of the un-assigned TeleVoc pins, paired it with their own brainwaves, and stole the *Kangaroo Kub!*"

Tom and Damon were both shocked. "I thought it was in a hangar for an upgrade," Tom said.

"It was, but the technicians told me that they finished things around eight and left it parked outside the repair hangar, ready to be picked up and stored until the *Sky Queen* is retrofitted."

It was terrible news, but Tom took it well. Damon asked, "Do we have any way to track it?"

"Had. Whoever took it knew enough to disable the IFF transmitter. They had to break it since it has no On/Off switch. Unless they fix it, it'll be luck if we sight it. At least the one-of-a-kind design will help us

get it back if it is recovered.”

The rest of the day and half the next were spent installing upgrades to several pieces of equipment and a total computer system flush and re-installation. With something as complex as the *Super Queen*, it was standard procedure to ensure that her computer systems were not only up-to-date but totally free of possible ‘bugs’ or viruses before any major flight.

“That’s odd,” Tom said to one of the technicians helping with the systems updates. “The navigation computer seems to be off by at least one hundred miles.”

“That’s kinda impossible, isn’t it?” the tech asked. “GPS?”

Tom pointed at the readout on the control board in front of the pilot’s seat. “See that?” he asked, pointing at the screen. “That says we’re currently sitting on the ground in a place called Domaine-du-Trécarré, Canada!”

Staring at the point indicated on the map, the tech let out a low whistle. “Wow. That’s not even close to right, is it?”

“No. It’s not!”

Tom spent the next hour searching for a clean backup of the GPS software. Of the three copies he found stored on various servers, two showed the same corruption. Only one was clear of any issues, so he finally performed a separate update from that source, tested the system and then backed up the entire ‘clean’ code onto a brand new hard drive array he set up in his lab.

He hated to entertain such thoughts, but Tom was beginning to worry about possible sabotage to the *Queen’s* software servers.

Harlan Ames promised to get onto the problem while the inventor was gone.

With Bud occupying the second seat and Hank and Zimby in the lounge to act as relief pilots, The mighty *Super Queen* soared into the sky and headed south after lunch. As they departed U.S. air space, Tom made first radio contact with the air control offices in Cancun.

“Permission to enter Peninsula airspace in ninety-five minutes,” he requested.

“Swift air flight, S2 Heavy. We read you. You have permission to enter airspace on arrival over navigation point 22 degrees 2 minutes North by 86 degrees West. You will receive new vector to destination at that time. On a side note, I understand that you have been granted a specific access corridor. You are reminded that this corridor must be adhered to. Call when at navigation point. Out!”

Tom glanced over at Bud who shrugged back at him.

“They don’t sound angry or anything, skipper, but they sure aren’t rolling out the high-altitude red carpet.”

“We play their game for now, Bud. It’s probably the only way to assure that we can over-fly this area with our space friends, assuming I can overcome all of the other details.” Tom looked dejected and Bud felt for him, but there was nothing he could do at present.

An hour and a half later Tom picked the microphone back up and made the necessary radio call. “Swift air flight S2 Heavy announcing arrival at navigation fix. What are your directions, please?”

“Welcome back, Swift Heavy. Please immediately descend to twenty thousand feet and decrease air speed to three hundred knots. You are to take a new heading of two-two-three degrees at this time taking a direct route to your flight corridor. Authorized corridor begins at twenty degrees, thirty-two minutes North by eighty eight degrees, forty minutes West as you pass over the town of Yaxuhuna.”

“Roger, Cancun control. We understand corridor is fifty miles wide centered over course two-two-three and is seventy-five miles long. Do we have permission to manage our own vectors, altitudes and speeds while inside corridor?”

“Yes. Once inside corridor you have self-control. You are directed to radio on arrival at corridor and then again each fifteen minutes during authorized over-flight period. Out!”

“I wonder how they are going to feel when we bring the space friends in that giant blimp?” Bud asked both teasingly and also with a hint of concern.

“The State Department is working on that for us. It’s one of those ‘we’ll see when we get there’ things I guess.”

They sent out another radio call as they arrived at the start of the controlled airspace and then dropped to about six thousand feet so they could get a good look and map out the best route to over-fly the area where the alien’s ancestors first landed, left artifacts and perished.

An hour and four check-in radio calls later, Tom was swinging the large jet in a wide, left turn. The GPS instruments showed them to be about a mile northeast of the contested border area.

Just as the *Super Queen* leveled back out on her new course Bud shouted, “Tom! I’ve got something hot and fast coming up at us. Hit the elevators. *It’s some kind of missile!*”

CHAPTER 13 /

A DEAL WITH THE MASTERS

TOM'S HAND hit down on the controls for the bank of repelatron lifters that covered the middle of the lower fuselage at the same time Bud's left hand shot out and rammed the main throttles to full power. As power surged into them the huge ship took a stomach-churning leap upwards and forward shoving the boys down and back into their seats. It happened so fast that it took their breath away. In seconds they rose from five thousand feet to fifteen thousand, and had shot forward by more than two miles.

Even with the maneuver, it immediately became evident that it wasn't enough. Bud's warning had come an instant too late.

With a jarring *thump!* the missile exploded very near the tail end of the *Super Queen*. Her Tomasite coating kept the missile from obtaining an actual lock on the jet so they were spared a direct hit, but as they raced away Tom found himself contemplating just how any missile could have followed their rapid rise and sprint away from the area yet still detonated so close to them. *Must have been manually controlled*, he thought.

"Sorry, Tom. I could have been a bit faster on the warning, there," Bud said, his face still a little white.

"Not to worry. We've got bigger problems." He told his friend about his concerns on the tracking ability of the missile. "It shouldn't have been able to follow us, Bud. That means just one thing. Someone was actively directing that missile and that points to a military grade surface-to-air missile installation, not some point-and-shoot shoulder launched job."

Zimby and Hank appeared in the back of the cockpit. "What the heck was that?" Hank asked.

While Bud explained, Tom place two radio calls. The first was to Shopton where he reported everything that had occurred. Next, he called Cancun Control. The radioman was most distressed to hear Tom's account. Suddenly, instead of being curt and direct he was apologetic and earnest in his spoken concern for the welfare of Tom and Bud and their aircraft.

"I can *not* apologize enough to you, Señor Swift. Dios Mío! Please repeat those coordinates and I will have our military command notified immediately. This is an incident that must be reported to the government of Mexico pronto! Are you certain you have sustained no damage?"

Tom asked for five minutes to do an internal survey of the *Queen*. When he came back into the cockpit he radioed, “Cancun. We are in good condition, but I would like to do an external inspection. Where can we set down?”

The controller gave Tom a vector to the airport at Merida where, as he termed it, they would have everything Tom might need including a tall ladder.

As he suspected, there was no visible damage to the skin of the jet. The ‘ladder’ turned out to be an old fire truck with an extendible ladder that could almost reach the fifty-two foot height to the top of the *Sky Queen’s* tail. It grumbled and groaned and wobbled quite a bit as Bud swung it around and Tom inspected everything.

They were soon heading back to the United States.

By the time they landed at Enterprises Harlan had some news for them.

“Seems that a large Mexican Army military regiment stationed near Compeche received a mysterious message purporting to have proof that your flight was actually a military spy mission from Cuba in preparation for a military incursion. They claim they were given permission by the provisional Governor of their state to fire on, and destroy if possible, any aircraft coming from your direction.”

“And, I suppose that all the typical diplomatic regrets and promises have been issued?” Tom said with a high level of scorn.

Ames could only nod. He had already taken out his anger on a mid-level assistant at the State Department. He had nothing left inside but resignation and frustration. “Our people are getting in contact with people high enough up the ladder in Mexico’s government to get to the bottom of this. In the meantime, we have evidently been ‘assured’ that this was a one-time thing and that any future visits will be treated as friendly. Whatever that actually means!”

Tom talked the matter over with his father an hour later. As they sat in their shared office, Chow brought in a late afternoon snack and some coffee. “I heard as how some hombres down south o’ the border took a pot shot at ya, Tom. What happened?”

After hearing an abridged version of the story, the western chef was livid. “Why, them no account—”

“Hang on, Chow,” Damon warned him. “We don’t have the entire story. It may well turn out that they had good reason. Bad timing and the wrong aircraft, but until we know the whole story, let’s hold off on the name calling.”

Chow, a bit embarrassed now, apologized for his outburst and left the office.

“Truthfully, Son, I can’t say I blame Chow for his anger. I’m pretty steamed over this myself. But, the important thing is that you are safe. It will likely turn out that your future trip through the area with the space friends will be just fine.”

Tom’s brow furrowed. “You don’t think that there’s going to be some level of shock and even panic when we announce that they are going to be flying around? That reminds me. Does our own Government know they are coming?”

Damon Swift nodded. “The people who *need* to know, do. I’m going to suggest that we take no more than three days flying around with our guests and then get them back off planet with as little fuss and notice as possible.” He looked at his son. “Do you agree?”

“I sure do,” Tom said. “I was going to suggest that we allow no more than forty-eight hours down here. Or, at least that amount of time in the air. I do hope we can find some way to show them around here at Enterprises. Just think what sort of technological advancements they might be able to share with us. I hate the idea of keeping them cooped up even though they live on a small space station of some sort.”

“So, no hope of some sort of space suits for them?”

Tom shook his head. “I could create the suits, even mount the atmosphere machine on a cart and roll it along behind them, but I don’t think that we can do it until they actually arrive. By then it may be too late. Besides, one of my tests shows that if you move the gravity stone around that the field it puts out warps and twists and sort of slides in and out. Unless our friends could be corralled into a space of about nine square yards I couldn’t guarantee that they wouldn’t be subjected to Earth normal gravity at various times.”

“If it hit them all of a sudden, it could do some damage to them. All we can hope is that this can be the first of several or even many visits. Once their masters see that they can overcome some of the problems, perhaps we’ll get the opportunity to help them overcome the larger ones.” Mr. Swift was looking toward Tom as he spoke, but the young inventor could see that his father’s eyes were focused on some point many months or even years in the future.

“I hope we get more chances, too, Dad.” Tom rose to his feet and headed down the hall. In his lab, he was surprised to find Bud sitting at his desk reading something on the computer.

“Hey, skipper. I’ve been doing some more thinking, and before you ask if it hurt, it kinda did. At least the punch on the shoulder I got from some cute blond girl who lives in your house did.” He rubbed his right shoulder. “Got me right on my old football injury. Anyway, I was just looking up something about magnetic fields.”

Tom looked puzzled. “Why those?” he inquired sitting down on the

sofa across the desk from his friend.

“Well, I remember you once telling me that some scientist from Germany or somewhere over there figured that a magnetic field is the way to affect the path of neutrons in that huge collider they built so that instead of traveling in a straight line, they make them curve and behave exactly like they need them to.” He looked expectantly at Tom.

“Right,” the blond inventor replied. He realized where Bud was taking this, but wanted to let his friend say it. “Go on.”

“Uh, well what I was thinking over is the problem you told me about with the gravity stone and how if you move it, it doesn’t seem to work right.” Seeing a smile begin to play over his friend’s face, he stopped, then said, “You’ve already figured this one out. Haven’t you?”

Tom laughed out loud. “Actually, Bud, no I hadn’t. At least not until you mentioned the magnetic field.”

Bud spread out both hands, palms up, and leaned forward. “Case closed then?”

Tom shook his head. “Not really. A good start, though. The problem... well, not problem because we don’t know if it is one, but at least the possible *issue* is that we don’t know how magnetism might affect our friends.”

“But, I’m not crazy. It might work?”

“You are no crazier than you’ve ever been,” said Tom, noncommittally. “And, once we get them down here and can communicate freely we might even find out that projecting a magnetic field to contain and control their gravity stone’s field will do the trick to give them mobility. It’s just not going to happen this trip I’m afraid.”

Bud sighed. “Ah, well. I tried. What’s next on the agenda?”

“Finishing the airship and getting it tested, finalizing all of the interior stuff like the wrap-around video system, completing the final three items on my master list of to-do’s and then finding out all the stuff I forgot and rushing around like crazy getting them done. Oh, that and waiting to see if our friends’ masters want to speak to us about all this.”

Bud’s mouth opened and closed but he didn’t say anything. Finally, he managed to get out, “You’re going to talk directly with their masters?” His face was the picture of astonishment.

“They’ve asked us to, and assuming that the masters agree, we could be speaking, or at least communicating, with them at almost any moment.”

“So you mean to tell me that the space friends have convinced

whoever it is that controls them to speak with you?” Bud was incredulous. “I mean, you’ll be actually contacting beings in another solar system?”

“That’s about it,” Tom replied. “Our friends haven’t been able to convince their masters that they should be allowed to remain in our solar system, but they tell us they are trying to broker an arrangement where we can send a message or two through their communication systems to these unknown beings.”

“Are you gonna tell them they can’t have their little minions back? Is that it?”

Tom stopped and thought a moment. “No. I don’t think that would work. The masters seem to have the technology to get here pretty fast, and we don’t want to be the cause of any harm coming to our friends. Dad and I have decided to put together a set of compelling reasons why our friends should be allowed to continue to study us. Plus we’ll promise to lick the ‘Earth visit’ issues for them... we can do some of it today. If these masters want our friends to be able to just step out of one of their own saucers and hike around, we will need a little more time.”

Bud asked Tom to explain how he intended to go about doing this.

“Our friends haven’t told us how the communication will take place. It could be that we send them another video unit filled with not only the original video but with additional messages trying to appeal to the masters. I’m going to need to ask them if their masters have a verbal language along with their advanced mathematical symbols. If they do, perhaps we can carry on complete conversations just as easily as you and I are talking right now. All we need to do is to make videos with us speaking and then use the symbols for subtitles.”

“So you’re telling me their masters might soon be watching the intergalactic equivalent of a foreign language movie and we all expect them to understand it?”

Tom nodded. “Yes. In fact, according to our friends, their masters may already know a lot about our languages. I’m assuming that means English and not Kranjov or Russian or Mandarin.”

“What if they don’t or can’t go the video route?”

Tom thought about this a moment. “Then, the other way would be an exchange of radio messages. Dad and I know for certain that our friends and their masters communicate into and out of the solar system with practically no loss of time. So, if we can meet them up there...” Tom pointed toward the ceiling, but Bud knew what he meant, “...hopefully we can just tap into their system and start the negotiations.”

They were interrupted when Tom's TeleVoc pin beeped, indicating an incoming message. He tapped the pin on his collar and mouthed the word, "Yes?"

A minute later, and several exchanges of silent communications, he tapped the pin again and smiled toward Bud. "We may just have our answer, flyboy. That was George and a new and fairly lengthy message is coming through right now. Want to come see what it is?"

Bud jumped up. "Try to keep me away!"

They walked out of the office briskly and across the hangar floor. Once at ground level they hopped into a waiting electric runabout and drove to the Communications building.

Dilling was hanging up the phone when they walked in. "I just talked to your dad. He's heading to the Construction Company to put out a few fires and says to tell you to handle this without him." He handed Tom a sheet of paper.

At first glance, Tom was astonished. Messages from their space friends had rarely been more than a few sentences or a couple paragraphs. This one filled more than two-thirds of the page.

Tom read part of it and then turned to Bud. "Listen to this:"

**TO TOM SWIFT, DAMON SWIFT
AND OTHER SWIFTS.**

"I think they may not understand the concept of families or different sir names," Tom said, looking up briefly.

**AT POSSIBLE PERIL WE
COMMUNICATED OUR NEGATIVE
DESIRE TO RETURN TO OUR PLANET.
MASTERS COMMUNICATED ANGER
BUT DID NOT DEMAND US TO LEAVE
IMMEDIATELY. WE SEE THIS AS
POSITIVE PROGRESS. SECOND
MESSAGE TO MASTERS REGARDING
DESIRE TO VISIT YOUR PLANET.**

**MASTERS DID NOT TELL US TO
ABANDON PLANS. WE WERE
UNSURE HOW TO INTERPRET.
THIRD COMMUNICATION TO
MASTERS REGARDING SWIFT
POSSIBILITY TO COMPLETE**

OUR MISSION.

**MASTERS SILENT FOR ONE
FOURTH PLANET ROTATION, THEN
COMMUNICATION. MASTERS
DEMANDING COMMUNICATION
DIRECT WITH SWIFTS. MASTERS
DEMANDING KNOWLEDGE ON
HOW SWIFTS CAN OVERCOME
PERIL/DANGER ON THIRD
PLANET SURFACE.**

**MASTERS CHANGE LANGUAGE ON
FOURTH MESSAGE. NO DEMAND
BUT SUGGEST FOR DIRECT
COMMUNICATION WITH SWIFTS.**

**WE BELIEVE CHANGE OCCURS
ON HOME PLANET AND MASTERS
MAY HAVE CHANGED.**

**LISTENER/WATCHER ON OUR
STATION HAS MADE SELF/PERSON/
BEING KNOWN. CAN NEGATIVE
COMMUNICATION WITH SELF
CONTROLLER CURRENTLY.
BELIEVES SELF CONTROLLER
NO LONGER IN CHARGE.
LISTENER/WATCHER IS NOT ANGRY
AT SITUATION. PLEASE PROVIDE
COMMUNICATION FREQUENCY
RANGE FOR OUT AND RECEIVE
MESSAGES. WE WILL ARRIVE
YOUR PLANET ORBIT IN ONE
PLANET ROTATION FROM POINT
THIS MESSAGE BEGAN. OUR
CRAFT WILL BE CONDUIT/PORTAL/
MECHANISM TO SEND OUT
AND SEND BACK TO YOU.**

**MASTERS WILL ACCEPT YOUR
VOCAL TRANSMISSION AND WILL
RETURN MESSAGE IN SIMILAR
VOCAL MESSAGE FORM. WE WAIT
SIGNAL INFORMATION. WE FEEL**

**JOYOUS REGARDING NEW
SITUATION.**

Tom dropped the hand holding the page to his side.

Bud was completely silent. George Dilling was standing by the doorway, also unable to think of something to say. Finally, Tom spoke.

“And that, gentlemen, is the signal for my stomach to start churning out the acid. I really hope that dad is able to help with all this.” He looked at them both and then turned to face Dilling.

“George? Can you give me two separate frequencies; one for outbound and the other for incoming messages. Make them something in the neighborhood of the frequency we use for these messages. That appears to be their preferred range.”

While George looked up a pair of unused and uncontrolled frequencies, Tom composed the outgoing message. Two minutes later, frequencies added, he typed in into the computer:

**To Space Friends. Happy to have your
new information. We are joyous as well.
Communication frequencies follow.**

**Out messages at 299.75 gigahertz.
Messages coming back to us at 298.575
gigahertz.**

**Will be available in one planet rotation
and also before and after that time.
Question. How much of my language do
Masters understand.**

He scanned the words on the screen and then pressed the Send button.

“I’ve got to go call dad and let him know, George. Ping me if you get a response before I come back. Come on, Bud. Back to the cave!”

The pair headed toward the hangar but Bud begged off coming back down explaining that he had a test flight of the recently modified *Toad*. “Dianne Duquesne and her propulsion folk tweaked the turbine set-up and they need my expert feedback.”

No sooner had Tom sat down at his desk than his TeleVoc pin

beeped.

“It’s George, Tom. We received a short and pretty sweet message. No translation problems. Want me to read it to you?”

“Sure,” Tom mouthed.

“Here goes:

**TO TOM SWIFT. NOW HAVE TOUR
FREQUENCIES. WILL MAKE TEST
CALL ONE EARTH HOUR BEFORE
MASTERS CALL. ANSWER TO
QUESTION. MASTERS KNOW
MULTIPLE EARTH SPEAK
LANGUAGES. WILL SPEAK IN YOURS.**

“That’s it. Need a copy?”

Tom declined saying thanks to the Communications chief.

Tom, Damon and George sat waiting for the radio to come to life the next day. The sample radio test messages—Tom had to chuckle when he heard a one minute excerpt from the “Hello and Welcome” speech he had sent to Mars weeks earlier—had come precisely on time.

Now, it was less than one minute until the first verbal communications with an alien race would begin.

A light pulsed on the radio panel. Dilling pressed a button and the three men took a deep breath.

Although slightly garbled and featuring a low, rumbling tonal quality, the voice was clear.

“Tom Swift. We are the beings our subjects refer to as The Masters. Our subjects have been near your planet for many, many of your solar rotations. We believe you refer to them as ‘ears.’ It is a strange title and means an entirely different thing to us. I await your reply...”

“This is Tom Swift,” Tom said into the microphone. “I sit here with my father and our communications commander. You must know that we have been in communications with your... subjects for almost two of our solar rotations. By the way, the word we use is *years*, not ears. Our twenty-fifth letter is at the start of that word. Ears, at least to us, are the openings on our heads through which we hear.” He paused, and then added, “I await your reply.”

There was a nine second delay and then:

“Understood, Tom Swift. I believe that is what you refer to as a name. If this is correct, then I also have a name but my understanding from studying your language is that you would be unable to speak it. You may refer to me as Garl. We are greatly disappointed in our subjects. They have failed to explore your planet. The time has come for them to depart and to abandon future attempts. Their failure must be punished. What is your reply to this Tom Swift?”

“Garl. You may shorten my name to Tom. There seem to be three major problems to overcome so that your subjects can come down to our planet surface. Our strong gravity is one. The downward force would weaken and possibly harm them. The second issue is the atmosphere we breathe. Our planet’s atmosphere gases are similar to theirs, but different enough to be toxic to them if exposed for more than brief periods of time. It also may contain organism that can sicken or kill your subjects. The third thing is that the light from our star we call The Sun, is too intense for their eyes. Without being given the basic tools to overcome these problems, you or the previous masters who sent them here almost assured the failure of their mission. How can you contemplate punishing them for something you masters failed to assist them with?”

He looked at his father for support. Damon nodded at the mic.

“It was only their bravery in communicating with us and just two *years* ago that has led to any change in this. And, only now with your recall hanging over their heads like an executioner’s ax have things begun changing. For one, they have provided us a small device that adjusts our Earth gravity to match the gravity they can tolerate. As to the second issue, air, we have constructed a device that will give them the exact mix of gases, free of organisms, they need to breathe and survive.

Tom paused. He felt something else should be stated, but needed to carefully find the words. They came to him.

“And, finally, we will transport them in a controlled environment where we can lower the intensity of any light they encounter. All we need is a little more time, and we can help them make the first successful trip down to our planet surface. You have to give us that time, and give your subject permission to succeed!”

The pause was longer and Tom was about to add that he was “waiting,” when the speaker came back to life.

“Tom. You have given me several concepts that I must study. If you can assist our subjects to visit your planet surface and survive, then our Council must confer and decide if this is to be allowed. However,

I must tell you that a recent change in our Council has meant that there is more tolerance for such a request. A decision will be made and communicated to our subjects in five Earth rotations. My communication is complete!”

With that, the radio went silent.

HEARTBREAK

THE GONDOLA of the huge airship had been broken down into small enough components that it could be shipped out in the two large cargo pods of the *Super Queen*, and the gasbag and small jet turbines folded, buckled and pushed into one of the larger of the Swift's cargo jets. Together, the two aircraft took off vertically and headed west for a remote area of New Mexico where Tom hoped to inflate and pilot his floating environment for the first time.

Tom and Zimby Cox were piloting the *Super Queen* while Bud and Hank Sterling had command of the cargo jet.

And, because of the recent missile attack on Tom, Harlan Ames insisted on a guard detail. By offering to have Enterprises pick up the expenses he had arranged for the Air Guard units from three states along the flight path to provide in-air protection and escort services. He had lucked out with two of the Guard groups. It would be their normal days of flight qualifications, specifically long-range flights and refueling exercises. As long as Tom and Bud would slow down several times during the flight, only the Texan Air Guard would need to be reimbursed for their fuel costs.

"I'd rather pay their hundred thousand dollar tab than have Tom and everyone else exposed to possible attack," Ames explained to Damon Swift.

"I'd rather pay ten times that amount than risk anyone," the older Swift replied.

During the flight, Hank manned the RADAR scope. Twice he caught glimpse of a small contact at the outer range of the RADAR, but it faded after a few sweeps so he thought it must be a false contact.

Contact with their military escorts over southern Missouri sent pairs of jet fighters off to see what might be out there only to have them return to the formation within minutes saying that nothing had been detected.

Tom had originally planned to land in the town of Alamogordo—closer to the test area by about twenty miles—but state authorities forbade them from using the jet lifters at that military field. Tom had tried to explain that this new aircraft didn't use the old jet lifters that shot searing hot gasses down to cushion the airframe, it used repeltrons. That tack worked ever less well as the bureaucrat he had been dealing with went into a small tirade about the possibilities of 'squishing defenseless animals, flattening homes and the landscape,

and such.’”

Because of the delicate work ahead and the flat area required it quickly became evident that the airfield at Holman Air Force Base in the north of the Texas panhandle offered a larger space as well as a smooth surface would let them work without the possibility of snagging the thin-walled gasbag.

After landing, Tom sincerely thanked their escort from Texas. Within the hour they had refueled and took off in formation quickly disappearing to the east with a final waggle of their wings.

That afternoon, while Chow prepared a big evening meal for everyone involved in the airship test, the Enterprises team consisting of Tom Bud, Hank, Arv and the fifteen members of the construction team unpacked the *Super Queen* and the cargo jet. It turned out to be slow work as nobody wanted to damage a single one of the components that needed to be assembled into a complete airship.

With Zimby remaining with the *Queen* and her radio, half of the men slowly unrolled the gasbag while the others began the ten-hour job of reassembling the gondola.

As dusk approached, Tom ordered the teams to weigh down the gasbag—now completely assembled and seamed together with the new adhesive—with small sand bags so that a predicted late night winds would do no damage.

Rising early, Tom radioed back to Enterprises to let his father know of their progress.

“I really wanted to get things together last night, but erred on the side of caution, Dad.” He told the older Swift about the occasional contact spotted on their RADAR that could not be found by the Air Guard pilots. “I’m just wondering if this is some sort of bug in the software,” he suggested. He didn’t voice his other concern. Sabotage!

Damon Swift offered to run the software through their simulators and report his findings later in the day.

Tom climbed back out of the *Super Queen* in time to see the first of the seven sections of the gasbag being partially inflated with helium. As he watched, that center section rose from the ground under control of a series of tie-down straps. Five men maneuvered the completed gondola under the raised section and set about making all of the connections.

Bud walked over, two steaming cups of coffee in his hands.

Taking the offered one, Tom said, “I thought they had at least four hours of work to do on that to get it ready. Am I crazy?”

Bud grinned and laid one hand on his friend’s shoulder. “It’s amazing what some people will do after their boss and task master

goes in and hits the sack!”

Everything progressed quickly. By lunchtime, the entire gasbag had been filled and the airship—all three hundred feet long, forty feet high and eighty feet wide—stood ready. Their work had attracted an audience of airmen and airwomen many who volunteered to assist where needed. Tom took a group of them up on their offer asking them to walk all around the gasbag spraying a soapy water solution on all parts of the surface looking for leaks. After making a suggestion, two of them left the group but soon drove back in a special truck from the fire reserve group, filled it with soap and water and drove it around so they could get more done in a shorter time.

Five small holes were located and patched.

As Tom and his team were performing a walk around of the huge craft, squealing brakes could be heard a few hundred feet away.

Two large four-wheel ‘jeep’ vehicles sporting **The Citadel** logos on their doors sat between the airship and the *Super Queen*. Each one had a single driver, now standing next to their vehicles. As Tom came closer, one of them stepped forward, removing her sunglasses.

“Hello, skipper,” she greeted Tom, giving the startled young man a little hug.

“Valerie? Is that you under all that blond hair?” Tom recognized the woman but marveled at the full head of what Bud would term “beached blond” hair. The last time he had seen her, she had been a dark auburn.

“Guilty. Got tired of the girl next door looks and went back to close-to-natural. You like?”

Tom nodded. “So, what are you doing here?”

She pointed at the two jeeps. “A little bird called last night and said that you rushed off without any way to drive around and out to the test area. Took us a few hours to get here, but we brought your chariots.”

Tom smiled and thanked the woman. They originally met when The Citadel celebrated its first anniversary about the time Tom was turning seventeen. She had been his second crush to come out of the desert, but he knew that the ten-year difference in their ages, plus her being married at the time, would never work. Valerie Potts was one of the best mechanics he had ever met. Growing up around a household involved in drag racing, she could use a socket wrench before she could write her own name.

An hour later they received both FAA and state permission to lift the airship and to head to the test area. Because permission for actual flight over the air base grounds had been limited, it was necessary to tow the airship across the tarmac and into the desert for at least ten

miles before they could fire up the small turbines.

With Tom driving one of the jeeps and Hank the other, they slowly moved off the air base property and on a north-running access road. The airship floated docilely above and behind them. Before they reached the mountains, the airship was untethered from the vehicles and allowed to float on its own. Almost no wind meant practically zero drift with a team of three men able to keep it stationary.

“What’s the plan, professor?” Bud inquired.

As he checked out the control panel, Tom filled his friend in. “I’m going to take her up this dry lake area about five miles and then do a bunch of turns and spins. After that I want to fly her up to a couple thousand feet and repeat everything. We’ll end up at five thousand and a full speed run up and back.”

“Why not take it on a longer jaunt?” one of the assembly crew asked.

“Do you see that area north of here?”

Everyone nodded.

“Technically, that’s the White Sands missile testing grounds. We have permission to fly around the south end of it, but we’d run into problems if we go more than about ten miles onto the grounds!”

An hour later all final checks had been completed and the airship stood ready for its maiden flight. A radio check with the Air Force base and another with the regional airspace controllers were made.

“Uh, Swift test team?” the voice of the regional controller came out of the speaker. “We had something kinda odd earlier this morning. Some sort of small blip that seemed to hang around for a couple sweeps but then disappeared for as much as a few minutes. Strange and not at any sort of reasonable altitude. Just thought you ought to know.”

“Regional Control. Tom Swift here. Where was that blip?”

“West of Chaparral. Between three and, oh, eight miles. Happened over about an hour. Hang on—” the line went dead for a minute. When the radioman came back on, he was slightly agitated. “Hey, Mr. Swift. I just found out that my night staff didn’t bother to tell us morning guys that they’d spotted something traversing the same area last night. Reported at just three hundred feet. One of my coworkers just showed me the logs—at least they wrote it down. Anyway, do you want a hold on your flight while we get someone from the local Sheriff’s to investigate?”

Tom considered the matter. It was probably some private pilot trying to do a cross-country flight and sticking pretty low. “No. Call out if you see anything in the next few hours, though. Thanks!”

Tom and Bud took one jeep with Bud driving and Tom operating the remote controls. Hank, Arv and Chow followed close behind as they first took Interstate 54 to the north and set up on a small cross highway a few miles over the state border.

Hank dropped his passengers off and returned to pick up the rest of the support team.

Tom spent several hours putting the floating environment airship through its paces. Though it was prone to be buffeted around in winds greater than fifteen MPH, he felt confident that the internal damping absorbers he would add before their visitors arrived would keep the environment pod inside the gondola from feeling any bumps.

Bud took a turn at the controls for a while as did Arv. Hank declined as he had already become familiar with the controls during the construction phase of the large dirigible.

“How big is that thing, Tom” Chow had asked as they watched it heading north on its final run of the day. “I mean, I walked under it an’ it felt like it’d crush a good couple o’ city blocks if it came down.”

“The gasbag is three hundred feet long, eighty feet wide and about half that tall. The environment pod takes up a little bit of the space inside, but it mostly dangles below like you can see from the black area. Makes the entire thing a bit over forty feet tall—well, fifty-six if you measure to the top of the tail. “

He described how the environment area and the gondola were built to hold at least five tons of living beings, equipment or whatever. “Weight will not be a problem,” he declared. “We now know that our space friends each weigh about one hundred sixty pounds, Earth weight. On their home planet and inside their Mars Outpost, they weigh the equivalent of about eight pounds. This type of airship can easily carry six, maybe even seven tons of cargo, and all our equipment for power, air and flying takes up just half of that.”

“Did ya ever git a handle on the whole makin’ ‘em weigh the right amount thing?” the westerner asked, concern crossing his face.

“Turns out they helped us, old timer. Do you remember that strange stone-like thing we found on Nestria that we’re fairly certain controls the gravity up there?”

The cook nodded. “Shore do. Don’t tell me ya took that off’n the asteroid? Folks up thar don’t need ta be floatin’ all around.”

Tom laughed. “No, Chow. But our friends pretty much confirmed what we believed all along when they sent me a small version of the same thing.” He pointed at the dwindling form of the airship. “We already have it installed in the ship along with instruments to measure what it is doing during this test. I want to see if it also negates inertia, or if it just affects gravity.”

Chow took off his ever-present ten-gallon hat and wiped his bald head with a bandanna handkerchief. Fanning himself with the hat, he said, "I reckon I prob'ly know what ee-nersha is, youngin', but gimme a clue to help me recollect."

Checking his control panel, Tom told the older man, "Inertia is that property something has to stay put if it's already sitting there, and to keep on flying away if it is doing that right at the moment."

"Right. I r'member now. Had me a mule once that had loads of eenersha. Lest ya gave it a good tug and a kick, it wasn't gonna move once it set its fat fanny down."

"That's pretty much it," Tom said with a smile. The smile turned to a frown as he saw that it was time to turn the airship around. While he punched in the commands he called over to Hank. "I'm getting an intermittent signal on her course. Is she turning yet?"

Placing the large binoculars to his face, the engineer and pattern maker soon held one hand back toward Tom with a thumbs up sign.

Tom now set the airship on its final high-speed run and at an ever-decreasing altitude. The plan was to bring it down to just a hundred feet for the last mile and to try for a pinpoint landing right in front of the group.

It was going fine until everyone began hearing a high-pitched noise coming from the east. It seemed to ebb and increase and always remained just on the other side of a small range of hills.

"Must be some sort of Air Force flight practice," Bud said as he walked over to Tom and Chow.

The noise kept up for another five minutes and then seemed to go away. Tom was about to relax when he realized that it hadn't gone away. It was being overpowered by the whine of the turbines of the airship, now less than a mile away.

As it came closer, everyone's attention was diverted to an object that suddenly shot over the hills.

The small jet streaked low to the ground heading directly for a collision with the airship.

Tom and his team could only watch, sick to their stomachs, as the jet tore through the huge gasbag, bursting into flames as it passed through.

The jet plummeted toward the ground in flames. A split second before impact they could see an ejection seat blast up through the canopy and the parachute partially deploying.

Tom and Bud jumped into their jeep and tore away, heading for the impact site.

Two minutes later they passed within a few hundred yards of the burning wreckage of the small jet. Bud looked at it and said somberly, "Farewell, *Kangaroo Kub*."

Tom continued to drive, spotting a large patch of grey fabric a few hundred feet further on. They reached that point in seconds and both boys hopped out.

Running over to the crumpled and twisted body at the end of the parachute's lines, Tom knew that it was too late for whoever it was that had rammed his stolen *Kangaroo Kub* into the airship.

"Want me to look, Tom," Bud offered.

"No. You call for help while I see who it is."

Bud raced back to the jeep and turned on the radio while Tom turned his attention to the flier's body. It was obvious that the pilot had not survived the crash; there was far too much blood and twisted body parts for that.

He carefully rolled the unmoving figure over after checking for a pulse at one exposed wrist. Just in case. He had an increasingly sick feeling spreading through his stomach. Gently unsnapping the flight helmet he pulled it off letting out an immediate groan of dismay.

"Harlan's going to be heartbroken," he muttered to himself. Louder so that Bud could hear he said, "*It's Gabrielle Grimsby!*"

Bud ran back over, his radio call finished. "Jetz, skipper. Why did she do it?"

Tom could only shake his head in sadness. When he spoke, his voice only came out in a hoarse whisper. "I don't have any idea, Bud. I thought we'd buried that hatchet. She seemed to be happy with her job and she and Har—" He could not continue.

Bud placed a hand on Tom's shoulder, squeezed lightly and then helped his best friend back to his feet. Feeling that it needed to be said, Bud finished Tom's sentence. "Harlan's going to be crushed."

They sat on the front bumper of the jeep waiting for the others to arrive. As the second jeep could be seen stirring up the desert dust, Tom's blood ran even colder.

He jumped to his feet and ran out to the destroyed airship. He yanked aside huge hunks of the gasbag and pulled and pushed other pieces aside until he was in the middle of everything. Furiously digging through the crumpled pieces of the gondola he finally found what he was looking for. It was in a hundred fragments and small chunks and would have been overlooked by anyone not knowing what to search for.

But, there it was. Spread over a five-foot area and never to be reassembled.

The small gravity stone sent to Tom by his friends had just been destroyed in the fiery crash.

CHAPTER 15 /

THAT'S THE IDEA!

BUD, STILL STUNNED, got up and went back and looked down at the dead woman. He lowered his head, nodded to himself and then reached out for the chute's lines and pulled the parachute closer. Finally, he gathered up the canopy and laid it over the body.

In just a few minutes the other jeep with Chow, Arv and Hank came driving up.

"We heard the radio call for assistance, Tom," the engineer stated. "It looks like it is too late to do anything about him," he pointed at the parachute-covered body.

Tom looked into the man's eyes and then said, "Hank, I have to tell Harlan. I don't know how to," he paused unsure how to proceed, "but it's Gabby."

Hank, Arv and Chow all gasped knowing how close the security chief had become to the younger woman. After Harlan's wife had passed away, he was left being a hard-nosed security man at work and combination father and mother to his young daughter at home. Everyone had hoped the new relationship might benefit the two of them.

"Don't know if'n this changes a thing much," Chow spoke up, "but I hear from Harlan that they sorta cooled things off a few days or so ago just before she disappeared."

The group discussed possible reasons for the suicide attack for the next twenty minutes. Finally they could hear the sirens of at least two vehicles.

A Sheriff's 4x4 came down the road and pulled up to the waiting group. Half a minute later an ambulance skidded to a halt close by.

Tom explained the situation to the two deputies. When he got to the point where he was telling them it was a stolen jet from his own company, the senior deputy stopped him.

"How did she get the jet, then?"

Tom explained how it had been sitting in an unsecured area within the walls of Enterprises and had been flown out a few nights earlier by party unknown.

"I'd say you know now, kid," the deputy sneered.

Hank stepped closer. "I realize we're on your turf, Deputy, but this not the time to be making snide remarks. I hope we understand each

other.” He stepped even closer causing the smaller county officer to step back, look up at the imposing man, and swallowing hard.

“Sorry. No offense meant. Just a bit spooked about this. Never seen no dead body from an air crash.”

The other deputy, wearing both his sheriff’s badge as well as an Emergency Medical Technician’s patch, had gone to help the ambulance driver verify the state of the victim while the other EMT radioed for a helicopter to retrieve the body. He also made arrangements for a team of investigators to come out in the helo. They would stay at the site while he and the dead woman went back to town in the aircraft.

Tom excused himself and took his jeep back to the site of the crashed jet. He could instantly see what had brought the little aircraft down. One of the support struts from the airship’s framework had rammed directly into the right intake for the engine, jammed the forward compression rotor and had pierced the internal fuel tank. Also telling was a smaller piece of metal that had pierced part way into the cockpit. It had gone in far enough to leave a great spray of blood throughout the twisted cockpit.

Tom noted that it also appeared to have kept the canopy from completely detaching so that only the rear had opened when Gabrielle had tried to eject. She was most likely rammed up against the canopy and died—if the metal spike hadn’t done it—from that shock before the powerful rocket under her seat had been able to shove her body clear.

Probably died instantly, he thought. Well. Almost.

That evening after the team had recovered as much of the airship as possible, and packed it into the forward pod of the *Super Queen*, they stowed the two jeeps in the aft pod and gave Valerie and her co-driver a lift back to The Citadel. Tom begged off having dinner with the manager of the facility, and they headed back to Enterprises. He called his father with the news and asked whether he should go to Harlan’s home.

“I’ll join you there if you want me to, Tom,” his father replied.

“No, Dad. I’ll do it.” The giant ship touched down three hours later and Tom drove over to the Ames house after taking a quick shower and changing his clothes.

“Well, hi, Tom,” Harlan said greeting the youth at his front door. “What’s the occasion,” he added cheerfully until he noticed the strained look on Tom’s face. “You’d better come in.”

Once seated Tom took a deep breath and was ready to begin when Harlan’s daughter came into the room. “Hey, Tom,” she greeted him. She came over and gave him a little hug. “Don’t tell me you’ve come to

take dad away again. We've got movie night planned!"

Tom assured the girl that he had no plans to get her father out of the house.

"We just need to talk a few minutes, sweetie," Harlan told her, giving her a hug around the waist.

After she left the room he said, "She is growing up so fast. One day I'm taking care of her and now she practically runs the house. And she's getting to be a real looker, like her mother. I'll have to get out the proverbial shotgun pretty soon." Harlan smiled at Tom. Sobering, he said, "But you came to tell me something serious. Right?"

Tom stammered through the story of the day's events finally getting to the point. "It was Gabrielle, Hank. I am so sorry. I know you two were getting pretty close."

Ames sat in silence for a minute. "Well, I'm shocked a little, even stunned, but something never rang quite right with our relationship. She came around too fast from hating everything Swift to suddenly confessing her affection for me. My heart wanted to believe it, my ego needed to believe it, but my policeman's brain kept kicking at me. So, about a week ago we broke up. That was on... oh-oh!"

"What, Harlan?"

"That was on Tuesday. Remember Tuesday? The day we had the biohazard alarm? Gabby was at Enterprises then. She had left my office and was supposed to be heading for the gate when the alarms went off. I was out of the office for another two hours. When I returned my door was open. I never thought a thing about it."

"Do you think she might have stolen an employee badge or TeleVoc?" Tom inquired.

"I'll do an inventory first thing in the morning, Tom," the man promised. "Uh, was she... I mean, did she..." He couldn't get the question out.

"She died immediately, Harlan. No sign of pain. I'm sorry for her. So full of unnecessary hatred."

"I could never shake the feeling that she hadn't been able to put her feelings behind her. You know. Little things like suggesting that I could do better by taking a job elsewhere. Little jabs at you, verbally. I just put it down to her having been so angry once. Guess she was still angry. She must be the one who flew the *Kangaroo Kub* out on Thursday night."

Tom didn't want to ask the next question, but he had to. "Do you think she might have been the one who clobbered me and left me to die in my lab?"

Harlan blanched and then reddened. "God, I hope not. I can't bear

to think that I was falling for someone that cold and calculating. Do you think that?"

Tom shrugged. "We'll ever know."

Tom spent a few more minutes consoling his security chief until Ames' daughter came back in to remind her father that he was going to have to allow her to stay up longer if they started the movie any later.

He said his good nights and left the Ames house a few minutes later, starting for home.

Calling while on his way he told his mother, "I've got a lot to think about so I'll stay in my little room behind the lab. See you tomorrow night. Momsie." He turned at the next intersection and drove back to Enterprises.

After less than an hour of note taking, thinking and alternating anger and despair, he lay down on his bed and was soon asleep.

The destruction of the inflatable environment aircraft left Tom saddened and near to giving up. He had pinned all his hopes on that airship.

Bud wandered into the Swift's shared office where Tom sat in silence the next morning. Seeing the pain on his best friend's face he opted to sit down in one of the overstuffed leather chairs and wait.

After an hour Tom looked at him, as if noticing his presence for the very first time. "Oh! Bud? Uh... what were we talking about?" he asked confused.

"Tom," Bud replied gently. "We weren't talking about anything. You've been lost in that brain of yours and I've been sitting here getting a cramp in my back."

"I'm sorry," the inventor said. "I am just so disappointed about the destruction of the blimp. I thought it had everything going for it. I never expected the attack!"

"Well, you've cracked the whole environment thing, haven't you?"

Tom nodded. "I guess. At least we know we can build a floating cabin that can be flooded with our recreation of their air."

"Then you just have to find some other vehicle to wrap around the inner... thingie. Whatever you call it."

Tom replied, "The environment pod, Bud." Tom's eyes suddenly widened. He snapped his fingers. "That's it!" he shouted. "Bud? That's it!"

"Great!" Bud paused, and then added, "*What's it?*"

"Pod, Bud. It's been staring me right in the face. We have been building Pods for the new *Super Queen*, why not a pod for the self-

contained environment for our space visitors when they get here?”

He quickly outlined his plans to his friend. Bud, as usual, did more listening than taking part in the discussion, but he knew that Tom's mind seemed to work best at time like this when he had an audience willing to just smile and nod occasionally.

Finally, Tom stopped. “So? Do you think it will work,” he asked.

Bud smiled and said, “If it works inside that mega-brain box of yours, then it's a cinch that it will pan out in real life!”

“We still have the issue of the destroyed gravity mechanism, though,” Tom stated with a sigh. “I'm not certain I can overcome that.”

Bud appeared to be smugly satisfied, so Tom asked him why.

“Because, I have faith that you will pull a rabbit out of your hat and come up with something out of this world to do the trick!”

Tom looked at his friend. “That's a really strange thing to say,” he told his friend. Then, shrugging he put his chin in his hands and leaned back onto the table in front of him.

Bud, seeing his friend go into what he sometimes termed “inventor's trance,” left the lab and headed off to do some flying.

Tom wandered down the hall to his large lab and absently picked up a pencil and began doodling. An hour later he was nowhere closer to putting things together, so he headed back to the shared office, hoping to get some ideas from his father.

“Oh, Tom,” Trent greeted him as the youth came around the corner and into the foyer of the office. “Perfect timing. Your father has asked that you come by to handle a phone call in about forty minutes. I was about to call you. He's inside right now but will be leaving in about five minutes.”

Tom opened the large door and slipped inside. Damon Swift was hanging up the receiver as he entered. “Trent tells me you need me here for a call,” he told his father.

“That's right. I'm off to Albany to give testimony to the state Senate committee on industry. They need to be pointed in the right direction by companies like ours. It appears that a small bunch of newly-elected junior senators have banded together and are suggesting that big companies start paying double taxes so that a very small group of banking and investment executives can stop. Funny thing, that. It seems that at least five of these new senators come from just that group of people.”

Tom rolled his eyes. More and more his father was having to fight political battles when Tom knew he really wanted to concentrate on inventing. “Wish I could help, Dad,” he said.

“Not to worry. The five of us going there this afternoon are all going to give them the same message: ‘We pay our fair share, you better pay yours!’ “ With that, he picked up his briefcase and headed for the door.

“What’s this call coming in I need to handle?” Tom asked.

Damon stopped and turned, his face blushing a little. “Oops! Sorry. I almost forgot. Do you remember Artemus Brigstock at Brigstock Thermoplastics?” When Tom nodded, Damon continued. “Well, Artemus—who’s got to be ninety-five if he’s a day—is a good customer and he likes to do things a bit on the old fashioned side. He insists that he won’t do business with any company where he can’t speak right to the man, or woman, in charge to place orders. Says it avoids misunderstanding and errors. Personally, I think he just likes to talk.”

Tom grinned. He had met the old gentleman years earlier and liked him.

“When he calls, let him lead the conversation. Oh, and comment on how we all hope his granddaughter—maybe it’s his great-granddaughter—is doing well at school out in Colorado.” Damon gave Tom a few other talking points but left him with a final word. “Assuming what he orders is an existing product, assure him that his standard fifteen percent discount applies.”

With that, he was out the door.

Tom had hoped to discuss his dilemma with his father, but it was evidently not going to happen that day.

The door opened moments later and George Dilling came in. Seeing the glum young inventor he eased himself into one of the leather chairs and said, “If I had one, I’d offer you my top hat, Tom,” George Dilling told the young man who was now staring at him in confusion. “You know. Something to pull that rabbit out of?”

“You’re the second person to make that rabbit reference to me today. The thing is, I’m going to need something a bit stronger than a rabbit, George,” Tom told the older man. “But, a lot like a magic trick, that’s for certain.”

As Tom got up to join him in the conference area, Dilling said, “Listen, Tom. I’ve been with the Swift companies since you were about four years old. Started out writing copy for ads for the original Swift Folding Car. ‘As easy as an umbrella. Pop it open and just drive it away. Buy one today!’”

Tom suddenly recalled the product. “Oh, geez. That’s right. It wasn’t much of a success, was it?”

George shook his head. “Certainly, not here. In fact it was a downright disaster. Practically killed the old Swift Construction Company. That was when your grandfather finally stepped down and

let your dad run the place. The reason I bring it up is that your dad and I were sharing a cheap bourbon the night he took control and he told me that what he really needed was ‘a miracle.’ I used to wear a fedora back then so I handed it to him and told him to pull a rabbit out.”

Tom smiled a bit wanly. “I guess he must have or we wouldn’t be here today. Right?”

“In a way. What he did was to look at that hat for a full ten minutes if it was a second. And then he turned to me, kissed me right on the tip of this old nose and shouted ‘That’s it, George!’” Seeing that Tom was not completely following the story, the older man said, “What I’m telling you must be all new to you. I don’t think I’m breaking a family confidence, but that silly reference made your dad think. Until the rabbit comes out, a hat is just a *possibility* of something magical. It is only so much baggage. Your dad realized that the collapsible car *was* only so much baggage, simply to be stowed like a very special spare tire in a larger vehicle. See?”

Catching on, Tom asked, “Like, if you are traveling along and break down but really need to get somewhere, you can pull the car out, pop it open and continue the trip?”

George Dilling nodded. “Right. And, we sold a bunch of them in South America and all over the southern half of Africa. Better than a thousand of them to South Africa alone. Every government dignitary there rode around in a giant limo, and most of those broke down on a weekly basis. They’d suffered so much lost time that buying a Swift Folder at around thirty-eight hundred dollars each could save them at least that much in less than a half year.”

“Why did we stop making them?” Tom asked. “And, when?”

“Stopped after about six months because we’d saturated the market. Your pop was smart enough to see it coming and halted things just after the three-thousandth one came off the line. Listen. Forget about the actual car but try to see what I meant by the metaphor. I made an off-hand remark and it hit some nerve or genius switch in your dad’s brain and he ran with it. His ability to turn one dumb remark into company-saving gold is something you inherited. I’ve seen it before. Now, this instance isn’t a company breaker, but we all know that it’s very important.”

“So, I guess I need to listen to everything that is said around me and see if anything lights the invention fuse.”

Getting to his feet, Dilling just nodded and left the room.

Tom sat in thought for almost thirty minutes when the intercom buzzed.

“It’s Mr. Brigstock, Tom. Line five.”

“Mr. Brigstock. Tom Swift here. My father had to attend to some political issues so I hope that the two of us can work together today.”

“Little Tommy Swift? Why, are you old enough to be working at Swift Enterprises yet?”

Tom chuckled. “I’m just about to turn twenty, sir. How are you today?” With that, an eight-minute run through of all of the gentleman’s ailments and political feeling began. When Mr. Brigstock appeared to be winding down, Tom asked about his great-granddaughter. This perked the man up and he talked about the girl for another five minutes.

Finally, he cleared his throat and said, “Well. Enough chit-chat. The reason for my call to you, Tommy, is that I’ve been approached to help create a thirty-mile commuter rail line here in Wisconsin. I had the pleasure of being allowed to ride on your incredible coast-to-coast train of yours last week—when you get to be this old you make lots of friends in high places—to see what’s out there in this new and amazing world of ours.”

“How did you like it, sir?”

“Loved about half of it and disliked the other half. My understanding is that you were responsible for all the bits that run underground. Correct?” Tom confirmed the man’s thought. “Well, that’s the half I loved. So smooth and quiet that it was like being in a super luxurious limo. Then, and you could really tell, when the train got onto the tracks laid by the other companies, up went the noise. I had to ask myself why. Can you tell me? Because, I want my rail cars to be whisper quiet both inside and out. You see, we’ll be running at high speeds right next to a good half a dozen residential areas.”

Tom chuckled. “Well, part of that is the nature of the rails which are made from a special expanded foam polymer, and part of it is from a simple little tube we embed all along it filled with a special gas I discovered on the Moon.” Tom told him of *Serpentium* and how he had used it first to elevate his *Monoswift*.”

“Well, sign me up for enough of that for my project, Tommy!” the man stated.

“Unfortunately, the supply is pretty scarce, sir. However, I would be happy to discuss leasing you one of the track laying units and selling you the foam.”

“I’ll have to think about that, I most certainly will!”

After discussing a few things the man really wished to order Tom hung up. He called the order over to Sales and then sat at his desk thinking.

The *Monoswift* had been able to literally fly above its own floating track using the gravitational-defeating properties of the *Serpentium*

gas—a substance found so far in just one deep crater on the dark side of the Moon. In his Transcontinental BulleTrain, he had used a small amount in both the rails and the wheels giving the train just enough lift to take a percentage of the weight off the tracks. This allowed the train to run quickly and quietly through the tunnels Tom created and along the rails that—extruded from the same super strong polymer as the tunnels—could not absorb heat that would otherwise be built up. It was mandatory to take part of the load off so that heat could be managed.

He realized that there was no further reason to stay in the large office so he headed back to his underground lab and office to continue thinking about how the mysterious gas might help him.

Is this my rabbit? he thought as he pulled up his electronic notes regarding the properties of the gas.

For two hours he read, re-read and jotted notes on the gas. Taking a mini-cylinder of it from his safe, he set about building a small experiment.

If, he told himself, I can build small suits with double-walls, pump in just enough gas to overcome most of gravity without stiffening them too much to make our friends uncomfortable, could that work?

To accomplish his test he created a clear bag inside of a slightly larger bag. Into the smaller one he placed a 3-ounce ball. Once he had the inner bag sealed he attached a hose from the small tank to the open end of the larger bag. In a few seconds he had pumped in a small amount of the rare Serpentine gas and sealed the outer bag.

Next, he inserted a pair of tiny electrodes into the space between the bags and applied a small electrical charge, causing the outer bag to puff up slightly. The entire thing slowly rose off the test bench. At first, Tom was elated but then sobered as he saw that the ball inside the inner bag was resting on the lowest point, causing the inner bag to sag under its weight. It seemed unaffected by the lowered gravitational pull.

He sat there just looking at the bags for many, many minutes. He racked his brain as to what might be done to make this work. Without it, his visitors could be seriously hurt or even killed.

He used a pump to draw the valuable gas back out and into its cylinder.

Just as he concluded that this was another dead end, a sudden noise behind him made shivers run down his back like icy lightning!

CHAPTER 16 /

X MINUS TWENTY

“HELLO, THOMAS,” said the warm feminine voice on the phone. Tom immediately recognized the caller. He took a deep breath to calm himself before replying.

“Hi, Bash. It’s great to hear your voice. Did I forget a date or anything?”

The pretty Pakistani girl laughed. “No. At least not today. I called because a little birdie named Sandra has reminded me that you are about to observe a special date.”

Tom racked his mind for what she might mean. “Well, maybe, Bash. Uh... which one were you referring to?” Tom’s curiosity began to work overtime.

“Well, does this song mean anything to you?” Bashalli began singing Happy Birthday to Tom. She stopped after singing, “...dear Thomas...”

“Wow,” Tom exclaimed. “I almost forgot about that. I’m actually turning twenty next weekend. Imagine that?”

“I can well imagine it,” she replied. “I have been in that pair of shoes myself. The only difference is that your grandmother didn’t start calling you long distance from Pakistan every week to see if and when you were finally getting married.” She giggled. “I am a bit of an old maid compared to other girls back there.”

Tom cleared his throat. Anyone seeing him would have easily noticed his discomfort.

“Oh, Tom. Do not worry. I am in no hurry, and my grandmother has now stopped calling. I finally told her I was seriously dating a non-Pakistani and she immediately shut up. I actually shocked her into silence which is, as I understand it from my father, a first.” Bashalli giggled again before continuing. “What I called about is to see if I could take you out to dinner the evening before your party. Sandra has invited me to join your family for your celebration, and I am coming, but I want to have an evening with you all to myself.”

Tom agreed but warned his date that he was so busy with the preparations for the upcoming visit that he would only be able to leave for the date after 7:00 p.m. that evening. She agreed and offered to pick him up. “My car, my restaurant choice and my treat for dinner,” she said making Tom promise to not try to ‘pick up the bill’.

She came by Tom’s underground lab fifteen minutes early. The

inventor had just stepped out of the shower in the small apartment behind the lab and was in the process of tucking in his shirt. With a little shriek, Bashalli covered her eyes and turned away from the open doorway. “Oh, Thomas. I am sorry!” she said over her shoulder.

Tom stepped out of the room and took her by her shoulders. Spinning her to face him, he said, “Bash. I’m dressed except for my belt, socks and shoes. Besides. I’m practically twenty and you are of the advanced age of twenty-one. You see me in far less whenever we go swimming or sailing.” He gave her a quick kiss on the forehead and returned to the apartment to get his missing clothing.

Five minutes later they stepped out of the elevator at ground level and headed for her car. Tom always enjoyed being a passenger in his girlfriend’s car. It was one of the newer all-electric Japanese cars that featured a dashboard that was more like spaceship control panel than anything a standard car would have.

The two had a delightful meal at a local Italian restaurant followed by a stroll along the shore of Lake Carlopa. She dropped him off at the main gate of Enterprises at midnight making him promise to go home and to sleep, not back into his lab for an all-night work session.

“I promise, Bash.” He held up his right hand and crossed his heart with his left. She smiled, gave him a soft and lengthy good night kiss, and then drove off with almost no sound. Tom shook his head. *That car is stealthy*, he said to himself as it traveled away in silence.

Tom’s mother tried to get the inventor to take a day off as they sat at the breakfast table the next morning. “But, it’s your birthday, Tom,” she told him.

“Momsie. Not to worry. I’ll be home in time for tonight’s festivities. Promise. Bash is going to call me every fifteen minutes starting at five to remind me that I must leave no later than six.”

Anne Swift stood up and let out a sigh. “One of these days, Tom Swift, she is going to be the one telling you to slow down and come home. I only hope your father and I have instilled the smarts in you to recognize that a wife or even a live-in girlfriend needs care and love and time. Your time!” She headed to the sink with her dishes.

Tom came up behind her and wrapped his arms around her waist. “I promise. Only you have to promise to not be jealous if I treat Bash better than I do you.”

Anne pushed an elbow playfully back into Tom’s side making him step back. “You sucker punched me, Momsie!” he mock-complained. She kissed him on the cheek and then shoo’d him out the door.

On the drive, Tom looked up and watched as one of the newest cargo blimps soared overhead. Several companies were building this new breed of sky trucks. This one looked like a giant starship out of an

old television series. Looking more like a stretched flying saucer with twin nacelles on the sides—that Tom knew held the four maneuvering jet engines used by this type of airship—it quickly disappeared over the trees.

He was still thinking about it when he pulled through the special gate used by himself, his father and many senior Enterprises' executives.

Five minutes later he was describing it to Bud who was waiting for him at the entrance to the Flying Lab's hangar.

"Yeah. I see that one scooting back and forth about twice a week," Bud told him. "Sure is more futuristic than the old tire company blimps, huh?"

Tom's eyes had gone slightly glassy as a series of thoughts began forming in his mind.

"I said," Bud repeated with a little more emphasis, "that it looks futuristic compared to the old advertising blimps. Right?"

Tom shook his head, coming back from his mental excursion. "What? Oh. Right. Blimps. I've just had a great thought, Bud. I'm going to scrap the idea of cramming our friends into a rectangular pod inside the *Super Queen*. I don't believe that the pod approach would suit them. Not enough possibility to look around, only down."

"Okay. So, no pod. What, then?"

"Another blimp," Tom stated, his face completely serious. "But, a very special type."

Bud could not think of a good come back, so he merely looked at Tom, waiting for more information.

When his friend said nothing else for over a minute, Bud gave in. "A blimp! Another big bag of helium? Large ground crew? Haven't we already gone through that? I mean, it was a huge target and you know what happened to the first one."

Tom smiled but slowly shook his head. "Blimp. Yes. Like the last one? Not exactly. Something a lot more elegant. And, unless I miss my guess, it will be faster than our friendly neighborhood air truck even without jet engines." He looked at Bud who seemed to be trying to come up with a question, but was currently failing. "Come on, flyboy. Let's get down to the lab and I'll sketch it out for you."

Downstairs, Tom turned his computer on and opened an Internet browser. He entered a few search words and then sat back, pulling a small pad of graph paper out of his desk. In seconds he had located the website he wanted. "That is the sort of thing I'm contemplating," he said showing Bud a photo that looked more like a fancy, round sports helmet than anything else.

“I believe that this sort of airship is what we need to host our friends. These have a high ratio of lift to weight and we can mount a series of smaller repelatron emitters along the sides of this area,” he said, pointing to a lower gondola-like area. “We’re not going to get this up to mach speeds—far too much area providing lots and lots of drag—but my bet is that I can get one to do at least three hundred miles per hour. Fast enough to cross the country in around ten hours.”

“That’s faster than your bullet freight train,” Bud said. Capable of speeds in excess of one hundred and fifty MPH, fully-loaded, one hundred car trains could make the nonstop trip in about eighteen hours.

“Yes it will be. And, I’m pretty sure that this will have enough lift to let me put a full-size environment capsule underneath the lifting area that will be self-contained and allow our friends to see outside via the set of HD video screens we have already built and some view windows. We know they can’t handle our bright sunlight, but the opaque nature of the outer shell will cut that down to a manageable level, and we can outfit the gondola with the same type of airlock room that I planned for the doomed airship.”

“So, we can still give them a good look at our world through the equivalent of giant sunglasses and let them fly around wherever they want?”

Tom scowled. “No. The plan was never to just let them go all over by themselves,” he said. “I can’t imagine the headache we’d have with air clearances for unlicensed, out-of-this-world aviators. Egads! The impact of what it might take to arrange for uncontrolled access in the U.S. alone would be a logistical nightmare. No. We’ll arrange for specific routes over as many types of terrain as we can get in North, Central and South America, but it will have to be with a licensed pilot controlling the flight.”

As he went quiet again, Bud leaned against the desk. He knew it was best to just keep quiet and let Tom ponder for as long as it took. In this case, Bud’s wait was less than five minutes.

Tom snapped his fingers. “We’ll incorporate a cockpit in the airship that can hold a couple pilots. That way, we can travel for all three days with no need for swapping out with a new crew. One sleeps while the other flies...” He stopped when he saw Bud’s expression.

“Skipper,” the flier said in an overly patient tone. “I am certain that you will remember a certain around the world flight in an electric plane? Way back when you were building the first nuclear power pod?” Tom’s face split into a grin recalling how the two had circumnavigated the globe in a small plane powered only by one of Tom’s revolutionary power pods.

“Of course I remember it,” he replied.

“Okay then. Do you remember the adult undergarments we wore so that we could keep flying, even when nature was calling?”

Tom blushed. The adult diapers they had donned for the multi-day flight had been a misery. Even more so as each hour of each day wore on. Doc Simpson had to treat them for advanced cases of diaper rash starting about fifteen minutes after they had showered and changed into real clothing. It had been a source of embarrassment for both of them.

“Hmmm. Right. Well, I’ll come up with the necessary facility to keep us flying without the you-know-whats.” He smiled at his friend who was still remembering the pain and itching they suffered for a week after the flight.

Wishing Tom good luck with the design, Bud departed for a mid-morning demonstration flight of a small personal jet Enterprises had been building for more than a year.

Tom spent the rest of the day doing all of the computations and basic design for his new airship. By the time Bashalli began calling, Tom was satisfied with the files he had just sent to Hank Sterling and Arv Hanson—so that Hank could begin creating the patterns for all of the components and Arv could create a scale miniature. These would let a team of engineers and aircraft construction employees get started on the build by the following day.

The birthday dinner was a real surprise for the inventor. Where he had been expecting his family plus Bashalli and Bud, the front door had opened to reveal a full living room of friends, neighbors, Chow, and Bashalli’s parents and her brother Moshan.

Tom accepted hugs from all the women and handshakes and slaps on the back from all the men.

Dinner had been cooked by Chow who had secretly trucked it over that afternoon. A buffet had been set up with all of Tom’s favorite foods—dry-rubbed pork ribs, fried chicken, juicy steaks, and many other dishes including one provided by Bashalli’s mother that Tom had enjoyed many times at their dinner table. After dinner everyone found a place to sit or perch in the spacious Swift living room where the Texas cook strummed his guitar and sang some old western favorites. Then, much to Tom’s pleasure, the cook began doing renditions of a number of the more popular songs of the day.

By the time everyone left at eleven, they were sore from laughing at the expressions, body movements and vocal impressions Chow had given to punctuate each song.

The following morning, still glowing from the memories, Tom met with Hank and the construction team.

“We’ve got everything in the works, skipper. Looks like we are going

to be able to use some of the molds from the *Toad* prototype for the cockpit in the gondola and even molds and jigs from the *Super Queen*. I've got a call in for bids on some parts it doesn't make sense for us to take on and the guys over in the panel shop will start turning out the segments for the blimp by this time tomorrow. They'll all be the same except for a maintenance entrance panel and that will be hand-adapted from a standard panel anyway."

Tom nodded and thanked everyone for coming together on such short notice. "Okay. Given that we'll start having components in less than twenty-four hours, when can we fly?"

Hank's answer took him by surprise. "Six days."

Tom's eyebrows shot straight up. "Six? I figured we'd be looking at three-shifts working twenty-four by seven right up to the last minute. What gives?"

"Would you believe that we're just that good?" Sterling asked.

"Yes. I would, but there's got to be something else going on. What is it?" Tom was very curious now.

"The truth is that you have spec'd out everything, and just about everything is off-the-shelf, skipper. Oh, sure, we've got to do some tinkering with things, but you're not asking for something as complex as, oh, the *Challenger* or the *Super Queen*." Hank smiled and held out his hands as if to say, 'Ta-da!'

Bowing deeply, Tom began backing up. "Then, I leave you all to it." He straightened. "I know I say this a lot, but thanks. I couldn't do this without all of you!"

Three days later, Tom entered the largest hangar on the grounds of Swift Enterprises. It was inside this massive building that a large, round vehicle was taking shape. The entire base section—that would house the power pod, environmental support area, cockpit, all equipment and the small repelatron array that would be used for maneuvering—was complete and a small team of engineers were installing various components. It looked more like a large, stylized chinstrap for a giant football helmet than anything else. The large globe section being built next to it would mate with it was about half complete.

Because nothing would be able to be built into the sphere section, this lower section would hold everything.

Hank Sterling was supervising the attachment of another outer skin panel. He glanced over and spotted Tom. "Hey, skipper!" he called out as he came trotting over.

"It's looking pretty good, Hank. How are things going?"

"Well, I've got to say that the build is about a day ahead of schedule.

Except for one item. The bearings that allow the sphere to rotate. The ones we ordered came slightly warped. Guess it's a pretty tough job to make nine-foot-wide bearings that curve to match the sphere and all within these tight tolerances."

"How bad?"

Hank hummed as he seemed to be searching his mental database. Finally he focused on his young employer and said, "We asked for them to be curved so that the outer edge is precisely three-inches, ninety-two hundredths plus two hundred sixty micrometers of inner curve from the hub with a tolerance for variation of just one hundred thirty micrometers. These came out at almost a full millimeter beyond that."

"So, that means they don't run as freely as we need. Right?"

Shrugging, Hank replied, "Oh, they'll rotate freely, especially since we are powering the whole rotational motion, but they are going to either need a different lubricant or a cooling system. Otherwise, they'll go over heat specs in the first hour."

Tom thought the matter over for a few moments. "These are sealed, right?" Hank nodded. "Is there any way to drill into the ring at the top and the bottom, add fittings and then pump through lubricant while we are flying?"

A grin spread over the large pattern maker's face. "We could add a fairly small outer housing with a cooling system and a pump to both sides. Hot lube gets pushed out the bottom and into a cooling and recirc system and then comes back in at the top."

They discussed the system for the next ten minutes before Hank promised to get to work on the design and build of the two add-ons right away.

"I've just got one question, skipper. I mean, I read all the tech journals and have seen a working prototype of this kind of airship. Some company called Magnus made one back a few years ago. The one thing I never understood is why the sphere needs to rotate?"

"That's pretty simple. Balance and control. You know how a gyroscope works. Well, this is the same principle. As long as the sphere is rotating in a specific direction on a known axis, then wind can't push it over. An unbalanced load won't make it spin sideways to compensate. The other side effect is that the spinning ball tends to want to rise rather than sink, so the rotation generates additional lift."

"A win-win all *around* then?"

Tom chose to ignore the possible pun, but grinned. "Something like that."

They walked over to the group installing the environmental

equipment.

“Hello, Tom,” greeted one of the team. “Did Hank tell you we’re ahead of schedule?” Tom admitted that he had been informed of the good news. “Well, we’ll have the environmental’s finished for the big ball by quitting time today. But, we have... well, *I* have one question. Why do we have the special gear for this exotic atmosphere and then what looks like a small backup that is just standard Earth air?”

Tom smiled. “Ah, Doug. That is an easy one. Do you see the space near the front that is separated from the rest of the gondola by bulkheads?” Doug glanced over his shoulder at an area about five feet wide by fourteen feet deep, and then nodded. “That is going to hold a control pod that will be manned by a human pilot. I figured that we can’t assume our visitors will ever be allowed to fly this craft, so I or someone else will be up front in the cockpit and at the controls. That why the normal air system.”

Hank, who already knew about this, smiled and gave young Doug a friendly clap on the shoulder. “Sorry, Dougie. I thought everyone knew that. I’d have told you if I thought it was a question.”

“Yo! Tom!” came Bud’s voice as he jogged into the hangar. “I thought I’d find you here.” Then, looking at the construction going on he let out a whistle. “Wow! And Jetz! She’s going to be a beautiful girl. Got a name for her yet?” He looked expectantly at his friend.

Knowing how Bud liked to nickname his various inventions—generally with the result that whatever it was became known by Bud’s moniker rather than the official name—Tom became very serious. “Yes, Bud. It already has a name, and Dad and I agree that we can’t play loose and free on this one. Sorry, but things are going to be a little tense and tricky as it is, so she can only have a single, official name.”

The dark-haired flyer looked downcast. “Oh. I see. Well,” he added, brightening, “once they leave can I take a shot at it?”

Tom knew he might regret it, but he asked, “And, what do you think you might want to call it? I mean, once our space friends leave, that is.”

Bud smiled. “Hmmm? Let’s see. At first I thought SkyBall or SkySphere, but then I remembered that you told me you hope to take them all around the world, so I came up with two. GlobeTrekker or GlobeTrotter.”

Tom was astonished. With that last suggestion Bud had completely blown Tom’s own idea out of the water. “Bud, you’ve done it again. From this point on, she will be forever known as the *GlobeTrotter*.”

Bud was beaming. He had managed to keep from saying that his first impression was “Flying Cueball” and had come up with a name

that was both descriptive as well as being more interesting than Swift Airship: Circular - Model 1, or whatever might have come to someone's less pixie-ish mind.

As he was watching Bud's moment of triumph, a sudden realization hit Tom like a sledgehammer. He staggered over to a nearby desk and sat down with his face in his hands.

Had he just doomed the entire project to failure?

CHAPTER 17 /

ONE NOT SO SMALL DETAIL

“BUD. HANK,” Tom said in anguish. “Slap a dunce cap on me and call me the village idiot!”

“What’s the deal, Tom,” his friend asked concerned.

“I’ve built the entire environmental system, tested it thoroughly and let our space friends know that they can arrive in five days. They’ve even told me they will bring a replacement gravity stone, so I don’t have to sweat that.”

“I’m with you so far. But, I don’t see where the title of ‘idiot’ comes in.”

“Do something I didn’t. Think. Where are our friends coming from?”

“Mars? Space? Out there, somewhere,” was Bud’s guess.

“Right. So, where is our environment?”

“Over there.” He pointed at the spherical airship.

“Right again. Here’s the thinking part I completely forgot about. How do they get from up there to down here and into the environment when it is the ‘down here’ part that has kept them from visiting in the first place? We already know that moving the gravity stone around messes up the gravity field so we can’t just march them around with it.”

Bud’s mouth dropped open. He started to speak several times only to stop as a new thought hit him.

Finally, Tom looked his best friend in the eyes and said, “People have told me for years that I’m too young to have as much responsibility as I do. That I lack the life experience to make good decisions. They might be right!”

Bud shook his head. “Tom. In all seriousness, you’ve got so much on your plate, and you take it all on willingly, that it’s no wonder if a few small details slip through the cracks.”

“Slip through!” Tom’s eyes went wide. “*Slip through?* Bud. This is more than a little slip thing. This could be a deal breaker.” Then, seeing his friend shaking his head again, Tom inquired in a softer voice, “Okay. Tell me why this is not a huge deal.”

“It is no huge deal because you’ve got everything you need to make this happen. Look. We go up in the *Challenger* and pick up our visitors. Right?” Tom could only nod in agreement. “Fine. Then, we

put them in the hangar where you will have installed a portable environment chamber. Something like..." Bud looked around and then spotted the isolation chamber at the back of Tom's lab. He pointed at it and Tom looked over his shoulder "Something like that. Maybe a little bigger, but you get the drift."

Hank added, "Bud's right, skipper. Just create a temporary, sealed room for them to use to get from space to the ground."

Tom nodded slowly, but he looked Bud straight in the eyes and asked, "So, that's all well and good up in space but what about down here and gravity?"

"Oh, that's the real easy part, skipper. Think about that little gift you received from the space friends."

Tom's eyes immediately showed renewed interest. "The gravity stone? Okay. They're bringing a new one for us. What about it?"

"Well, if motion really messes it up so badly, then it would never work in a moving airship or any other vehicle. They must have thought of that. Your tests were the ones I helped with where I was dragging it along in a little wagon. It was bouncing around and jiggling. No wonder the field went wonky. I'll just bet that once it is anchored to whatever surface they are standing on, it will be fine."

The inventor's attitude brightened. "Wait. I think I see where this is heading. Since it seems to be self-powered and pretty small, we put it inside the new transfer environment in the holder I was able to recreate and then just transfer the whole thing into the new *GlobeTrotter*. Sort of slide the transfer pod in and they walk into the big room but the stone stays put and stable? They stay at their normal gravity the entire time. Bud. Take a kiss from Sandy out of the petty cash drawer. You've earned a reward!"

Bud pretended to be embarrassed, but he was actually very proud to have been able to make a positive suggestion. "That's one tiny detail taken care of then?"

"All over but the actual building of the pod and some way of integrating it into the *GlobeTrotter*."

Hank stepped forward. "We still have the entire aft end open and waiting for the room with a view and airlock assembly. Could you make that the transfer environment, too?"

"I can now!"

Tom returned to his office and called up the design for the module in question. After making a few changes to the airlock and creating a matching lock component to be added to the *Challenger's* hangar, he sent everything to Hank's computer.

By late the next day not only was the sphere almost finished,

including all the interior environment areas, Tom received word that the transfer module was well on the way to completion.

He leaned back in his chair and took a deep breath. Things were coming together and he was beginning to feel the pressures lifting from his shoulders. With just four days to go, he started feeling like things were going to work.

Five minutes later he pulled out his organizer and looked down the list of items to complete.

With one now glaring exception, all of the items were checked off. He leaned back forward, gawking at the unchecked item.

The translator!

How could he have forgotten? Well, he actually did know how. The death of Gabrielle Grimsby has come in the middle of his earlier work on the device; he had neglected to return to it once things calmed down.

Now, he was up against another wall. He pulled out the mock-up device from a cabinet. Bud had been able to test it for a few hours before their trip to fly the first airship and his notes were sitting next to the translator.

Tom scanned them. With relief he saw that Bud had made no negative notations, just a few suggestions, many of which he had to admit made a great deal of sense. So, with Bud's to-do list in hand he carried the translator down the hall to his large lab and set up everything he felt he might need on the large work bench.

The first thing he did was to make a duplicate controller board, minus the microphone, speaker and audio sub board. To this he connected a second LCD screen. Bud's notes said:

A real pain turning it around and around. Can you have a screen on both sides, please? One for you and one for them?

Changes in the video controller and the processors were required to support this new functionality and the associated components, but Tom was able to make those in only a few hours.

He checked the clock. 4:58. It looked like another long evening. Sighing, he read the next item on Bud's list:

It is possible to make this thing learn? I mean, if they come up with a new hand gesture, this could video it, store it and save a translation you scribble in.

That, too, made a great deal of sense, but was going to be a little more difficult as it meant swapping out the display-only screens for touch-sensitive ones.

Before he left for home at half past one in the morning, tired, hungry and stiff from sitting on a stool for many hours, Tom was happy with the new translator. He tried it out on a few things such as his soldering iron. He tapped a hidden screen button that activated the camera on the other side of the device. The two seconds of video were displayed on his screen along with a yellow-outlined box. He used his index finger to write:

soldering iron

After turning the device off and then back on he aimed the camera at the iron. A moment later the words: SOLDERING IRON came up on the lower part of his screen.

He made the last two very minor changes suggested by his friend, updated his design notes and sent everything electronically to the Electronic team. Along with the working prototype that he placed on their manager's desk before leaving for the night... morning, they would all come together in a couple of days as a set of six working translators.

When he got back to work around ten that morning he read the email from Electronics telling him they were going to add one additional thing; a data port in case Tom wished to update the software. He smiled glad to know they were thinking ahead.

Pulling out his organizer, he made an emphatic check next to the final unmarked item. His list was complete even if the actual final airship and translators were still in process.

He settled down into his desk chair, leaned back and closed his eyes. He hadn't realized how sleepy he really was until...

Tom looked around and shook his head as if clearing cobwebs. The clock must have been wrong. It said he had been asleep for more than four hours and that was impossible. He'd only closed his eyes to rest them a minute ago. Hadn't he?

"Oh, good. You're awake," Munford Trent said as he walked into the room. "Last time I checked I could have dropped a whole trout into your mouth it was open so wide. Might have stopped that awful snoring you were doing as well. Your father would like to see you for a status update. Can I bring in some coffee or hot chocolate to help you focus?"

Tom smiled. "How about a hot chocolate made with a couple shots of espresso along with the milk. I'm going to need the caffeine."

As the secretary went one way down the hall to fetch the requested

beverage, Tom walked the other and into the big office.

“Hi, Dad. I evidently zonked out for a few hours. Trent tells me you would like a status update.”

Pointing to the conversation area, Damon rose and followed Tom to the comfortable chairs. They were just settling in when the door opened and Trent brought in a fresh cup of coffee for Damon and Tom’s extra-powerful cocoa.

Tom ran down everything he knew up to four hours earlier. “I may have to update the update once I check on a few things, but for the most part we will be ready tomorrow, a full two days before we go retrieve our friends. By the way, how are all the flight zone permits coming? Did the State Department come through?”

“Happily, they did. As long as you remain under eight thousand feet and no closer than two miles from any airport you have clearance for up to five days all over the U.S. and the provinces of British Columbia, Alberta, Saskatchewan and Manitoba. The others are off limits for now. And, Mexico has agreed to a flight corridor along their eastern coast as far south as Ciudad Madero and then due east to the Yucatan Peninsula. Once there you will have a military helicopter escort and freedom to roam all over the site of our friend’s ancestral landing area.”

“That’s great. Now I just have to decide where to take them up here.”

“Well, if you’ll take your old man’s suggestion, I’d fly them from here to the Great Lakes, dip down over the grain states and then back up and into Canada to show them the splendor of the Canadian Rockies such as up around Banff. From there perhaps down through the Pacific Northwest and over Crater Lake, southeast and over Lake Tahoe, over to where the Citadel is and then down to the Yucatan. On your way back up maybe take in the Grand Canyon, the Louisiana Bayou, and finally up the Eastern Seaboard.”

“That’s just off the top of your head, right?” Tom said teasingly.

“Er, correct. Completely spur of the moment. Didn’t even compute that including a ten hour layover in the Yucatan that the entire trip could be made in seventy-one hours and you would set down at night all three days flying just between pre-dawn to dusk.”

“I think I’m a smart enough man to realize when something good is being handed to me,” Tom said, favoring his father with a big smile.

“Do you have everything ready?”

“I think so. I hope so. There’re just so many variables that I’ve tried to account for, but I won’t really know until we’re all together.”

A small knock on the door was followed by the entrance of Harlan

Ames. “I just wanted to tell you, Damon, that Gabrielle Grimsby is dead.”

Tom’s head swung back and forth between the two other men. “Uh, Harlan? Are you okay? Gabrielle died in the attack on the first airship. Remember?”

Harlan smiled. “Is it okay to tell him?” he asked the older Swift.

Damon nodded. “If she is actually dead, then we should tell him.”

Harlan sat down. “Her body was discovered in a small storage locker in a town on the other side of the state. She’s been dead for about ten weeks. Her killer stuffed the body in a freezer there and paid two months rent. Nobody knew anything until rent was due and they shut the power off. Then...” he left the rest unspoken.

“Wait! What’s this all about?” Tom asked.

“Harlan discovered who our Gabrielle Grimsby was that very first morning, Son.”

“I told you it pays to be an ex Secret Service agent, Tom. When I stepped out of the interrogation room and made some calls, I found out that her phone was registered to the real Gabrielle. The only thing is, Gabrielle had been reported missing a few days before it was purchased. I also spotted something *our* Gabrielle didn’t have that the real one did. A tattoo of a fish on her neck. On the back of her neck.”

“Does that mean you knew she wasn’t the real one even though you vetted her to work here? And, you *dated* her?” Tom was amazed, but a few things began to make sense.

“Yes I did. And, so did your father. It’s the old ‘Better to have your enemies in front of you than behind you’ thing. We set everything up because I believed I already knew who she actually was. Tatiana Roushcu, a former Romanian agent who defected to Kranjovia about three years ago.”

Tom, who had jumped to his feet moments before sat back down. Looking at his father, he asked, “Why didn’t you tell me about her?”

“Think about it, Son. The more people who knew the truth, the more likely it would have been for her to discover we were on to her. We were working with the FBI all along. They needed us to help them incriminate her so they could arrest her.” He looked down for a moment and then back at Tom. “Even Phil was kept in the dark. Boy, is he ever going to be upset. We really didn’t know that she would kill herself in that attack.”

“Okay. So now some things makes sense. Even though there were multiple times when the security around here broke down, and it seemed that you were flubbing things, dad never got really mad.”

“Right, Son. Harlan had to push me to get visibly angry one time for fear that I would underplay things, but I really had trouble pretending to be furious. We knew about the acid attack on the surveillance cameras but had no idea she was going to attack you. Then we set up the missing TeleVoc pin and the false alarm with hopes that she would try to steal some secret documents. What we hadn’t considered was her stealing the *Kangaroo Kub*.”

Ames pulled a photograph out of his jacket pocket. “Take a look, Tom.”

Tom looked at the picture. “That’s Gabrielle. Black hair instead of the red, but that’s definitely her.”

Ames shook his head. “Sorry. That’s Tatiana from a hidden camera about a year ago. Makes it pretty obvious why she chose to take Grimsby’s place. They could have been twins.”

“Why?” was the only thing Tom could get out. He didn’t know whether to be angry or relieved.

“The Kranjov government runs a team of spies here in the U.S. We know who most of them are and where they are, so what they generally get are doctored specifications, phony designs and wrong-pointing clues. Roushcu has been here trying to get an in with one of three industrial giants including Applied Genetics and Swift Enterprises. It was probably sheer luck of timing that she took Gabrielle’s identity just as we were getting into this visiting aliens project. We’ll never know if she planned to get into Enterprises or not, but it was an opportunity too big for her to ignore. And, even though I made it appear that I was sloppy and she took advantage of that to sneak around, she was foiled at every turn when it came to getting her hands on anything meaningful. My guess is that she decided to destroy the airship, and possibly you as well, as a way to throw Enterprises into chaos. Another guess is that she didn’t realize that the airship would have a solid inner structure. She may have planned to dive through the gasbag and fly away leaving the ship and—again I think she thought you would be inside—you to plummet to the ground.”

Tom felt a shiver run down his spine. He evidently looked so uncomfortable that his father rose from his chair, placed his hands on both of Tom’s shoulders and told him, “It’s over, Son. She’s gone and everything is going to get back to normal.”

Looking into his father’s eyes, Tom could see the power and conviction the man had. He gave him a quick smile and a nod. “Thanks, Dad. Oh, and thanks to you, too, Harlan. Wish I could have known about all this earlier, but I see the logic of keeping things tight.”

Ames said, “Thanks.”

“Are we going to be okay for the visit? I mean, are there any other Kranjov agents or Brungarian assassins lurking around?” Although he sounded a little sarcastic, Tom’s questions were in earnest.

Ames realized this and chose to ignore his tone. “So far as we know, there is one minor listener hanging around Shopton. He frequents bars and listens to see if anyone is talking about confidential projects or leaves something on a bar when they go to the bathroom, but he is well known. I’ve even sat down with him before and had a good laugh about how little he is able to find out. Other than that, we appear to be clear.”

Tom remembered something. “Dad! I completely forgot to call Dan Perkins at the *Bulletin*. He’s probably furious with me.”

Damon smiled. “No worry there, Son. Harlan and I took care of all that a few weeks ago. You were so busy that I thought it best to handle Dan myself. He goes to press in a couple days with a full front page story that starts off like gangbusters and then becomes a ponderous travelogue of things the aliens are most likely to wish to see. No specific flight details... in fact I sort of left him with the impression that you would be traveling in the *Super Queen* and might be heading California first, then British Columbia, Hawaii, Alaska, Down the length of The Rockies and across the north of Texas before ending up checking out New England and finally Greenland.”

Tom had to smile. “Who will be flying the *Queen*?”

“Oh, a team of three. There’s Red Jones, Hank Sterling and some old guy named Swift.” His eyes glinted as he named himself. “Got to make that man keep up the flight hours, you know?”

A half-hour later Tom and Damon were summoned to the Communications building.

“We just got a doozy of a message from our friends. You need to see this,” George said handing both Swifts identical pieces of paper.

With growing dismay, Tom read it aloud:

**SWIFT FRIENDS. MASTERS HAVE
COMMUNICATED THEIR INTENTION
TO TAKE OVER EARTH VISIT. WE
ARE NOT TO ARRIVE ON EARTH.**

SORROW.

MASTERS COUNCIL DOES NOT

**BELIEVE THAT WE WILL BE
ALLOWED TO PROPERLY
EXPLORE PLANET
AND THAT YOU WILL NOT TAKE
DIRECTION FROM US.**

**THEY WILL ARRIVE IN SEVEN
EARTH ROTATIONS. UNSURE
HOW TO PROCEED. PLEASE
TELL US WHAT WE CAN DO.**

CHAPTER 18 /

“WE ARE NOT TO ARRIVE, BUT...”

TOM LOOKED at his father in total disbelief. “What could have happened, Dad?”

Taking a deep breath, the older inventor replied, “It would seem, if the translation is correct, that their masters have tossed a monkey wrench into all our plans. Given my past experience with them I do not want our friend’s masters down here on our planet.” He looked knowingly at his son. “I’m sorry.”

Tom sighed. “But, if that’s the case then we’ve done all this to no avail. Our friends will be forced to go back and will probably be punished. These masters will be angry and—” He stopped seeing his father’s shaking head. “What?”

“The what is that we have no idea about how they truly think. In all probability they do not share our emotions. I mean, look at the animal kingdom. While man and even dogs both feel guilt, our nearest evolutionary cousin the chimp doesn’t. In fact, guilt feelers are the minority of species. The same thing with anger. It may be a foreign concept. We just can’t assume that our friends or their masters have such feelings as loyalty, or honor, or shame or even pain. Do you see?”

“Yes. I guess I do. I’m just so disappointed that all our plans and these past eight weeks of work may go down the drain all because these masters have a bug up their...” He looked at his father who smiled and shook his head. “Okay. A bug up somewhere. We can’t assume they have an orifice to have the bug up. Right?”

“Right. Listen, Son. I’ve got to run to a meeting but I want you to just keep going ahead as if you never got this message. Perhaps between now and a week from now things will change. Let’s all just assume that it’s a go. Anyway, you now have a week rather than a day. Maybe we can get back in contact with Garl and try to reason with him... and as I say that I have to remind myself that I just told you they may not have concepts like being reasonable.” He shook his head, patted Tom on the shoulder and left the radio room.

Tom sat down and composed a new message:

**Friends. Make contact with your
Masters and connect me with them.
I will speak to your Master, Garl.
If Garl says he wishes no contact,
tell him that Earth visit is**

**cancelled. Earth visit is only for
you, our friends.**

He was so mad he almost pressed the send button before reading what he had typed. He made a slight change to the final sentence making it read:

**Invitation to visit Earth only open
to you, our friends. Previous
contact and troubles for one of
our spacecraft with older Masters
near planet two unsatisfactory.**

Satisfied, he sent the message. He opted to wait for up to an hour for any return message. It came through twenty minutes later.

**SWIFT FRIENDS. MASTER GARL
UNHAPPY HOWEVER AGREES TO
COMMUNICATION. SOME
UNDERSTANDING OF PREVIOUS
EARTH VISIT AND MASTER
ENCOUNTER KNOWN TO HIM.
WE HOPE YOU SUCCEED.
COMMUNICATION WITH MASTER
GARL IN ONE PLANET ROTATION
FROM THIS TIME.**

Tom printed copies of his message as well as the reply and delivered them to his father's desk. He left Enterprises five minutes after that, heading for Bashalli's parents' home.

"I am so sorry, Tom, but Bashi has not arrived back home from her job," Mrs. Prandit told him when she answered the door. "But, please come inside and I will fix a glass of iced tea and some special sweet treats for you."

Tom entered the home he had been in more and more often in the past year. Now that he knew the Prandits, he could see how their heritage, beliefs and the things they enjoyed had shaped their home. Where he had felt trepidation and terror on his first visits he now felt comfortable, the surroundings, familiar.

Mrs. Prandit came back into the living room a few minutes later bearing a small round tray with two tall glasses and a small plate of a

rice and coconut treat that Bashalli once swore would end up making her a fat old woman if her mother ever gave her the recipe.

They sat talking about Bashalli and her job and her new car. Eventually, the conversation began to wane and Tom gathered all his courage and asked a question.

“Mrs. Prandit. You know how deeply I feel for Bash. I’m in love with her. And, I know that you all have hopes that she will get over me and find a nice Pakistani man, but I need to know one thing. If, in a year or so, I were to ask her to marry me, would you, Mr. Prandit or Moshan be angry with either her or me?” He found that he was shaking from either adrenaline or fear, but he couldn’t decide which.

Mrs. Prandit was also shaking, visibly. So much so that Tom was afraid she might be having some sort of seizure.

“Are you okay?”

She looked at him. “Thomas Swift. I am fine. I am shaking with joy. I do not know if you realize how much Bashi is in love with you. How she yearns to be your wife. Tell her of this conversation and I will deny it, but I promise you right now that if you make her happy by asking for her hand, her father will grumble for show but will take you aside and tell you how proud he will be to have you as his new son. Moshan will hide his feelings, but privately he will be overjoyed. Bashi is so important to him and her joy is the one thing he seeks.”

“And you?”

“I will take your face in these hands and kiss you once on the left cheek, once on the right, and once on the forehead. I will then bless you and welcome you as my second son. Bashi will probably faint from the excitement and joy, but she will also take your face in her hands and kiss you. Only in a more meaningful way.”

She beamed at the inventor and he felt a warmth inside he had never experienced. At that moment the door opened and Bashalli walked inside.

Giving a delighted squeal she threw her arms around Tom’s neck and hugged him.

“Has my mother been attempting to fatten you with her wicked treats?”

“Your mother and I have been having a nice conversation and enjoying both her tea and the things you call wicked. I call them delicious!”

Sensing something, Bashalli asked, “And, nothing else?” her eyes narrowed as she looked first at Tom and then her mother.

“I was simply telling Thomas that you were enjoying your new job but hoped that it would not impact your time together.” Tom could not see it as he was facing Bashalli, but Mrs. Prandit quickly stuck her

tongue out at her daughter. When Bashalli laughed, Tom spun around to see what was funny and missed her sticking her own tongue out at her mother.

Both women were reduced into gales of laughter.

Eventually, Bashalli composed herself and asked, "What very pleasant occasion is it that brings you to our home?"

The past few moments had chased the growing melancholy away from Tom's mind. He shrugged and told her, "I just wanted to see you. Hope you don't mind. I'm taking a couple hours off before I need to meet with dad around six. Want to go for a walk?"

She did. Bashalli placed her arm through Tom's and leaned into him as they strolled around her neighborhood. By the time they returned it was time for him to leave. "I'll see you tomorrow," he promised.

At Enterprises he went straight to the large office. As he suspected, his father was there. He must have just come back as he was sitting there reading the message exchange pages.

"Ah, Son. Glad you're back. I just saw these. Do you think you can convince old Garl to let things go along as planned?"

"I sure hope so," Tom replied sitting on the visitor chair opposite his father.

"Well, if you can pull this one off I may need to have words with a certain friend of mine in D.C. about getting you officially declared the U.S. Ambassador at Large for Inter-Spacial Affairs. What do you think of that?"

Tom had to laugh. "Oh, sure. Does that come complete with a special uniform and a sash?"

Damon chuckled, but became serious as he said, "It comes with a scroll declaring your position, a sash and a ceremonial sword. It also entitles you to meet with the President any time you have good reason, and to have a support staff of five."

Tom was about to ask if his father was truly serious when there was a tentative knock on the large office door. It opened to reveal the face of Harlan Ames. "Is it okay to come in and bother your two?" he asked rather meekly.

Damon looked at Tom. They shared a concerned look. It wasn't often that their Security chief was anything other than determined or direct. It just wasn't like Harlan to ask permission.

"Why, absolutely, Harlan. Please. Come in and have a seat," Damon said rising and starting to walk toward the large meeting area of the office. While Tom and Harlan took comfortable chairs, Damon opened the door again and asked their secretary to bring in some fresh coffee.

"So, we can both see that you've got something on your mind," he

said, sitting down. "What's going on?"

Ames took a deep breath, held it a second and then let it hiss out through his clenched teeth. "I'm not even certain where to begin," he admitted. "So, here's a somewhat terse rundown. First, Tom and Bud flew down to the Yucatan Peninsula and almost took a missile up the tail end of the *Super Queen*." He looked at his employers as they nodded in agreement.

He was given a small reprieve when the door opened and Munford Trent came in with a carafe of hot coffee and a plate of fresh cookies that Chow Winkler was no doubt responsible for.

"Anyway," he continued after Trent departed, "I got hold of the State Department and they got hold of the Mexican equivalent and they got in contact with X, and they got in contact with Z, and so on until it finally got right down to the military regiment that now agrees they fired on you."

"So, it *was* the military and not some revolutionary group or anything like that?" Tom asked.

"No. Just their Fifteenth Regiment out on maneuvers and making a 'feel the presence' visit up in the Yucatan trying to quell some problems there. Here's the part that has angered the Mexican government to the point where they are disciplining the General leading that group. He evidently acted directly on a telephone call from someone purporting to be from our own State Department."

Both Swifts looked surprised.

"It gets worse. The call came in the morning you departed. The voice was that of a woman identifying herself as Gladys Smith. She told the General that an aircraft flying under falsified U.S. credentials was actually a secret mission from Cuba with orders to destroy his regiment in preparation for an upcoming invasion!"

Damon shook his head vigorously. "That's preposterous, Harlan. How could anyone believe such blatant tripe?"

Harlan took another deep breath before continuing. "The General, through channels, assures our State Department contact that this was the fifth conversation he had with the woman over the previous several weeks and had also spoken with at least one gentleman as well and with the knowledge of a high government official. The very reason his regiment was in that specific location was based on her previous warnings. He believed she was speaking to him with the permission of his own government."

"Do they have any clue about who this woman is?" Tom asked.

Harlan's head tilted to one side. He seemed to be struggling with his emotions. Lifting his head back up and looking the young inventor in the eyes, he stated, "The General's assistant secretly records all of his calls. He provided a digital recording to the Mexican government who

sent it on to ours. State sent me a copy. I played it this afternoon, which is why I'm here. It was Gabrielle Grimsby! I mean, it was Tatiana Roushcu. I know her voice."

Tom looked at his father. Damon was shaking his head, sadness evident in his features.

"It gets a little worse," Harlan added. "Remember that nut case, Herman Philliman?"

The Swifts nodded in unison.

"Philliman is actually Harry Larson. The FBI finished making the connections late yesterday. And, get this, Larson is the first cousin of—"

"Gabrielle Grimsby!" Tom said, interrupting his Security man.

Ames nodded. "Gabrielle Grimsby. Her father is the brother of one Mary Larson, nee Grimsby. What a family!"

"Indeed," Damon commented. "Any other familial surprises for us?"

"Not much. Both Mary Larson and her husband died in a light aircraft accident a few years back. Even Tatiana knew about that and that alcohol was involved. No other offspring. Harry went around and over the bend when they died and had been in and out of institutions until a year ago when he went off the map. Right now he is locked up and looking at a life of institutional living. Even if he gets better, he will then face conspiracy to commit murder charges. Our FBI contacts say he'll most likely never get back out into society. And, what with Gabrielle's... passing, and she being an only child, that just leaves the ex-Senator and Gabrielle's parents."

Tom and Damon looked expectantly at Harlan. He realized what they wanted and finished with, "They are both in shock still. I should call them."

"What will you tell them?"

"That their daughter's killer is dead and that her remains are being transported to them now that the autopsy has been concluded. At least they will have some sort of closure. I'm not certain if I'll tell them about the Kranjovian connection.

They finished their coffee and conversation and Harlan left to make his phone call.

Tom spent a restless night eventually getting out of bed around five and going downstairs. His mother came into the kitchen moments later and quietly set about making a pot of coffee and some slices of buttered toast. She brought these to Tom as he sat in the living room staring at the dark television set.

Without a word, she softly tousled his hair and went back upstairs.

Tom got up and retrieved a note pad from the writing desk on the far wall. He began writing down what he would want to say to Garl or

who- or whatever he eventually was connected to. By the time his father came down at seven thirty, followed by his mother and a bleary-eyed Sandy, he thought he had a fairly complete idea of what tact he needed to take.

He showed his final version Mr. Swift.

“Can I take it from the missing half of that pad that you’ve gone through a few revisions?” His father winked at him.

“Yeah. Lots. What do you think?”

“I’d say that you make a pretty good case. Even a *diplomatic* one. You might be earning that sash sooner than you think.”

Sandy looked like she wanted to ask what that meant, but she eventually closed her mouth, shrugged and laid her head onto the arm of the sofa. She tucked her legs up under her and was soon lightly snoring.

Tom and Damon departed the Swift home just before eight with both men heading to their shared office to prepare for the upcoming radio call.

“Nerves?” Mr. Swift asked.

“I guess. Jitters, butterflies, flip-flopping stomach. I have to ask. How would you handle this if you were in my place?”

Mr. Swift paused while he pulled his copies of the most recent messages from his desk. He read through them before answering. “Son? I have to be fully up front with you. I would not have been as kind and patient as you were with this Garl. The first contact might have been the very last. You handled that like a champ.”

Tom wanted to thank his father but the older scientist continued, cutting him off.

“As far as this latest problem, I truly believe your message spelled everything out in big, bold letters. You didn’t shut things down but you did tell them, and in so many words, that the invitation was not for the Masters. Now, we just wait and see how they take that.”

“But, what if they want to pull the rug out from under all this?”

“Then we let them. Earth is in no position to make enemies out across space. We barely know anything about what is going on beyond our own atmosphere. But, that’s not what you want to hear. So, I’ll tell you this. Pick your words as carefully this time as you did before. Be firm with them, hear them out, but stick to your guns.”

Tom sat in silent contemplation until it was time to go to the Communications building.

As before, a test call came through one hour prior to the scheduled call. The hiatus between calls only made Tom more anxious so that by the time the real call came through, he felt he might be close to panic.

But, the moment he heard the first words coming through the speaker, his jitters and fears disappeared.

“Tom Swift. I am Garl. The nature of this communication is to discover why you have halted plans for our arrival on your planet. I await your answer.”

Tom and Damon looked at each other. Picking up the microphone, Tom cleared his throat and spoke.

“Garl. This is Tom. My communication with your subjects was based on information from them that you or your Council intended to prevent them from arriving, and that representatives from you Masters would replace them. Is this an error? I wait for your reply.”

“Good approach, Son. Keep Garl on the defensive without pushing too hard. It may even come down to a miscommunication between their Council and our friends. This all could be a tempest in a teacup.”

The reply stopped him from saying anything else.

“Tom. Our intent is to come to your planet to gather information that our subjects have proven to be unable to do. They have been unable to assure us of the outcome of a planetary visit and we can not allow the visit to fail. Do you not intend to allow the visit if the Council sends emissaries from our race? I await your reply.”

“Garl. Previous encounter with emissaries of your race were unsatisfactory and almost destroyed several lives. Including my father. I am not certain if you understand the concept of a father or mother, but they are the two Earthlings that gave me life and protected me until I matured.” He grinned at his father. “We have a good relationship with your subjects and trust them on our planet surface. We are unsure if we can trust you Masters at the present time. In the future, once your subjects have been allowed to study us, perhaps over several visits, and once we find out more about you and your intentions toward our planet, perhaps a mutual visit plan can be developed. Please allow your subjects to complete as much as possible their mission for you. If you understand the concept of trust then please believe that we trust your subjects and you should trust them as well. Waiting.”

It took almost a half hour before there was any response. When it came through, Tom dropped the cup of cocoa he was just filling, and Damon and George Dilling both froze in their seats.

The message was succinct and brief. Exceptionally brief.

“Granted!”

CHAPTER 19 /

“YOU KILLED GABRIELLE GRIMSBY!”

“WELL, I’VE GOT news for you both,” Harlan told the two Swifts when he entered their shared office an hour later. “You’d better both sit down and grab hold of your desks.” He looked from Damon to Tom with a very serious look on his face.

“Is it that serious?” Damon asked.

“I’m afraid that it is,” the Security man told them, lowering himself into one of the leather chairs in the conference part of the room.

Tom joined him while Damon asked for a moment to complete an email. He sat down a minute later. “Okay. Tell us.”

Harlan took a deep breath. He looked first at Tom and then at Damon before continuing.

“Okay. According to one of my acquaintances at the State Department, a few days before Tatiana’s call to them, the Mexican government received a personal phone call from someone in Washington. This caller, evidently a long-time personal friend of the Vice President of the country, gave him a heads up regarding a planned invasion from Cuba. The phone call lasted more than fifteen minutes while detailed information regarding both the intent and the specific aircraft that would be used were passed along.”

He paused to see if there would be any questions. When there were none, he continued. “Citing governmental privilege, the Mexican V.P. refuses to divulge his source. However, the call was backtracked to one of those throw-away phones. ‘Burn phones’ they call them. We’re doing a trace on that one, but it seems to be the third in the serial sequence of the phone Tatiana posing as Gabrielle Grimsby purchased and used.”

Tom leaned forward. “Could she have made that call then?”

Shaking his head, Ames replied, “Not likely. She was here in Shopton when the call was made in D.C. Besides, the Mexican V.P. mentioned several times that ‘he’ told me this and ‘he’ told me the other thing.”

“Her cousin?” Damon Swift asked, arching one eyebrow.

“Not very likely, but not out of the question. He’s been transferred down to Albany, by the way. That Grimsby family is a pretty nasty piece of work.”

“Could Miss Grimsby’s parents be involved?”

“No, Damon. I highly doubt it. From what I gathered in my call to them they are about as estranged from the Senator as you can ever be. Grimsby’s son blames the ex-Senator for his business failures going all the way back to the time of your problems with GrimsbyTronics years ago. Grimsby the junior, name’s David by the way, hates his father, believes the old man is responsible for the death of his sister and brother-in-law, refuses to have anything to do with his nephew, Harry Larson, and had all but disowned his own daughter a few months back when she started in on a campaign of hate toward us. Toward you two in particular.”

“The real Gabrielle hated us? Not just this Tatiana?”

“As far as her father knew, it seems that she was having those leanings the last year of her life, starting about the time she spent a month with her grandfather following his exit from the Senate. Her parents said that her phone calls and personal visits to them generally ended quickly whenever she began tirades against you two.”

“When was the last time they spoke to her?”

“Verbally? About three days before she was reported missing by the folks at Applied Genetics. After that, all communication between the parents and who they thought was their daughter took place electronically. We have to believe that it was Tatiana Roushcu and not Gabrielle from that point on.”

“How about the mother,” Mr. Swift asked.

“Pretty much an emotional basket case over her daughter’s death these days, but she agrees that Gabrielle was a changed and very bitter woman and had been more favorable toward her grandfather than her parents for at least a year. It’s kind of sad. She knew her daughter was bitter toward them, but she believed it was because of her husband’s conservative political stance versus Gabrielle’s liberal one, not something to do with how she felt her grandfather had been treated.”

“Couldn’t the real Gabrielle see that the senator brought it all on himself?” Tom asked.

Mr. Swift chuckled. “Put on her shoes, Son. How do you feel whenever I come home with bad news about losing some contract or how I was grilled by a Senate committee?”

Tom grinned. “Yeah,” he admitted. “I guess I tend to feel that you got the raw end of the deal and that they are all fools. But, I wouldn’t have some vendetta build up. And, are we wrong to think that Senator Grimsby was the architect of his own downfall?”

“My vote is no. You are not wrong, but that’s moot. Gabrielle’s hatred might not have killed her, but it let Tatiana do that and take her place. Then, she could have killed you and Bud as well!”

Damon nodded, coming to an internal decision. “What’s our next

move?”

“I keep digging. If it turns out that the personal friend of the Mexican V.P. is our ex-senator, then I will contact the Attorney General’s office and let them take *that* hot potato. In any case, I’ll keep you two advised. Oh, say. On a mostly unrelated note, how are the plans coming along for the visit? What I mean is, how soon do I need to post extra guards to handle all of the ‘*You’re bringing on the end of the world*’ protesters?”

“Four days,” Tom said. “Assuming that I get the last of the environment airship completed and the transfer pod and air lock tunnel and everything else finished!”

Tom left with the Security chief. They parted ways at the side door of the Administration building with Tom hopping into one of the ever-present electric runabouts that Enterprises’ employees used to get around the huge facility. He depressed a button on the dash and the electrical lead disengaged and was automatically retracted into the charger on the post in front of the car.

He quickly accelerated across the parking lot and out onto the wide tarmac area leading out to the cluster of hangars and repair buildings near the northwest side of the facility.

“You can’t tell me you’re finished, Hank,” Tom declared on seeing the fully assembled sphere and underslung control cabin.

Hank gave Tom a noncommittal stare and said nothing.

“Okaaayyy. I’m guessing that you *can* tell me you’re all finished. Right?”

“You can indeed, skipper. Just sealed the final panel in place an hour ago. Oh, and we have the transfer pod and the air lock and all ready for the *Challenger*. I’m shipping them out tonight.

“Why don’t you take an extra day or so. We’re not going to go up and get them for more than three-and-a-half days. I’d rather we had one more complete inspection, just to be certain I haven’t forgotten anything.”

“Ha!” Hank exclaimed. “You’ve never been so good about giving us lists and designs of everything. But,” he added, seeing the serious look in his young boss’ eyes, “never let it be said that I was unwilling to prove myself wrong. Uh, is there any particular place you think one or more of us might have missed something?” He looked hopefully at Tom.

“Not an idea, Hank. Just want to be certain. After all, it wasn’t until yesterday that I told you I neglected to add a water tank so that Bud and I could drink. Right?”

Hank smiled openly and nodded.

“Sure, but then I kinda forgot to tell you that Arv thought to add that a week ago. I just let you believe that we did a rush job on it!”

Now, Tom smiled openly. “Okay. Just a quick once-over then. If you need me I’ll be in my underground lab.”

He left secure in the knowledge that the burly engineer would make certain that nothing was missed.

By the time he arrived at his lab, Tom had convinced himself that he might actually have a day to relax before the big day. It turned out to not be so.

“Hello. Tom? It’s Davey at the main gate. Listen, I’ve got some guy here who says he needs to see you personally. Won’t give me his name or why he’s here and insisted that I call you. Should I buzz Mr. Ames?”

“Not quite yet. Tell him that I’m in the middle of something that can’t be interrupted. See if he will talk to me on the phone. I can give him a couple minutes.”

Tom waited for a few moments before the gate guard came back. “No. He says he needs to see you in person. You *and* your dad.”

“Tell whoever it is that we don’t come to the gate to see anyone who won’t state their name and their reason for being here. If he gives you any flack, punch the alarm and let the security team take care of him.” With that, Tom hung up.

He became so immersed going over the final preparations that afternoon that he forgot to mention anything about the odd visitor to his father. That evening, as the family was eating dinner, the alarm system blared to life.

Installed by Mr. Swift several years earlier, it registered anyone coming onto the property who wasn’t precluded either by wearing one of the older-fashioned amulet wrist watches or the new TeleVoc pins.

The tone used indicated that there was someone at the front of the house. Mr. Swift rose and went to the door. A look at a small TV screen on the wall showed a well-dressed man, possibly in his late twenties, standing there with a briefcase.

Tom came to stand next to him. Looking at the screen he said, “No idea who that is, Dad.”

Setting the doorstep that would prevent the heavy wooden door from opening more than a few inches, Damon turned the knob.

“What can we do for you?” he inquired. “We’re in the middle of our dinner and don’t deal with solicitors.”

“Are you Tom Swift?” the man asked.

“I am,” Tom said moving so the man could see his face.

“So, that means you’re Damon Swift?” he asked looking at the older

inventor.

“Yes. What is your business?”

“I was trying to get to you both this afternoon, but some punk kid in a uniform had me kicked off the premises. Here. These are for you.” He handed a pair of thick envelopes through the partly open door then turned and walked away.

In a very sarcastic tone he called back over his shoulder as he headed to his car, “Have a real great evening, you two!”

Damon closed the door. It was only then that he looked at the envelopes. Opening the one with his name on the outside he scanned the first page.

“Well. It appears that we are being sued by ex-Senator Grimsby and his nephew for the death of Gabrielle Grimsby!”

* * * * *

Harlan arrived at their home thirty minutes later, his daughter remaining out in the car.

“Sorry. Had to bring her along,” he explained.

Anne and Sandy headed immediately out the door and brought the bored girl into the house. “Men!” they told her, and took her into the kitchen for milk and cookies.

He sat reading the fifteen-page lawsuit. His anger began right off when he saw whom the plaintiff was bringing the suit: Senator Anthony Arbuthnot Grimsby.

“How dare he, and how dare he continue to use that honorific?” Harlan practically exploded. But, he read on. By the time he reached the end, he was almost smiling again.

He explained to the two confused Swifts. “If this actually comes from our old friend, then he’s dropped himself into it. There are several passages in here that only a few people outside of this room could know. That would include Tatiana Roushcu and anyone who she was working with.”

“Such as what?” Damon asked.

“Such as this place,” he replied opening the document up to a middle page, “where the suit lists ‘slandering the good name and reputation of Grimsby with the government of Mexico, end quote. I’ll get this to both our Legal department and the U.S. Attorney General tomorrow morning. Any chance you captured a picture of the man who brought these to you?”

Tom nodded and headed into his father’s study. “I’ll download the video and print out a couple of good shots,” he called back to them.

Five minutes later, Ames took a set of four very clear shots of the

process server and a memory card with the entire video. He muttered something to himself but opted to not speak out loud.

“Thanks, Tom. I’ll get these out to all the appropriate folks. To tell you the truth, if this guy just sort of shoved them through your door then he didn’t officially deliver them, and you’ve got video to prove that. You could legally ignore them. He’s probably not even a licensed server.”

Forty minutes later, Ames and his daughter, a small smear of chocolate on her upper lip from the warm cookies she had been eating, departed.

By mid-day the next day, Ames was back in the office with Tom and Damon.

“As I suspected, the man who dropped these off isn’t licensed. In fact, he isn’t associated with the law firm that drafted these. They claim they haven’t served them yet. Oh, by the way, that legal firm—Pearce, Fennel and Towsmith—provided another nail for the Grimsby coffin. Turns out he had them drafted these four weeks ago, starting the day before Roushcu did her suicide run. Of course, they claim that the suit didn’t include the ‘you’ve killed her’ parts back then, just the defamation and slander stuff. The thing is, it shows how Grimsby is connected.”

“Sounds like before, during and after the fact,” Tom said.

Ames and Mr. Swift nodded.

“So, our legal experts tell me to forget about this. They’ll work with the A.G.’s office in Washington and let us know the outcome.”

Harlan left and Tom was about to do the same when Trent buzzed on the intercom.

“There is a call from a rather smug Dan Perkins at the *Bulletin*. Are either of you in?”

“We are, Trent. Put him through,” Mr. Swift directed.

“Hello, Dan. It’s Damon and Tom here. Is this a social call? I hope you’re not going to bang on about the forthcoming visit.”

“Actually, this is a ‘I’m going to help you a little more and hope that you’ll be nice to me’ call.”

He started to tell them about a recent development that had been brought to his attention.

“You recall that nut, Philliman, nee Larson?”

They told him they well remembered the disturbed man.

“He evidently talked himself out of the facility the police took him to. Sort of walked away yesterday with everyone looking the other way. Some development, huh? Of course, we know he was the one who kept trying to give me the bad info about your visitors, but what I

just found out is that he actually isn't a kook. In fact, he's a third person. Interested?"

"Do tell, Dan," Damon suggested.

"Philliman-Larson also goes by the name of Perry Danielson and is a junior attorney with a moderately well known law firm down in Manhattan. It, uh..." they could hear the sounds of rustling papers as the newsman searched for the name, "it's Pearce, Fennel and Towsmith. You might alert Ames about that in case he wants to follow up."

The Swifts were stunned. After a few seconds, Perkins asked, "You still there?"

"Uh, yeah, Dan," Tom responded.

"Good. Does it buy me anything?"

"Well, not much more on this story except I'll promise to give to a play-by-play once our friends have departed plus some exclusive photographs of them. Deal?"

"Oh, brother, have you ever got a deal!" With that, the line went dead.

Damon immediately called his Security chief and gave him the new news. When he hung up, he said to Tom, "I left him giggling like a school girl."

Two days later, Ames came back to the office to give them some news.

"Glad I caught you both in," he told them. Making himself comfortable, he began. "For starters, Philliman-Larson-Danielson has been arrested. First charge is illegal process service, but that will only hold him for forty-eight hours. Once he is released, the U.S. District Attorney's office will re-arrest him on a bunch of Federal charges including impersonation, practicing law without a license—"

"What?" Tom and Damon chorused.

"Oh. It turns out that Danielson was hired with no background check or even a check of his Bar credentials on a personal request from a good friend of one of the Senior Partners. Guess who made the request."

Tom groaned, "Grimsby?"

"That would be the one."

"But, Harlan," Mr. Swift said, "doesn't that mean they hired Larson on Grimsby's recommendation?"

Ames shook his head and grinned. "Nope. Our old friend told them he was requesting the position on behalf of an old family friend, and that the person they should hire was Perry Danielson."

Neither Tom nor Damon could think of anything to say.

“He is also looking at conspiracy to commit murder, conspiracy to commit fraud and breaking about five laws having to do with international activities including politically motivated assassination.”

“Was he the one who knows the Mexican V.P.?” Damon asked.

“No. But, he was the go-between someone higher up and the Mexicans. Brokered a deal and evidently made payoffs to several individuals down there.” He grinned at them. “Aren’t you going to ask who Mister Big is?”

“Anthony Arbuthnot Grimsby” Tom guessed. It hadn’t been much of a leap.

“The very man who is...” Harlan looked at his watch, “...about to be visited by federal Marshals and taken into custody. I believe that any future problems we may have will never more involve a Grimsby!”

CHAPTER 20 /

SPACE TOURISTS

TOM AND BUD zoomed skyward in the *Challenger*, the small, portable environment chamber bolted to the porch of the hangar deck and extending back into the hangar.

They set course for the rendezvous location, one of the five Lagrange point in Earth's orbit where an object, once 'parked,' would remain balanced between various gravitational sources. Although point L1 was technically the closest, it had been decided that L3 was the best. It offered slim chance of being spotted by the Masters should they be watching.

"Why out here?" Bud inquired.

"Well, my guess is that they want to leave their saucer or ship somewhere that it is not going to wander away, but don't want to leave it in a predictable orbit of close enough to Earth where it might be attacked. The Lagrange points are all far enough away that the ship will be safe."

Twenty minutes later Bud called out, "Got something on the scanner, Tom. About as big as we are and sitting stationary in space." He read out the coordinates and Tom adjusted their course, slowing down as they approached the alien craft.

"Say. Doesn't that look a lot like the saucer they sent with all the sick animals"

Tom had to agree. "Same form, but it looks to be about twice the size. We shouldn't assume that they just have one ship."

The *Challenger* suddenly slowed even more, briefly alarming Tom. "I didn't just do that," he told Bud. "She seems to have been taken control of by our friends." He pushed his seat back and watched the giant monitor as it showed them the approach.

Bud had a lopsided grin on his face. "It has to be them, doesn't it? I mean, they've probably been watching how you and I drive around in our cars and figure they're going to be safer if we don't have control right now."

Tom had to smile in spite of the unexpected turn of events. "You're probably right. I'm going to send them a signal and see." He swung his seat to the right and began entering something on a keyboard and monitor that Bud realized he had never seen in the *Challenger* before.

Not wanting to bother Tom, he held his question.

"In case you are wondering about this," Tom said pointing at the keyboard with one hand while typing a message with the other, "it is

connected to a special version of the translator. I type things in and they are transmitted to our friends.”

“Like the set-up in the Communications building. Right?”

“Yes and no. Like the portable translator, this doesn’t send out mathematical symbols. After translating what I enter it sends a video of their hand sign language with the face of the sender, me, on the top half of the screen. Anything coming back is displayed on the screen and we hear it from that speaker, not in symbols and printouts. Dad and I argued over this for a few days, but in the end he agreed with me that they are really quick on the uptake and must have already incorporated our type of video display into their own equipment. Remember that they made that video cube to send to us after just having our around for about twenty hours.”

Tom pressed the key marked XMIT and sat back. “We’ll know in a minute or less. The next generation of this will bypass entering text altogether and just let us speak with them.”

He was correct. Fifteen seconds later, the small screen above the keyboard came to life and the speaker gave a small buzz. They looked on in awe as a picture of one of their friends came on and it began moving one of its hands in a series of both simple and complex gestures.

Greeting our friends. You see we may now visually communicate with you. Have we provided proper samples for you to understand our communication.

Unable to get the huge smile off his face, Tom furiously typed a new message. As he did, he spoke it aloud for Bud’s benefit.

“Friends. We understand your communication. We are pleased that you have created the equipment for your ship. We have many things to speak about. We have created a portable copy of our language device and can use it when we are together. When will you be ready to come to our ship?”

Bud looked at Tom. “You have enough hand signs to cover all that?”

“Oh, that plus a lot more. We’ll need to have them help us, of course, but Dad noticed patterns in the different signs and came up with about a thousand new ones he believes may be close enough to be understood—”

Greetings to you Tom Swift. We will enter your sphere in a ——— time.

“I guess that means they’re using a gesture we don’t have yet,” Bud said.

“Here goes... Friends. I am joyous that you are here. Signal when you are ready to come to my sphere. I will provide details of procedures.”

In seconds, the reply came:

We will come to your sphere in ten of your short time periods. We are joyous to finally see you.

The new communicator went silent and the screen turned black.

The boys discussed whether the time reference was meant to be hours or minutes. It turned out to be minutes as exactly ten minutes later the screen came back to life.

Tom Swift. We visualize a being next to you. Is this also a Tom Swift. If not, is there a designator we must understand. Do you have a visual sample proper to designate the other being.

“Friends. Tom Swift is my full individual designator. I ask that you refer to me as Tom. The being beside me is designated Bud Barclay however I do not believe I have an appropriate sample of your communication for that. We will work to devise one when you come to our sphere or down on our planet.”

We will leave our ship soon. Advise on procedure.

Tom hurriedly typed in the steps the aliens would need to accomplish in order to enter the environment transfer pod. As he sent this off he told Bud, “Come on. Let’s get suited up, pronto, and meet them.”

They raced down the ladders to the lower deck and pulled on their suits. Just as Bud was helping Tom lock his helmet in place, they caught the first glimpse of their visitors. Five balls seemingly made from some stretchy material popped out of a port on the side of the saucer’s upper half. These quickly scooted across the fifty feet of open space.

Tom and Bud entered the transfer pod and closed the airlock behind them. The outer lock was already empty of all air, so Tom pushed a button and the outer door swung open.

The first of the balls—slightly, Tom noticed, larger than the open hatch—squeezed inside. The door was closed and the airlock flooded with the alien atmosphere. Bud pulled the ball inside once pressure had equalized while Tom closed everything and repeated the procedure four more times.

Once all five of the balls were inside, a muffled but understandable voice from inside one of the balls sounded. Tom had to laugh. It was his voice only computer generated.

“Tom. We are now here. What is the procedure?”

Tom unlocked and pulled off his helmet, as did Bud. They would be able to breathe the strange mixture for up to an hour without much effect other than the obnoxious sulphur dioxide smell.

“Can you hear and understand me?” he asked.

Receiving no answer he assumed that they could not, so he pulled out his translator and spoke into it. "The air in this room is equal to your air. You may open your suits and come out if you wish."

He had held the unit up so that the back screen faced the first of the balls to have come inside. He assumed the being in that one to be their leader.

Evidently, they could see through the opaque surface of their ball suits as his own voice came back, "*Have you adjusted for Earth breathing.*"

"No. We can breath this for a short period of time. It is set for you."

An unseen zipper or other pressure closure began separating on the upper portion of the lead ball. The alien's head slowly pushed up and out of the ball that held its shape even though it was now open. Even though he had seen several of the aliens on the video screens, Bud let out a little gasp.

It turned its head from one side to the other, the two eye stalks continuing to point the eyes directly at Tom and Bud. Then, what would have been the alien's left hand rose from the opening and moved forward in a gesture Tom and Bud both recognized.

Friend!

Tom held out his translator and spoke. "Greeting to you, friends. Welcome. I am Tom." He couldn't help but grin even though he realized that there might be some point of misunderstanding about mouth movements as the aliens appeared to have none.

He needn't have worried. Though practically invisible, the alien did indeed have an opening where a mouth might be expected. It slightly opened revealing a dark mouth with no lips or visible teeth. But, the edges of the mouth curled upward. From the slight muscle shakiness he observed in the face, Tom believed this was not a normal motion for them.

The other hand came out holding a small, flat rectangular object, covered in what appeared to be the same rubbery substance as the video unit they had sent.

The alien's hand moved over the longer surface. From an unseen speaker came Tom's voice.

"Greetings to you Tom. We are this number with one additional arriving soon. That one will bring new gravity device, nourishment and objects for your pleasure."

The device gave off a soft ping-like noise and the other four balls began to open. One by one, heads popped up and hands formed the "Friend" gesture that Tom and Bud returned each time using their translator tablets.

Almost as if on command, the balls all fell away from their visitors.

As each one stood fully upright and stepped out, the balls compacted into small, basketball-size, bundles.

Tom and Bud could finally see their visitors. Standing between about four foot eight and five feet tall, they were covered from their mid chest area down to their feet with a uniformly light blue fabric, something Tom recalled from the samples they had sent. Each one had two arms and two legs, however the proportions were different from humans. Their arms were fairly long and their bodies elongated with short, almost stocky legs underneath.

Their skin, now seen in slightly dimmed man-made light was a pleasant brown. Tom was pleased to see that, unlike science fiction movies and stories, they were all proportioned differently with one of them exceptionally slender and another quite wide. *Almost*, he thought, *plump*.

Tom turned to the first alien and said, “My *name*,” he pointed at himself, “is Tom Swift. Short form, Tom. He is Bud. Do you have names?”

This caused a brief conference filled with silence and many, many hand gestures. Tom immediately realized that the slow and deliberate gestures he had been seeing were the alien version of speaking very slowly to a young child or a foreigner.

“*You are Tom*,” the leader said pointing at Tom. “*You are Bud. We do not have Tom or Bud designators. We have appendage movement designators. Can you provide translation?*”

“We can try.”

The alien nodded, or at least tilted his head forward. “My designator is—” and he made a hand sign. Tom’s tablet worked on the gesture and soon read out, “Row.”

Tom pressed the “learn” button and that gesture was added to the dictionary. The process was repeated for the other four and Tom found that he was faced with Row, Ral, Ryd, Rux and Rol. He also learned that the sixth member who would be joining them shortly was Ruv.

“Hope they don’t run out of R letter combinations,” Bud whispered.

Ruv arrived towing a cube-shaped container behind his ball. Leaving it outside, his ball entered the airlock and he was soon standing with his fellow beings. In one hand was the new gravity stone. The other hand held the familiar activation bracket. Ruv set them up in one corner of the pod.

An hour later and with the large, rubbery substance-covered container lashed to the “porch” of the hangar, Tom sent Bud up to the control room. “Let’s get back home and get our friends into the *GlobeTrotter*.”

He opted to remain with their visitors, and they spent the next hour teaching each other's translation devices more words and concepts. By the time they landed at Fearing Island—it had been decided that it would be a more secure and private place than Enterprises—Tom had increased his vocabulary by about twenty percent, and he hoped that his work with Row had helped them.

The gravity that had been introduced to the transport pod remained constant even on touchdown. Tom had explained as best he could about what was going to occur next. He had suggested that the aliens all sit or lay on the floor while the pod was being transferred to the *GlobeTrotter*.

The one he believed to be Ruy—both he and Bud had noticed that they each had distinct facial features—made what looked like a dismissive gesture with his right arm and reached out for the gravity stone. His fingers danced over the surface and a series of internal lights pulsed. Ruy returned to the conversation he was having with either Rol or Rux.

Row touched his shoulder gently and pointed at Tom's translator. Tom raised it in time for Row to sign, "*The gravity device has been adjusted for movement conditions.*"

Tom could only smile and nod. Of course it would be something easy like that. Leave it to the mysterious device to have a 'bumpy road' setting!

The transfer went well, taking place at around midnight that evening.

Tom explained that he and Bud required sleep for the following seven hours but there would be someone to assist them if needed during that period.

Row's hand moved on his translator. "*We require regenerative period. Ours will be six hours. We will take nourishment after that and await your return.*"

The following morning, one of the ground support people handed Tom a copy of the *Shopton Bulletin* just before the inventor joined Bud in the cockpit of the *GlobeTrotter*. "Your dad had this flown over in last night's supply jet. He said you'd want to read the main article."

Tom looked at the front page. Along with a stock photo of aliens similar to those in the movie *Close Encounters of The Third Kind*, was the headline:

**THERE IS NO CAUSE FOR PANIC.
ALIEN TOURISTS ARRIVING
BUT JUST HERE FOR SIGHTSEEING!**

The article took up the entire front page and half of page two. Tom

had to smile as he read what the editor had printed. It was, for the most part, an honest account of the previous couple years of communicating with the aliens and a healthy serving of, “You wouldn’t worry if it were just a family from France, so don’t worry about this!” words meant to calm.

It was factual, if a bit boring, and stressed the need to avoid sensationalizing the event. Plus, in his Editorial, Dan chided any news organization or reporter that might want to stir up something that wasn’t there. He stated that any such reporter or broadcaster who twisted the known facts into gloom, doom or hatred, was not worthy of the title, “newsperson,” and that they should be boycotted for the rest of their careers.

When Tom entered the cockpit, he handed Bud the paper. Once he had read the pertinent items, the flyer shook his head. “Just when I was really ready to work up a good head of ‘hate Dan’ steam he goes and does a great thing like this!”

They agreed that it was probably a good thing that this article, and the press release that was going out that mid-morning from George Dilling’s office, gave the public the fake itinerary and discussed that people would be seeing a Swift company jet flying around in various locations.

After a check to ensure that their guests were comfortable and explaining what they would be doing for the next three days, Tom raised the airship from the tarmac and they headed northwest.

Wearing a small air cylinder and a mask, Tom spent much of his non-piloting time back with their visitors. He practiced his own hand gestures and even received praise from the recalcitrant Ruy for his attempts. Once his guests understood that he could only imply the fourth long digit by overlaying his other index finger, they soon were all carrying on simple conversations.

Many times along the route the first day Tom or Bud brought the craft down to the ground and the other hopped out to bring in a sample of a flower or a rock or, in one distasteful instance, a requested dried cow pat, for the aliens to examine.

One of them—Tom now knew it was Ryd—acted as the official scribe or secretary for the group, making copious notes on what appeared to be a pad made entirely of vapor. He would pick up what looked like a small cube of constrained gases and it would blossom out to form the pad. He wrote with one of his fingers for hours on end and then simply set the ‘pad’ down where it reverted to the small, gaseous cube.

Although impressed by sights such as the Great Lakes and mile after mile of corn and wheat fields, the aliens were in awe of the majestic sights of the Canadian Rockies. Row explained that they had

nothing remotely similar on their world or that of their masters.

Tom had been following his father's suggested route when Bud asked if they could take a swing over his old home town, San Francisco. It was the first large city they had flown over and the aliens seemed fascinated by all of the tall buildings with their various shapes.

"We have structures on our home planet, however they are all similarly shaped."

Tom tried to explain about design and individualism, but felt he was unable to communicate the reasons, so he dropped it.

Although the aliens were visibly enthusiastic about everything Tom and Bud showed them, including having the opportunity to feel, smell and taste snow—something they admitted was a state of water they had never witnessed—it was obvious that they were anxious to get to the Yucatan to see where their ancestors had meet their fate.

The Mexican Army had arranged to accompany the *GlobeTrotter* down the coast and over to the peninsula. There were no incidents, but there was an almost steady flow of apologies masquerading as situational and positional updates coming from the Mexican government.

The only incident, if it could be called that, came when the aliens, to a man—and Tom had found out that they were all male in the Mars station but there were females back on their home planet—insisted on having the aircraft land so that they could step outside and walk on what they believed to be almost sacred soil.

His fears for their health and safety were addressed by Row who told him, *"Just as you can breathe our atmosphere for short periods of time without illness, so can we breathe yours. Did our ancestors perish immediately or did they survive for many Earth days? We believe days."*

Tom acquiesced, although he did remind them of Earth's much higher gravity. Row performed his head bow but insisted that it was their only true wish.

On reaching the site of the original crash landing, he joined them in their airlock. He signed, "Prepared?"

Row tilted his head forward, and Tom pressed the Open button. The pressure inside had been slightly lower than outside so they all felt the warm, humid and richly aromatic air that hissed in. The effect was immediate and quite noticeable.

Though they had no visible noses it was obvious to Tom that they could smell the jungle and were fascinated by it.

They kept close to the ship after Tom described the violent nature of

some of the animals in the area.

What worried Tom more than anything was how they suddenly bent and seemed to compact a bit as they left the influence of the gravity stone. Their steps became labored and their arms hung at their sides. Seeing this, Tom now firmly believed that it was Earth's crushing gravity that had been the primary cause of the deaths of their ancestors.

Two hours later, Ral and Rol both began showing signs that the lower oxygen level in the air was becoming an issue, so the group returned to the *GlobeTrotter*. While their guests rested and ate, Tom went to the cockpit.

"Got some news for you, skipper," Bud told him.

"And..."

"And, although there are reports of some small scattered protests in places like Paris, Berkeley, New York City... and New Zealand of all places, most of the world seems to either be taking things in stride or they've discounted the news as some sort of hoax."

"It isn't as if the idea that we have been in contact with our friends is new, you know," Tom replied. "The world found out about that more than a year ago. There was a little furor then but it went away pretty fast. I'd say that the human tendency to forgive, forget and ignore things that aren't slapping them in the face all the time is probably what's keeping any real problems from cropping up. By the time anyone gets up to full speed protesting, we will have announced that our friends have already departed."

"Just that easy?"

"As they say in the police shows, case closed!"

And, they were correct.

After spending another three hours on the ground and in the jungle, the aliens were ready to depart. They brought with them many samples of plants, a few insects and the soil for study. Tom had prevented them from trying to bring any animals with them.

The remainder of the trip went smoothly, although Tom had to make one detour so that they could sample more snow, this time from on top of The Rockies.

On the fourth day Tom and Bud transferred the pod from the back of the *GlobeTrotter* to the *Challenger* and they all headed back to the parking point of the alien's saucer.

Before departing Tom's ship, Row presented him with several items of various shapes, most covered with the rubbery substance. Tom thanked him after finding out that they included a small faster-than-light radio like the one used in both their ship and Mars station to call

Tom and their masters. Another one was a duplicate of the note pad cube.

Tom had wanted to ask before, and it was now or never, so he did. “What is the nature of the substance covering all of these and the things you have provided me?”

Row appeared to be thinking of how to answer it. Finally, he manipulated his translator. *“Do you recall telling us of the origin of that flat animal product object you retrieved for us over the central portion of your country?”* Tom signed, ‘Yes.’ *“You informed us that it would be better for us to not know where it originated. This is such a case.”*

The object Row had indicated was the radio began glowing. Row reached over and pressed the single, pulsating blue light. A familiar voice seemed to come from all around them.

“Tom Swift. This is Garl. We see that the period of exploration of your planet is concluded. If our subjects report that they were unable to accomplish their mission, they will be recalled. They will not return. If they report they were able to complete their mission, they will be allowed to remain. If that is the case, we anticipate the day when you can allow the Masters to explore your planet. My communication is complete.”

Tom looked at Row who looked right back. The slit of a mouth opened slightly and the alien did his version of a smile.

He looked down at his own hand and so did Tom. Row signed, “Friend. Joyous. Mission success. Coming back.”

* * * * *

“Now that you have become an accomplished tour guide, Thomas, will you be changing your job? Perhaps working at one of those movie studio theme parks?”

Tom laughed. “Hardly, Bash. One intergalactic group has been enough to put me off that for a long time to come.”

She smiled at him. “Well, then. Speaking of ‘time to come,’ what do you plan to do next? I hope that you will be keeping your feet firmly on the ground and very near to my feet. You did promise to spend many days with me and not being at work all hours.” She looked him in the eye with a combination of hope and trepidation.

He smiled down at her and kissed her on the nose.

Little could Tom know that within months his life would change forever and his feet would be flung through space on a wild and dangerous detective adventure as he would try to solve the mystery of the *Paradox Planet*.

Putting an arm around her shoulders, he took a deep breath and

leaned his mouth close to her left ear. “And, speaking of keeping my feet next to yours, Bash, I’ve got something to ask you...”

<•>—< End of Book >—<•>

