

TOM SWIFT AND THE EXTRASOLAR PLANET

Tom Swift Jr. was no stranger to the depths of space! The young scientist's thirst for knowledge had taken him from his home in Shopton, New York to the cratered surface of the Moon and beyond. After developing his mighty rocket ship Tom built the Outpost in Space and used it to supply the Earth with solar batteries – a cheap, renewable energy source that changed the world's economy. When a group of aliens placed an asteroid into orbit around Earth Tom used his keen intellect to give it a breathable atmosphere. Tom even ventured to the outskirts of the Solar System in his mighty *Cosmotron Express*.

But none of these adventures prepared Tom for his greatest assignment yet! His inventiveness is put to the test when Swift Enterprises receives a desperate plea for help from an alien race on the verge of disaster. The survival of an entire civilization rests on Tom's ability to reach a planet hundreds of light-years from Earth and retrieve a lost artifact. To do this Tom must find a way to travel much faster than light – while battling an enemy that is bent on stopping him at all costs.

The challenge becomes greater when Tom discovers that the planet he must visit does not orbit a star. Instead, the world is adrift in deep space, torn by unceasing storms, and lit by a strange phenomenon never before seen in nature. It will take all of Tom's ingenuity to overcome the odds and save his space friends from destruction. You won't want to miss the stunning conclusion of his book as Tom Swift makes the greatest discovery of his career!



On Tom's command, the Challenger left its orbit around Thanatos

THE NEW TOM SWIFT JR. ADVENTURES

TOM SWIFT
AND THE
EXTRASOLAR PLANET

BY VICTOR APPLETON II
ILLUSTRATED BY JONATHAN COOPER

GROSSET AND DUNLAP
A NATIONAL GENERAL COMPANY

PUBLISHERS NEW YORK

COPYRIGHT © 1971 BY GROSSET AND DUNLAP, INC.
ALL RIGHTS RESERVED
PUBLISHED SIMULTANEOUSLY IN CANADA
LIBRARY OF CONGRESS CATALOG CARD NUMBER: 74-130339
ISBN: 0-448-09134-x

PUBLISHED IN THE UNITED STATES OF AMERICA

CONTENTS

Chapter I: Fire in the Sky.....	9
Chapter II: SOS from Space!.....	21
Chapter III: Mission Impossible.....	29
Chapter IV: Rattlesnake Island.....	37
Chapter V: A Matter of Time.....	47
Chapter VI: The Shadow of Death.....	55
Chapter VII: The Fate of the World.....	63
Chapter VIII: Mission to Mars.....	71
Chapter IX: Countdown to Launch.....	81
Chapter X: Across the Depths of Space.....	89
Chapter XI: A World Made of Shadows.....	97
Chapter XII: Lost in the Darkness.....	109
Chapter XIII: The City Beneath the Sea.....	119
Chapter XIV: Home of the Exmen.....	131
Chapter XV: The Living Dead.....	141
Chapter XVI: Space Invaders.....	153
Chapter XVII: Homeward Bound.....	161
Chapter XVIII: Rendezvous in Space.....	171
Chapter XIX: Defeated.....	181
Chapter XX: A Meeting of Friends.....	189
Dinner at Tom's.....	199

TOM SWIFT AND THE
EXTRASOLAR PLANET

CHAPTER I: FIRE IN THE SKY

“SO what's all this about, Tom? I leave town for a few days and you've already come up with another invention!”

The lanky, eighteen-year-old Tom Swift Jr. laughed at his friend Bud Barclay. His teenage chum had been visiting his parents in San Francisco for the past three weeks, and had returned to find Tom in his private laboratory piling equipment onto a large cart.

“I'll tell you all about it on the way out to the testing grounds, fly-boy. Just give me a hand with some of this equipment, will you?”

Bud nodded and was soon helping his friend gather pieces of scientific equipment from all over the room. Tom's ultramodern laboratory was the center of activity at Swift Enterprises, the company that Tom's father, Tom Swift Sr., had founded decades ago. Over the years both father and son had created many inventions in their laboratories that had changed the world.

Tom scanned the room with his keen blue eyes. “Let's see. I've got the boots, the gloves, the batteries – oh, yes. Can you grab that equipment off my workbench? I think I'm going to need all of it.”

“Sure thing, Tom.”

Bud walked over to Tom's workbench and looked it over. He remembered the many long hours his friend had spent hunched over this desk, drawing up the plans for one invention after the next. Tom's most recent invention had been the Transmittaton – a device that could instantly beam matter from one location to another.

As Bud started transferring equipment to the cart he lifted a

white helmet off the workbench and looked at it quizzically. “Is this some sort of new spacesuit for intrepid astronauts?”

Tom laughed. “Not exactly, Bud – although that would certainly come in handy if we had to battle any more galaxy ghosts!”

The young scientist was referring to their most recent adventure. A few months ago an armada of ghosts from the Andromeda Galaxy had invaded the solar system, looking for a new planet. Only Tom's quick thinking had saved the Earth from a terrible disaster.

Tom gave the laboratory one final look around, and then nodded with satisfaction. “I think that's about it!” He then motioned to Bud, and the two pushed the cart out the door, down the hall, and out of the building.

“I still say it looks an awful lot like a suit, Tom. You've got a helmet, gloves, boots – why, that's everything you need!”

“You're close, Bud! This is a suit, of sorts, but it's not designed to be a spacesuit, although it could work in space.”

“So it's a new deep-sea suit, then?”

Tom shook his head. “No, Bud, I'm afraid it's not going to replace our Fat Man suits. Those are still the last word when it comes to walking on the ocean floor.”

The two of them continued to push the large cart down the sidewalk and past the many buildings that made up the complex of Swift Enterprise. The four-mile-square campus was filled with white, ultramodern buildings that were equipped for nearly every scientific purpose imaginable. Tom Swift's father had built the world's most advanced scientific facilities and turned his company into a world leader in research and development.

“So what is it, Tom?”

“It was so obvious, Bud – this invention was staring me in the face all this time, but I never thought of it! I should have built this years ago. Do you remember the repelatron?”

Bud laughed. “How could I forget it? You've used it in almost everything you've created! It's what brought us to the moon, remember?”

Tom nodded. "It's amazingly useful, and yet it's so simple. All it does is generate a repulsive force against whatever material it is tuned to repulse. When we use it on the ocean floor we can tune it to repel the water and create underwater cities. In rocket ships it can repel the ground and get us into space, and so forth."

"Right! It's proven to be a fantastic invention. Millions of people are now driving your repelatron-powered atomicars."

"Now for that you can thank Ned Newton! Under his watch the Swift Construction Company has done an amazing job at selling the inventions that were created right here on these grounds. Did you get a chance to see him while you were out in California?"

"I sure did, Tom. He's doing better than ever! I think he misses the old days, though, back when he and your father went all over the world having adventures."

Tom smiled. "I'm sure he does, Bud. I wish I could have gone on some of those myself, like when they went to South America to find Jake Poddington and that lost race of giants. That's when Dad first met Koku."

"I wish I could have met him, Tom. I've never seen a real giant, and from what I've heard he was a great guy. Oh – that reminds me! Why did Ned move the construction company out to California, anyway? They've been located just down the road ever since the company was founded!"

Tom shrugged. "Everyone's moving out to California these days. They've even tried to get Dad to move Swift Enterprises, but he won't budge. Maybe some future Swift will move Enterprises out of upstate New York, but as long as Dad and I are alive we're going to keep it right here."

"California is not all bad, Tom. They do have some nice beaches! Not that you would ever actually take time off and go to a beach, or anything. But if you did they'd be there!"

Tom smiled. "I'm not much of a beachgoer, Bud. I'm happiest in my laboratory, dreaming up new ideas and overcoming new challenges. But to get back to your question – while you were gone, I was tinkering in my lab and thought, why not put a

repelatron in a suit? You could power it with a solar battery and have enough energy to stay aloft for days! The great limitation to jetpack technology has always been the fuel requirements, but we solved that problem a long time ago.”

Bud's eyes glowed with excitement. “That's a terrific idea, Tom! It sounds like something I've always wanted. What are you calling it, the repela-suit?”

Tom slapped his friend on the back. “I was leaving the naming to you, pal – I knew you'd come up with something good! The repela-suit it is.”

“Thanks, Tom! Say – are you going to let me try it out today?”

Tom shook his head. “I'd love to, Bud, but I'm not quite satisfied with it yet. Besides, I haven't had a chance to show you the ropes! The control system is a bit tricky, and there are a few other things that you probably haven't seen before.”

“Like the helmet,” Bud said.

“Exactly. It's amazing what you can do with miniaturized electronics! Not only does it have a communications system, but the helmet also includes a full heads-up display – it can tell you how much energy you have left, it can magnify objects that are great distances away, and it provides other flight information as well. I tried to think of everything.”

“I'm sure you did!” Bud said. “That is your specialty. It might take you a couple tries and a few near-disasters, but you always nail it in the end!”

By now the two of them had pushed the cart onto one of the many airstrips that crisscrossed the company's grounds. Tom stopped the cart and began combing through its equipment. As he worked, Bud noticed that a crowd of people was beginning to gather.

“Hey Tom, did you announce this test to anyone?”

“Oh, I forget,” Tom said absently. “Maybe a few people. Why?”

“Because it looks like everyone and his brother is coming out to see you fly! I bet all of the buildings around us are being

emptied.”

Tom looked up, startled. “Wow! That's odd. It's just a simple test, Bud. Why it would attract such interest? It's not like they've never seen a repelatron before!”

Bud smiled. “I think they're gathering *because* they've seen you test a repelatron before! Or they've at least heard stories about it. Don't you remember what happened the very first time you tested that invention? You installed it on a spacecraft out at Fearing Island, and decided to put it through its paces.”

Tom shook his head. “Hmmm. That would have been the *Challenger*, right?” The *Challenger* was Tom's repelatron-powered rocket ship that had taken him to the moon.

Bud nodded. “That's right, Tom. The first time you lifted off, you put the repelatrons on too wide a spread – ”

Tom started laughing. “ – and flattened every building in the area! Of course! I remember now. No wonder nobody wants to be indoors when I test this! I really don't think there's any reason for concern, though. Repelatrons are a proven technology, and even if something did go wrong this rig can't provide very much lifting force. I'd be surprised if it could handle 300 pounds, which is hardly enough to flatten the Wakefield Damon Geophysics Building over there.”

“All the same, Tom, I think they're siding with caution this time. Besides, one of the perks of working here is getting to watch you test your latest creations! Think of all the things they've seen.”

“To say nothing of all the disasters! I just hope this test doesn't become headline news on the *Shopton Evening Bulletin*.”

Tom grabbed the main body of the suit and began putting it on. “Hey, can you lend me a hand with this? It's a bit tricky to put on alone.” With Bud's help the young scientist put on the suit, the white boots, and the gloves. Bud then strapped a large steel box onto Tom's back. As he secured it in place Tom explained its various components.

“That piece is the repelatron unit, Bud. Inside is a series of powerful solar batteries. You can see the repelatron antennas –

they're miniaturized, of course, and I've installed a few backup units for redundancy.”

“I'm guessing that these steel extensions that are jutting out from the back of the unit are the controls?”

“That's right! I'll be resting my arms on them while in flight. They're adjustable so that people of different heights and weights can wear the suit. The unit is controlled by the joysticks at the end of each arm, and there are a series of buttons that allow the wearer to access higher functions.”

Bud then lifted the helmet off the cart, placed it on Tom's head, and secured it. The helmet's golden faceplate obscured his view of Tom, but it would also provide protection against deadly radiation if it was ever used in space.

Tom lifted the faceplate. “I think we're about ready!” he told Bud. “I've brought along a radio on the cart. You can use it to keep in touch with me during the demonstration. There should also be an atomicar around here somewhere that you can use if you have to come and get me.”

“Sounds good, Tom! Hey, where's Chow? I'm surprised he's not here! And what about your father?”

Tom smiled. “Dad and Chow have been at the Citadel for the past few weeks. Dad's been wrapping up work on his nuclear fusion experiments, and Chow couldn't resist the urge to go back home.” The Citadel was Swift Enterprise's atomic power plant in the southwest. It was equipped with a wide range of equipment that was designed for nuclear power research.

Bud nodded. “You'll have to fill me in on how that's going! Well – good luck, genius boy! May the wind be at your back.”

Tom smiled and closed the faceplate. Those outside could only see the reflective gold coating, but inside Tom could see that the display was lit up with glowing green points of data – everything he needed to soar into the air.

“Looks like all systems are go!” Tom said aloud.

“I read you loud and clear,” Bud replied over the radio.

Tom contacted the air traffic control tower on the grounds. “This is Tom Swift, requesting clearance for takeoff.”

The tower radioed back immediately. “You've got it, Tom. Good luck!”

Tom gripped the right control stick with his hand and pressed it forward. Immediately he lifted off the ground and soared into the air! Even from the sky he could see astonishment on the faces of the employees that had gathered to watch the demonstration. Tom continued to fly vertically until the display told him he was 150 feet off the ground.

Now let's put this thing through its paces, Tom thought. He began soaring over the complex of Swift Enterprise, flying high over the buildings. The sight was amazing.

“I can see everything from up here!” Tom said aloud. “There's the communications center, and the observatory, and the power plant. Over there is the building that houses my laboratory, and there is the parking lot. And look at all those people!”

As usual, Tom's demonstration had not gone unnoticed. Employees walking down the sidewalk stopped in their tracks and stared at the figure that was flying over their heads. Tom smiled as he saw their startled reactions.

“This is going even better than I had hoped! The controls are as smooth as silk, and the solar battery is providing plenty of energy. Let's open it up a little bit and see what kind of speed we can get!” Tom poured on the power and watched his speed indicator rise to 50, then 100, then 150 miles per hour. He had soon left the compound far behind him.

Swift Enterprises was located on the outskirts of Shopton, New York – a small town in the northern part of the state. As far as the eye could see there was nothing but trees, hills, and wilderness. Tom had chosen to test his invention on a crisp autumn afternoon, and the trees were already turning from green to beautiful shades of yellow, orange, and red. The sight was breathtaking. *I should have brought my camera*, he thought.

Off in the distance Tom could see Lake Carlopa. *I'd better not go that way*, he thought. *If something goes wrong and I have to bail I don't want to do it over a lake!* He turned the controls and lifted himself to 1000 feet.

A voice came in over the communication system. "How's it going?" Bud asked.

"Like a dream, pal!" Tom replied.

"I'm tracking you on radar, Tom. If you get into any trouble we'll be there in a minute to help. I've got the atomicar warmed up and ready to go."

"Roger that – and thanks!"

As Tom raced through the sky he noticed that his display had registered the presence of another object in his vicinity. Tom reoriented the repela-suit so that he could get a good look at it. Once he realized what it was he smiled. "Will you look at that!"

About a mile away, drifting lazily in the sky, was a large hot-air balloon. The blue-and-white balloon was a few thousand feet higher than Tom. *It looks like I'm not the only one enjoying the afternoon!* he thought.

Using his helmet's vision system, he magnified the object so he could get a better look at it. The insignia on the balloon's gondola identified it as belonging to a popular ballooning club in the area. Tom was too far below the balloon to see clearly, but there appeared to be only one person in the craft.

As he was watching, he saw a brief flash of light in the basket. Tom then heard an explosion – and saw flames!

"Good night – that balloon is on fire!" Tom said, gasping.

"What's that?" Bud asked. "Is there trouble?"

"You bet there is! How soon can you get here?" Tom asked.

"A few minutes, tops," Bud replied.

"That's not soon enough – whoever's in there isn't going to last that long. The whole balloon is going to be on fire in just a few seconds! I'm going in, Bud!"

Tom gunned the repela-suit and shot toward the flaming balloon at high speed. The display briefly clocked him at 147 miles per hour. *I've got to get there in time!* he thought. As he watched he saw flames climb up the fabric of the balloon and light the envelope on fire.

"I'm on my way," Bud said over his suit radio. "Hang in there, Tom!"

Tom reached the stricken balloon less than sixty seconds after the explosion. By then the flames had nearly consumed the envelope and caused a rapid loss of hot air. As he grabbed the side of the gondola the balloon began falling out of the sky. When Tom glanced inside he instantly realized that a spark or malfunction in the tubing had lit the propane gas and caused the explosion.

Inside the gondola was the balloonist, who had been knocked unconscious by the blast. What Tom wasn't expecting was the size of the man. He was at least six feet six inches tall, and was built like a boxer.

“Wow! Bud, he's got to weigh at least 250 pounds – probably a good deal more than that. My suit wasn't designed to carry that kind of weight! But I've got to try – I've got to!”

“I'll be there soon, Tom – just hold on!” Bud called back. Tom could hear the whine of the atomicar's repelatron over the suit radio, and had no doubt that his friend was pushing the car to its limit.

Tom removed a few fire-extinguisher pellets from his suit pocket and used them to douse the flames, but it was too late to save the balloon. It continued plummeting toward the ground at an alarming rate.

If I just grab him I could easily injure him further, but I don't have time to do anything else, Tom thought grimly. *The ground is approaching much too quickly!*

Since there was nothing else to do, Tom reached in, put his arms around the unconscious man, and gunned the suit's repelatron lifters. He managed to get clear of the balloon, but quickly noticed that the repela-suit was having trouble. His helmet's display warned him that the lifters were overheating and on the verge of shutting down.

The repelatron's aren't strong enough to lift all this weight! Tom thought. He struggled to maintain his hold on the unconscious individual as his suit began to fail. The two of them were dropping rapidly!

As they fell Tom had an idea. He backed off the constant

stream of repelatron thrust and began making short but intense bursts, hoping to slow their descent. *The suit can't handle the weight, but maybe I can control our fall*, he thought. By re-lining the equipment and then giving it a brief chance to cool he was hoping to keep it from burning out and sending both of them to their deaths.

With sweat pouring off his brow, Tom watched the suit's indicators and desperately held on to the injured man. Hundreds of feet below him he saw the balloon crash into the trees. Just north of the wreckage he spotted a clearing that was not far from a major highway, and decided to set down there.

Over the next few seconds Tom gradually started to see a reduction in their rate of descent. He breathed a sigh of relief when he realized that they were going to make it. In another minute they had reached the ground.

Tom let go of the man and gently placed him on the grass, and then radioed Bud. "We've touched down, Bud, safe and sound. Wow! I've got to build more lifting power into this suit. We had the energy but not the horsepower."

"Adding a parachute might be good too! I'm almost there, Tom, and I've sent for an ambulance. Medical attention should be there shortly."

By the time Bud reached the clearing Tom had removed his repela-suit and attended to downed balloonist, who was just beginning to regain consciousness. Bud circled the field once and then set the atomocar down on the grass about twenty feet from Tom. He quickly leaped out of the car and raced over.

"What happened?" the man said weakly.

Tom shook his head. "We were hoping you could tell us. I think something went wrong with your propane tank."

"That's right," he gasped. It was difficult for the man to talk. "Something went wrong with the tubing and lit the gas. There was an explosion. That's all I remember."

The man struggled to sit up, but Tom restrained him. "Just lie there for a minute – help should be here soon." They could already hear the wail of the ambulances in the distance.

“But how did I get here from the balloon?” the man asked. “The fall should have killed me!”

Tom smiled. “I happened to be in the area and saw that you were in trouble. What did you say your name was?”

“Frank – Frank Overton.”

“You’ll be just fine, Frank.” The man nodded, closed his eyes, and laid back down on the grass. A team of emergency rescue personnel raced into the clearing, carrying a stretcher and other equipment.

Tom and Bud stood nearby and watched as the balloonist was examined. Only after the medical team had pronounced him to be in stable condition did Tom and Bud bid him goodbye. After loading the repela-suit into the trunk they both got into the car, with Bud taking the driver's seat. Within moments Bud had piloted the atomic-powered car out of the clearing and into the air.

“I’m glad Frank is going to be ok,” Tom said at last. “The whole experience did reveal a few flaws in the suit. I’m going to have to make a few changes to it before I try it again.”

“I think Frank would call the suit a big success, though!” Bud replied. “Oh – and I think you failed at your attempt to keep this out of the press. I’m sure this is going to be front-page news on the *Bulletin!* I can see the headline now: Tom Swift and his Flying Suit, or, A Daring Rescue in the Sky.”

The two friends were suddenly interrupted by a message that came in over the car's speakers, interrupting the radio. “Tom, Bud, you’ve got to get back to Swift Enterprises immediately!”

“Tom Swift – always in touch no matter where he goes,” Bud quipped.

“We read you loud and clear,” Tom said aloud. “What seems to be the trouble?”

“We’re receiving an urgent message for you, Tom – from outer space!”

CHAPTER II: SOS FROM SPACE!

BUD floored the accelerator and the atomcar sped forward. “We’ll be there in less than five minutes – much less, if I have anything to say about it,” he said grimly.

As Tom watched the speed of the atomcar climb to over 200 mph he spoke up. “What is the nature of the emergency? Has something gone wrong with the Outpost in Space?” Tom was referring to the space station that he had built in low earth orbit to manufacture his solar batteries.

“It’s nothing like that, Tom. It’s your space friends. They’re sending you an urgent SOS!”

Some time previous, a meteor engraved with strange symbols had landed inside Swift Enterprise grounds. Tom and his father had managed to decode the symbols and discovered that they were written by an alien race that apparently lived on Mars. The Swifts were able to find a way to send a message back to their new space friends, and over time the two parties had formed a friendship. At one point the aliens had even steered an asteroid into Earth orbit, which the Swifts had colonized and named Nestria. Occasionally the space friends would request their assistance, although it had been a long time since they had been in dire need.

“Can you relay the message?” Tom asked.

“I’m afraid not. The computer can’t translate it.”

Tom whistled. “It’s been a long time since we’ve gotten a message like that. We’ll be there pronto!”

The messages from the space friends were always encoded in a mathematical language that had proven very difficult to

translate. Over time the Swifts had learned the meaning of many space symbols and created an electronic brain that could automatically translate the messages. In the event that a new symbol was transmitted, however, the translator would fail and the Swifts would have to decode the message manually.

“How far you do think we are from the compound?” Tom asked.

Bud eyed the odometer, which he had maxed out at 225 mph. “We’ll be there in less than two minutes. You really covered some distance in that repela-suit of yours!”

The young inventor nodded, and then stared off into the distance. His friend could tell that he was already lost in thought. “You know, it’s been a while since we’ve had an urgent request from them. The last time we got an SOS like this was when a plague was decimating their food supply. Do you remember that episode?”

Bud laughed. “How could I possibly forget our first trip to the moon, Tom? Boy, that was an adventure! The Brungarians almost did us in that time. If it hadn’t been for your repelatrons their missiles would have spread our remains all over the lunar surface!”

“And what have our space friends asked us to do since then?”

Bud thought for a moment. “Hmmm. Well, the most recent favor they’ve asked of us was us to go under the ocean floor and retrieve a cache of information. You had to build your subocean geotron in order to reach it.”

“Do you remember what that information was for?”

“I don’t think they were ever very clear on its purpose. Didn’t they say it contained some kind of gas-magnetic-field data? I think they wanted it so they could learn how to survive on Earth. But what are you getting at?”

“Here’s the thing, Bud. We know that at one time they actually lived on this planet, right?”

Bud nodded. “I guess you could say that. We did see remains of settlements on Easter Island, and in the city of gold that you found at the bottom of the ocean. Come to think of it, I think we

found some traces of them in that village in Mexico, too – the one where you first field-tested the electronic retroscope.”

“Right. So we know that they used to have a range of settlements right here on Earth. But now, centuries later, they're trying to learn how to survive in this atmosphere. How can it be possible, Bud, that they no longer have the ability to do a simple thing like set foot on this world, and yet they can move an entire satellite into orbit?”

By this time the sprawling Swift Enterprise complex had appeared on the horizon. Bud slowed the atomicar down and steered it toward the communications center. “I'll set down inside the compound right beside the radar center, Tom – this car is registered with the plant's security system and its presence shouldn't alert your robotic security sentries.”

Tom smiled. “I appreciate it, Bud. I'd rather not be decimated by my own inventions!”

“I always hate it when that happens,” Bud agreed.

After making sure that no innocent bystanders were in the way Bud settled the car down into a parking spot. “But, getting back to your question, Tom, I just really don't know. Now that you put it that way it does seem strange. Maybe something happened to them since they lived here.”

“Exactly, Bud. Why did they leave? What disaster has brought their once-mighty civilization to its knees – if that is what happened?”

Bud shook his head. “I don't know, Tom, but there is one way to find out!”

The two of them raced inside the communications center, where they met the lady who had contacted them over the radio. “I'm sorry I couldn't translate the message for you, Tom,” she began. Tom recognized her as Kathy Foster, the compound's chief radio officer.

“It's no problem, Kathy. Say, can you tell Arv to get the repela-suit out of the trunk of our car? It's the red atomicar that's parked in the lot outside. There are a few changes I'd like him to make to the production units – tell him I'll meet with him

tomorrow morning to discuss them.” Arv Hanson was a dedicated Swift Enterprise employee who had been with the firm as long as Tom could remember. He was Tom's chief model-maker and often took Tom's engineering drawings and used them to produce working models of his inventions.

“Absolutely, Tom. I'll take care of it right away!”

As Kathy walked off to get in touch with Arv the young inventor looked over the message from space. Without saying anything he took a stack of printouts from the electronic brain, walked over to a nearby desk, and sat down. He removed a pencil from his pocket and began making some initial sketches on the printouts. Bud sat in silence and watched his friend, but as the minutes ticked by Bud began to realize that Tom was not making progress.

After a half an hour had passed Tom shoved the pencil aside and sighed. “This is a mess, Bud.”

“Do you think the message got garbled?” Bud asked.

Tom shook his head. “No, I don't think so. I understand some of these symbols, but a lot of them are entirely new, and they're arranged in an unusual manner. It's definitely an urgent message, but I can't make any sense out of it.”

“Why not ask for clarification?”

Tom smiled wryly. “I'll give that a shot, Bud, but do you know what usually happens when we ask them for clarification?”

Bud nodded. “Yeah, I know. We get told there isn't any other way to phrase it.”

“And they're probably right, too. It's incredibly difficult to transmit non-mathematical ideas using only mathematical symbols. In a way it's amazing we've been able to communicate as well as we have.”

“You really should teach them English, Tom!”

Tom laughed. “I tried that with Exman, remember?” Tom was referring to a being made entirely of energy that was sent to Earth by the space friends. The being had remained with Tom for a while and learned a great deal about their planet before he was sent back into space.

Bud stood up and stretched. "True, true. Say, I'll go send that message asking for clarification. If they reply with anything useful I'll let you know."

Tom nodded. "In the meantime, I'll get in touch with my dad. If anyone can help me decode these symbols it would be him."

As Bud walked off to send the message to their space friends Tom reached over on the desk and activated the videophone. Swift Enterprises had their own private TV network that they used to communicate with the many branches of the company. This time Tom was attempting to get in touch with the Citadel.

A few minutes later Tom's father appeared on the videophone. Like his son, Tom Sr. had blue eyes and blond hair, although age was beginning to add tinges of gray. Both father and son shared a passion for science. "Tom!" his father said, as he took a seat in front of the videophone. "It's good to see you, Son. I'm glad you called."

"It's good to see you too, Dad. How is your fusion project going?"

Tom Sr. smiled. "Outstanding! Even better than I had hoped. The production reactor is online and exceeding our expectations. I've received word that our colony on the Moon has been able to start mining commercial amounts of helium 3, and Ned Newton has already started receiving orders!"

"That's terrific! I think you've opened a new chapter in history. These reactors will provide clean, safe, dependable energy for millions of people!"

Tom Sr. nodded. "I'm sure they will, but I suspect you didn't call me to congratulate me on the success of my project! What's on your mind?"

Tom Jr. tapped a few keys on the videophone. "I'm sending over a message that we just received from our space friends. I think they want our help, but I'm having trouble trying to decode the message. I was wondering if you could help me work through it."

A few moments later Tom saw his father walk out of sight and return with a stack of paper. As he thumbed through them he

began nodding his head. “I see what you mean! This does look like a challenge. Let's work together on this and see what we can find out.”

Bud returned a few minutes later. “You're out of luck, skipper. The space friends said they've told us all they can. It's up to you to work it out!”

Tom Jr. nodded. “Then I guess we need to get at it, Dad. Bud, this could take a while.”

Bud nodded. “I've got some errands that I need to run anyway. I'll be back around 8pm to check on you two. Don't make any trips to space without me!”

The two Swifts spent the next several hours working out the content of the message. At around eight o'clock Bud walked back into the communications center. When Tom Jr. saw him he put his pencil back down, and then stood up and stretched.

“So how goes it, genius boy?” Bud asked.

Tom sat back down in the desk chair and sighed. “I think we're close, Bud, but we're still missing something. There's a whole section of numbers here that we haven't been able to make heads or tails of.”

His father nodded. “Let's go over what we do know. I think we both agree that the main part of the message can be translated as follows:”

SPACE FRIENDS TO SWIFTS. WE NEED YOUR HELP ON A MISSION OF DIRE IMPORTANCE. OUR RACE IS BEING THREATENED WITH IMMINENT EXTINCTION. OVER TIME WE HAVE LOST THE ABILITY TO LEAVE OUR WORLD AND OUR BIOSPHERE IS ON THE VERGE OF COLLAPSE. IN ORDER TO SURVIVE WE NEED YOU TO RETRIEVE A DEVICE THAT WE BUILT LONG AGO AND BRING IT TO US ON MARS. THE DEVICE CAN BE FOUND AT –

Tom Jr. nodded. “Which is followed by the coordinates. What

puzzles me is that we've received coordinates from them before, but these numbers are like nothing I've ever seen. There are just too many of them!”

A voice suddenly boomed out over the videophone. “Well, brand my boots, what's goin' on here?” Tom Jr. saw Chow Winkler, Swift Enterprises' stout cook, walk into view. The Swifts had met the good-natured cook years ago when Tom's father was building the Citadel, and he had been a loyal companion on many adventures ever since. Chow was wearing an incredibly flashy shirt, with crisscrossed red and yellow patterns that were highlighted with sequins. Chow's weakness for bright shirts was a constant source of humor among Enterprise employees.

Tom Jr. smiled. “Chow! It's good to see you again. How's the southwest been treating you?”

Chow grinned. “It's been swell bein' down here again with your dad, Tom. I sure miss Shopton though! Yer dad tells me he's about wrapped up his work and we can be heading back home tomorrow. But say, what's all this about your space friends? Are they askin' us to go out in space and run a mission for 'em?”

Tom Jr's eyes suddenly got wide. “That's it, Chow! You've done it! These aren't coordinates for a location on Earth. They're for a location in space!”

The young scientist quickly scribbled some equations on a piece of paper. His jaw dropped. “Why, if my interpretation is correct, I think our space friends want us to retrieve something they left on a planet *hundreds of light-years away!*”

CHAPTER III: MISSION IMPOSSIBLE

TOM'S father was the first one to speak up. "I think you're right, Son! If you interpret the origin of these coordinates to be Mars, and then divide the numbers into three axes..." his voice trailed off as he scribbled some figures down on a piece of paper. "The numbers appear to specify a point that is 362.7 light-years from Earth."

Tom Jr. nodded. "That's what I get too. It's astonishing!"

Chow spoke up. "So are we goin' on another space trip, boss? I can pack up my things as soon as I get back home! When do we leave?"

Tom Jr. burst out laughing. "Not so fast, Chow! Even my fastest spaceship would take generations to make a voyage like that. I don't think our space friends have that much time left. I'll send them a message and see if they can provide the transportation." He beamed out into space a short message:

WE ARE WILLING TO GO BUT THE DISTANCE IS
TOO GREAT FOR OUR CURRENT TECHNOLOGY.
CAN YOU PROVIDE TRANSPORTATION?

The response came moments later:

WE NO LONGER POSSESS THE ABILITY TO MAKE
THE VOYAGE. CAN YOU FIND A WAY TO GET
THERE? THE NEED IS DIRE! OUR BIOSPHERE
WILL NOT EVEN LAST UNTIL THE END OF YOUR
CALENDAR YEAR.

Bud looked at Tom. "It looks like they're pinning all their hopes on you!"

Tom drummed his fingers on the desk. "I think I know why they think so highly of us, Bud. If you'll remember, we visited Mars just recently. I believe we even planted seeds there."

"That's right, we did – in your *Cosmotron Express*. If the space friends do live on Mars you probably gave them the impression that we have the space travel problem licked!"

Tom's father spoke up on the other end of the videophone. "So what are you going to do, Son?"

Tom Jr. looked thoughtfully into the distance. "It's a tough problem, Dad. It's one thing to travel to the outer planets, but this request is in an entirely different league! There's no known way to go faster than light, and we're going to have to travel much, much faster than light to get anywhere near this system in a reasonable amount of time."

"Just what is that-there star system like, pardnor?" Chow asked. "I ain't never been that far from home before!"

"That's a good question, Chow," Tom Jr. replied. "Let me look it up on the charts."

Tom walked over to a nearly computer terminal and typed in a series of commands. "We've had all of our star charts categorized electronically for some time now. It should be here somewhere. Oh, there we go." Tom pulled up a chart on the display, and then stared at it, puzzled. "That's strange."

"What is it, Tom?" Bud asked.

"There's no star there!" Tom Jr. replied. "There's just empty space. There isn't even a star in the surrounding area."

"Try checking the area with your megascope space prober," Tom's father suggested. "It may be that the star is too faint for our telescopes to pick up."

"Good idea," Tom Jr. replied.

Tom Sr. looked at his watch. "I'm sorry to break this up, Son, but there are a few things I need to do before I can call it a day, and it's getting late. I'll leave the resolution to this problem in your hands. Do what you think is best."

“I'll do that, Dad. Thanks.”

“See ya later, boss!” Chow said, just as Tom Sr. disconnected the video signal. The line went dead.

Tom stood up and stretched. “Let's go over to the observatory, Bud, and get some answers.”

“I'm right behind you, Tom!”

The two friends got in the atomicar and drove over to the observatory. At this time of day it was a bustling hive of activity, for the late hours of the night were the best time to view many celestial objects. The parking lot outside was filled with cars.

Tom and Bud walked inside the building and up to his megascope space prober. As expected, it was surrounded by a crowd of people. The young scientist walked up to them with an apologetic look on his face. “I hate to bother you, but I was wondering – ”

One of the scientists in the crowd began shaking his head. “Let me guess, Tom! You've made another tremendous scientific discovery, and you'd like to use the megascope to confirm your findings.” He sighed, but there was a twinkle in his eye. “Why can't I have a life like that? Sure, Tom, go ahead. We were just observing the Crab Nebula, but it isn't going to go anywhere.”

Tom thanked the group for allowing him to interrupt their scheduled observations, and then walked over to the terminal beside his megascope space prober. He removed a piece of paper from his pocket and began entering numbers from it into the device. The crowd of astronomers watched with keen interest.

“That should do it,” Tom said, satisfied. “Now let's see what's out there.” As the seconds ticked by, however, nothing appeared on the screen.

“Are you sure this is working?” Bud asked.

Tom quickly scanned the controls. “Positive. If there was a star in that region of space, however dim, we should be able to see it. This is strange! Maybe I decoded the coordinates incorrectly.”

The young inventor thought quietly for a few moments. “You know, it's just barely possible that something else is going on. I've

got a hunch.” He reached over to the console and made a few small adjustments. After a few moments a dark, hazy object appeared on the screen!

Bud looked at it, startled. “That doesn't look like any star I've ever seen!”

Tom grinned. “That's because it's not a star, Bud. It's a planet! I switched the machine to scan for a planet instead of a star, and I found this object, right where our space friends said it would be.”

“But what star does it orbit?”

“That's just it – it doesn't orbit a star! It's a true extrasolar planet.”

The crowd of astronomers gasped. “I knew it!” one of them said. “Why can't we make discoveries like that?” another one asked.

Bud spoke up. “You mean it just drifts around in deep space?”

Tom nodded. “I'm sure it orbited a star at one time, but something must have happened. The planet may have been ejected into space when its parent sun went nova, for instance. It's hard to say. Whatever happened, it probably happened a very long time ago.”

Bud looked at the hazy image with a mixture of curiosity and awe. “And that's where our space friends want us to go! Man. That would definitely be breaking some new ground! Can you get a clearer picture?”

Tom attempted to adjust the settings, but the picture remained distorted. “The megascope just wasn't designed to observe extremely small, dark, and distant objects. If it was a star I think we'd be ok, but that planet is pretty tiny. I would need to redesign the whole circuit assembly in order to get clear pictures of this class of objects.”

Bud nodded. “I get it. At least we can see something, though! Do you think that's a cloud layer?”

“That's what it looks like. The planet has got to be awfully cold, though – probably not too much above absolute zero. To have clouds at all there must be some internal heat source. Volcanism, maybe. It's hard to say.”

“Do you think the planet is habitable?”

Tom shook his head. “Not a chance, Bud. The clouds are probably either methane or some other gas. We’ll need to bring our spacesuits along on this jaunt!”

Bud’s eyes sparkled with excitement. “A real interstellar voyage! Do you think we can find a way to get there?”

“I just don’t know, Bud.” Tom stared at the mysterious object that was displayed on the glowing screen of his megascope. Hazy as the picture was, he could still see clouds swirling in the upper atmosphere. Somewhere on that planet was an object that his space friends needed in order to survive. Tom realized he had to find a way to get there by the end of the year – the lives of many beings depended on it!

Tom at last spoke up. “This isn’t an easy problem, Bud. Einstein proved beyond any doubt that it is impossible to go faster than light. As you approach the speed of light your mass increases, and if you ever hit the speed of light you would have infinite mass. In order to accelerate an infinite mass you’d need an infinite amount of energy, which is impossible. It just can’t be done.”

“But haven’t scientists found ways around that limit?” Bud asked.

“There have been lots of theories, but none of them have worked out. For instance, one idea would be to use wormholes that provide short-cuts around three-dimensional space. You could use these tunnels to cut a thousand-year voyage down to just a few days, or hours. The problem, though, is that in order to build these tunnels you need something called negative energy, which might not exist.”

Bud slapped Tom on the back. “If I know you, genius boy, you’ll have a working prototype by the end of the week! I’m going to go get packed. Is the trip on?”

Tom smiled. “I appreciate your confidence, Bud. I just hope it isn’t misplaced! Let’s go tell the space friends that I’m working on a solution and will keep them posted on my progress.”

“Sounds good, skipper!”

Tom returned control over the the megascope to the astronomers, and the two drove back to the communications center. Tom then sat down at the terminal and typed out a message:

WE ARE WORKING ON FINDING A SOLUTION
AND WILL KEEP YOU INFORMED. ONCE WE
ARRIVE AT THE PLANET HOW WILL WE LOCATE
THE OBJECT?

"I'd really rather not search an entire planet for a small machine," Tom explained. "It would be nice to have some easy way to pinpoint it."

"Good thinking!"

A light started flashing on the communications array. Tom looked at it, puzzled, and then tried to resend the message.

"What's up, Tom?" Bud asked.

"You know how this system works, right? I redesigned it a few months ago."

Bud nodded. "Sure I do. You send messages using your private ear technology to your Outpost in Space, and it then relays the messages through a powerful transmitter to Mars. That way it's impossible for other people to overhear your communications."

"Right. We've had no end of trouble in the past when other people intercepted messages and sent out communications that claimed to come from us. Well, Bud, it looks like the messages aren't going through. I'm not getting an automated acknowledgement from the space station."

"Do you think something is broken?"

Tom shook his head. "No, Bud, I don't. I think we're being jammed!"

Bud looked startled. "You think that someone is trying to prevent you from communicating with your space friends?"

"That's exactly what I think! If that's true, it should be possible to triangulate the source of the interference."

Tom walked over to another machine and began running an analysis. "Try sending the message again, Bud." As his friend resent the message, Tom watched the numbers on his display.

"This is tough, Bud. The interference is almost generalized. I'm having trouble pinpointing it."

"But how is it even possible that someone can jam the messages?"

"The private ear network relies on the same anti-inverse-square-wave principle that the megascope was designed around, Bud. It's pretty much impossible to eavesdrop on, but since it's a form of electromagnetic wave it is very possible to jam it. I'm just surprised that someone even *wants* to. Try sending the message again."

Bud complied, and this time Tom leaped out of his chair. "I've got it, Bud! The source is just outside Swift Enterprises. Let's go find out what is going on!"

Tom and Bud raced to the atomicar. Tom took the driver's seat this time and the car leaped off the ground and sped into the air. "I think the interference signal is originating about a half-mile south of the compound. There's a section of forest there that would make an ideal spot for hiding covert equipment."

Bud nodded. "Are we going to fly straight there?"

Tom shook his head. "I'll get us close and then set the car down. We'll try to sneak up on the spy and see if we can catch them red-handed. I think there's a repelatron gun in the dashboard that you can bring in case we run into trouble."

A few moments later Tom cleared the south wall of Swift Enterprises. He carefully flew the car over the treetops until he was a couple hundred feet away from the suspected origin of the signal. Tom then set the car down on the ground and parked it under a tree.

Motioning for Bud to be quiet, the two silently crept through the trees.

"I see something up ahead," Bud whispered.

"I do too," Tom replied. "It looks like a van of some sort."

Tom and Bud quietly crept toward the van until they were just

a few dozen feet away from it. From that distance Tom could see that a large, white van was parked under an oak tree. The van bore no identifying marks and had no license plate.

“What should we do?” Bud asked.

Tom looked at the van with a puzzled expression. “That’s weird. Do you see any antennas?”

“Nope,” Bud whispered back.

“Then how is it broadcasting the interference signal? I wonder –”

Tom picked up a rock from the ground and threw it at the van. It passed harmlessly through it!

Bud’s eyes grew wide. “It’s –”

Before he could finish his sentence a thunderous explosion threw the young men into the air!

CHAPTER IV: RATTLESNAKE ISLAND

TOM Swift felt himself slowly regain consciousness. His head was swimming. “What happened?” he asked weakly.

“It’s good to see you coming around, Tom!” a voice replied. Tom opened his eyes and saw that he was lying in a hospital bed in the Swift Enterprise infirmary. Doc Simpson was sitting on a chair next to him and had a concerned look on his face. Harlan Ames, the chief of security, was standing behind the doctor.

Doc Simpson looked at Tom sternly. “Next time you want to conduct an investigation, Tom, bring along your security team! There’s a whole department of people here whose job is to protect you, but they’re not going to be successful if you keep running off like you did last night. You took a nasty blow to the head and have been unconscious for hours. Frankly, I’m surprised you weren’t killed!”

Tom’s first thoughts were for his friend. “Where’s Bud?” he asked.

“Right beside you,” Doc replied. Tom turned and saw a second bed in the room. It contained the bandaged form of his friend Bud Barclay, who appeared to be fast asleep. “He woke several hours ago. You were closer to the source of the blast and took a much harder hit than he did, so it’s taken you longer to come around. You’ll both be fine in a few days, but I strongly recommend not doing that again!”

“How did you find us?” Tom asked. “All I remember is the explosion, and then everything went black.”

Ames spoke up. “The explosion registered on the plant’s security systems. As soon as I saw the blast I gathered my men

and raced over to see what was going on. We found you and Bud lying on the ground, obviously injured. I called Doc immediately and rushed you here to the infirmary. That was last night.”

Tom shook his head ruefully, and then winced in pain. “Thanks, guys. I think I can explain what happened.” He then told Ames about the jamming signal he had noticed the night before, and their short investigation in the woods. “The truck must have been a projected hologram, put there to act as a decoy. I bet the real communications jammer was being hidden by a hologram of a tree or something equally innocuous. Bud and I probably walked right by it. Then, like an idiot, I threw the rock – ”

Ames nodded. “And set off the security system, which triggered the blast that destroyed their equipment. It must have been right behind where you were hiding, Tom. We’ve recovered a few pieces of it that we’re analyzing, but it’s pretty much destroyed. It looks like the hologram generator was based on your 3D telejector technology, but that’s only a guess.”

“Any idea who might be behind it?” Tom asked.

Ames frowned. “Well, it’s obviously someone with a lot of technical expertise. Not only was he able to jam your private ear signal, but he hid his jammer in a very sophisticated way. It almost sounds like the Black Cobra, but I wouldn’t jump to any conclusions. It could be Brungarians, or someone else entirely.”

Tom nodded. “There are probably many enemy nations that envy our relationship with the space friends and would like to use it to their own advantage. I’ll let you know if I can think of anything.”

“You do that, Tom. In the meantime I’ll double the watch around the grounds. And try to stay out of trouble!”

“Thanks,” Tom said. As Ames left the room Tom attempted to get out of bed, but Doc restrained him.

“You’re not going anywhere, Tom! You’ve had a nasty head injury and very nearly broke your neck. This hospital room is where you and Bud are going to stay for the next couple days – and no arguments!”

“Okay, Doc. I am feeling a little shook up, and the rest will

probably do me some good. Thanks for putting me back together.”

After Doc left, Tom picked up the phone and dialed Arv Hanson, whom he asked to come over. A few minutes later Arv walked into the room. Hanson was one of Tom's most loyal employees. The hulking six-footer was not only a talented craftsman, but also a veteran pilot and astronaut.

Arv eyed Tom and Bud critically. “You look like you're in rough shape, skipper!”

“I'll be fine, Arv. Listen, I wanted to speak to you for a moment about the repela-suit. There are a few changes I'd like to have made to it.” Tom told Arv about the test he had conducted the day before, and explained that he wanted to boost the suit's lifting power. “I think the unit's solar batteries can provide more than enough energy. It's just a matter of installing more powerful repelatrions. They need to be able to handle a much heavier load in emergency situations.”

Arv looked at Tom thoughtfully. “Won't that increase the weight, though?”

Tom shook his head. “Not by more than 10 or 15 percent. It should be fine. Do you think you could make the changes to the existing suit sometime today? I'd like to get the design perfected and turned over to Hank Sterling as soon as possible so we can begin making production units. Now that we're going on a deep-space expedition I think we'll need them sooner rather than later.”

Arv nodded. “Can do, Tom. I'll try to have the unit ready for you tomorrow. Are you headed to Mars again?”

“I'm going a lot farther out than that!” Tom told Arv about the unusual request he had received from his space friends. “That reminds me – I need to resend those messages! I bet our space friends are wondering what happened to us. I'll see if Dad can do it for me. He should be back by now.”

As Arv left the room Tom picked up the phone and dialed his father's private office. Tom Sr. answered the phone immediately. “Tom!” his father said. “I'm glad you're awake. I was down in the infirmary earlier but you were still unconscious. How are you

feeling?"

"A little woozy, but I think I'll live. I was wondering if you could do a favor for me, Dad."

"Sure, Son. What is it?"

Tom explained what had happened the night before, and asked his father to resend the message that he had been unable to deliver. Tom Sr. promised to do so immediately and said he would relay the response to Tom. "So it sounds like you have decided to make the voyage!"

"I'd like to, Dad, but it's an enormous challenge! There's a lot of hard work ahead of me."

"Have you devised a way to avoid the light barrier?"

"I've got a few ideas, but I don't know if they will pan out or not. I'll keep you posted."

After Tom hung up the phone he took a pencil and a pad of paper from the nightstand and began sketching out equations. By the end of the week he and Bud had fully recovered from the effects of the blast and were discharged from the infirmary. Tom immediately went to his lab and continued his work.

Several days later, Bud walked into Tom's private laboratory. He found Tom seated at his workbench, staring absently out a window. Bits of paper and electronics were strewn all over the lab.

Bud walked up to Tom and put his hand on his shoulder. "How's it going, genius boy?"

Tom shook his head. "It's not, Bud. I keep hitting dead ends! There's got to be a way to do this, but I just haven't found it yet."

"That, my friend, is why I am here! I've got a quick quiz question for the mighty brain. Who invented the television?"

Tom frowned. "Are you thinking of my Dad's talking pictures?"

"Right! That was a Swift invention. Tell me, Tom. When was the last time you sat down and actually *watched* it?"

"It's hard to say, Bud. I suppose I've seen the news a few times with my parents. Does that count?"

Bud laughed. "I'm not surprised! You and your dad invented the future, and yet somehow you never have the time to enjoy it. This is the twentieth century, Tom! You need to get outside every now and then to clear the cobwebs from that mighty brain of yours. It'll do you good!"

Tom smiled. "Let me guess! I can see where this is going. You've set up a double-date with Phyl and Sandy!" Phyllis Newton was the daughter of Ned Newton and Tom's regular girlfriend. Sandy Swift was Tom's seventeen-year-old sister and went out with Bud on a regular basis.

"Phyl is a great girl, Tom. You really should spend more time with her! Where would you be if your father had spent all his time in his lab? Poor Mary Nestor might have gone on to be a librarian instead of your mother, and the future would never have been the same."

Tom sighed. "You're right, Bud. When do we leave?"

"Right now! The girls are outside in the car. You better not keep them waiting!"

A few minutes later the four of them were speeding down the road in Bud's silver atomicar. "I can't believe Bud actually pried you from the lab!" Phyl said teasingly.

"How could I say no to such a great offer?" Tom replied. "Speaking of great offers, where are we going?"

Sandy spoke up. "I thought it would be nice to spend an afternoon at Lake Carlopa. Mother provided all the food we'd need for a picnic, and the car doubles as a great speedboat. Should be fun!"

"Sounds good to me!" Tom replied. Bud switched on the radio, and the group was soon listening to the popular music of the day.

When the atomicar reached the lake, Bud activated the repelatrions and the car leaped into the air. The group was soon soaring just over the surface of the water.

"Where are you going?" Tom asked.

"There's a small island about a mile from here," Phyl explained. "We thought it would be just the place to spend the

afternoon.”

Tom nodded. “You must be talking about Rattlesnake Island! I haven't been there in years.”

“I don't think I've ever been there,” Bud replied.

The vehicle quickly reached the island in question. Before landing, however, Bud directed the silver car higher into the air and made a quick circle around the island. From the sky they could see that it was almost entirely covered in trees, with only a thin strip of beach on its outer edge.

“I thought there was a cabin there somewhere,” Sandy said.

“The cabin was a dilapidated wreck back when Dad was our age,” Tom replied. “It's probably gone by now.”

“The foundation should still be there, even if nothing else is,” Phyl said.

Bud landed his car on one of the island's small beaches, and the four of them then exited the vehicle. Phyl grabbed the picnic baskets from the trunk and soon had lunch ready for the group. It didn't take them long to devour the meal that Mrs. Swift had prepared.

“This is great!” Bud said, after finishing his third helping of fried chicken. “Your Mom sure can cook, Sandy!”

She laughed. “You sure know how to put it away! I'm so glad we're out here today. It's perfect weather for going to the lake.”

Tom had to agree. Even though autumn had begun and the leaves had started changing colors, the sun had warmed the air to a comfortable temperature. The sky was blue and cloudless and the lake was calm. “This is probably one of the last nice days of the year,” he said. “Winter will be here soon.”

“Has the lake ever frozen over?” Bud asked.

Tom nodded. “It has in some spots, but I doubt you could walk from the shore to this island. It gets cold here in the winter, but not that cold.”

“I want to walk around the island before we go boating,” Phyl announced.

Bud leaped to his feet. “Lead the way, Tom! I'm ready to see another piece of Swift family history.”

After they cleaned up the area and packed their remaining supplies into the atomicar, the group headed off into the woods. Tom was chosen to act as leader and guided them into the forest. They soon came across an old, overgrown path, which they decided to follow. It took them only a few minutes to leave the sound of the lake behind them. In every direction all they could see were trees heavy with autumn leaves. The forest floor was thick with dry leaves that crunched underfoot as they walked down the path.

“Speaking of family history, how did you and Bud meet, Tom?” Phyl asked.

Tom looked at her, surprised. “You mean you don't know?”

She shook her head. “You just brought him over one day, introduced him to my family, and said he came from California. I don't think you ever explained how you two happened to get together.”

Tom and Bud looked at each other, and then burst out laughing. “I don't think you'd believe us even if we told you,” Bud said.

Sandy looked at him and frowned. “Now Bud, be nice. You and Tom met about a year before he started building his Flying Lab. Tom had gone out to California to run some initial tests on a nuclear-powered jet engine that he was developing, and – ”

“But there's more to it than that,” Tom said. “Key parts of that story are still highly classified. I only know what Dad was doing out there because I accidentally got involved.”

“What are you talking about?” Sandy said. “Dad was there?”

Tom bit his lip. “Well, –”

Phyl spoke up. “I hate to interrupt, but is that the famous cabin?”

The group came to an abrupt halt. “I would have missed that completely,” Tom remarked. In the midst of the woods, about a hundred feet from the path, was the ruined foundation of an old cabin. By the size of the ruins they could tell that it had once been a sizable structure, but all that remained was a section of the basement. Large trees were now growing out of the foundation,

and the remaining walls were covered in thick vines.

“So that's the cabin where your father was held prisoner,” Bud said.

Tom nodded. “It was much more impressive back in the day. It even had electricity and phone service.”

Phyl looked surprised. “Way out here? On an island? In the 1930's? How did they manage that?”

Tom shrugged. “Beats me! I don't think Dad stuck around to find out.”

“Evil villains like their creature comforts,” Bud explained. “No matter where their sinister lair might be, they're always going to make sure they have the latest conveniences.”

Sandy threw Bud a sour look. He laughed.

Phyl walked around the ruins of the cabin. Tom joined her. “I wish I could go back in time to see what it used to look like,” she said.

Tom's jaw dropped. “That's it! Of course!”

“What's what, Tom?”

“The answer! It's been staring me in the face all this time. How could I have missed it? Superluminal travel isn't a matter of space, it's a matter of time!”

“Super-what?” Phyl asked.

Bud spoke up. “Hey now, genius boy, no inventing on your day off! Save it for tomorrow.”

Tom grinned. “All right, Bud, I'll give it a rest. It'll keep. But – wow!”

After getting their fill of the ruins the group made their way back to the beach. Just before they left the woods, though, Bud suddenly stopped them. “Shhh!” he said.

“What is it?” Sandy asked quietly.

Bud motioned for Tom to join him, and then pointed into the distance. “Do you see what I see?”

Tom nodded. “It looks like someone is messing with your car!”

The girls gasped. “What should we do?” Sandy whispered.

“Stay hidden in the trees,” Tom replied. “Bud and I will go

investigate.”

“Be careful, Tom,” Phyl said.

While Sandy and Phyl crouched down and hid in the underbrush, Tom and Bud made their way around the edge of the forest, being careful to stay out of sight. After several minutes of careful effort they reached a clump of trees just a few yards away from the automobile. From their vantage point they could see a man crouched under the car. He was dressed in jeans and was wearing a white polo shirt.

“What's he doing?” Bud whispered.

“Probably trying to access the power plant,” Tom answered quietly. “You can't open the hood without a key, and I've got it with me.”

Bud nodded. “I doubt he's just a curious bystander. Do you see that motorboat over there?”

Tom looked in the direction Bud indicated and saw a powerful black boat idling just offshore. The person that was at its helm had crouched behind the windshield and was difficult to see.

“Now's our chance, Tom – while he's occupied under the car! If we can grab him we can chase the boat in the atomicar and apprehend them both.”

“Sounds good, Bud! You grab the suspect and I'll get the car started.”

On the count of three, the two men rushed the unsuspecting man. As they approached him from behind the lookout in the boat yelled out a warning. The man turned just in time to get bowled over by Bud, who sent him sprawling into the sand. As Tom jumped into the car Bud grabbed the downed suspect and began pinning his arms behind his back.

While he wrestled furiously with his opponent Bud was suddenly startled by the sound of gunfire. The lookout in the boat was shooting at them! Bud heard several retorts and saw small tufts of sand kick up just a few feet away.

The sound of gunfire startled Bud just long enough for the man to escape his grasp. He lunged into the water and headed

toward the boat. Bud, meanwhile, dived behind the atomicar to shield himself from the lookout in the boat, who was still shooting at him.

Moments later, the man climbed into the boat, which immediately roared off into the distance. Bud climbed into the passenger seat of the car and looked at Tom curiously. “Why aren't we chasing them?” he asked.

Tom looked at the car sourly. “It won't start, Bud! He must have done something to the wiring.”

Bud sighed and watched their foes roar off down the lake. “Can we at least call the police? They're getting away!”

“I know, Bud, but the car phone won't work unless the car is turned on, and its electrical system is dead. I didn't think to bring my pencil radio with me – this was just a picnic, after all!” Tom sighed. “While I check out the car, can you go get the girls? I don't want them to wonder what's happened to us.”

“Sure thing, Tom.”

A few minutes later, Bud returned with a worried Phyl and Sandy. Tom was leaning against the car, holding a white piece of paper.

“Is everything ok?” Sandy asked.

Tom nodded. “It was easy enough to fix. They weren't actually trying to damage the car, Sandy. All they wanted to do was delay us long enough to make their escape. Their real purpose was to deliver this message, which I found taped under the car.”

Tom gave it to Bud, who read it aloud. Neatly typed on a white piece of paper were these words:

YOUR RECKLESS ATTEMPTS TO HELP YOUR SO-CALLED SPACE FRIENDS ARE ENDANGERING ALL LIFE ON EARTH. STOP TRYING TO RESCUE THEM OR WE WILL BE FORCED TO STOP YOU! THIS IS YOUR LAST WARNING.

CHAPTER V: A MATTER OF TIME

“WHAT are you going to do, Tom?” Sandy asked.

Tom folded up the note and placed it in his pocket. “Don't worry about it, Sis,” he said gently. He noticed the apprehensive look on the girls' faces and decided to downplay the incident. “This isn't the first time we've faced threats, but we've always beaten them in the end. I'll give this note to Harlan and let his team investigate it. I'm sure everything will be fine.”

The girls insisted on returning to Swift Enterprises immediately, so the group piled into the car. Bud drove them back to the plant, where he dropped Tom off and then left to take the girls back home. Tom, meanwhile, went to see Harlan Ames. When he heard Tom's story he shook his head. “You seem to have a real knack for getting into trouble!”

“Do you think you could check into this note for me?” Tom asked.

Ames nodded. “I'll see what I can do, but it'll probably lead to a dead end. Have you had any ideas on who might be behind this?”

“I'm afraid not, Ames. We've just never had this kind of trouble before. The Black Cobra was never very interested in our space friends, and the Brungarians would be more likely to steal from them than stop us from communicating with them. I think this is some entirely new foe.”

“You're probably right. I'm guessing it's a small group of people pursuing some xenophobic agenda. It sounds like they just wanted to give you a warning this time, but I doubt they'll be that forgiving again. Be careful, Tom.”

“I will, Ames. Say, has anyone made a public announcement about the interstellar voyage I'm working on?”

“Not to my knowledge. The public relations department doesn't usually issue press releases without your approval.”

“Then let's keep this new project under wraps. I'm guessing that this party, whoever it is, knows that I've been communicating with our space friends but possibly isn't aware of the particulars. The less they know the better.”

Next, Tom walked over to his father's private office. He found Tom Sr. at his desk, hard at work. When Tom walked in his father stopped what he was doing and looked up. “Tom! How have you been?”

Tom smiled. “Not too bad, considering. I hate to bother you, but I wanted to see if you ever resent my message to our space friends.”

Tom Sr. thought for a moment. “Why yes, I did! The message was resent about an hour after you asked me to do it. Did I never get back with you?”

Tom Jr. shook his head. “I don't think so – or if you did, I missed it.”

“I'm sorry about that, Son. I haven't been this busy in years, what with my work on the fusion project.” Tom Sr. started digging around in the piles of paper on his desk, looking for a particular memo. “First there were the experiments to learn how to fuse helium 3, and then I had to get the lunar colonies built, and then there were the long talks with Ned about pursuing commercial opportunities... ah, here we go.”

Tom Sr. grabbed a piece of paper out of a thick stack, looked at it with satisfaction, and then handed it to his son. The note read as follows:

THE EXACT LOCATION OF THE DEVICE IS NOT KNOWN. IT CAN BE LOCATED BY SEARCHING FOR THE FOLLOWING ENERGY SIGNATURE:

The remainder of the message was a series of numbers.

Tom Jr. studied the numbers carefully. "I'm guessing that the device emits an electromagnetic signal on this frequency. Our space friends want us to locate it by scanning for that band of radiation. Is that your guess, Dad?"

Tom Sr. nodded. "You should be able to use the damonscope for that. After all, it was designed for precisely that type of work." The damonscope was a device built by Tom Jr. to detect faint amounts of underground radiation from high altitudes.

"I think that will work. Thanks, Dad!"

A week later, Bud found Tom sitting in his private laboratory, adding wires to a delicate piece of circuitry. Bud looked at his lab with astonishment. "Good night! What happened here, skipper?"

Tom laid down the soldering iron he was holding and looked up from his work. It was easy for him to understand Bud's reaction. One entire wall of Tom's lab had been demolished, and a construction crew was hard at work laying long strands of thick cables. Large sections of the laboratory floor were missing, and pieces of lumber and other construction debris were scattered everywhere. Bud could hear the sounds of a large-scale excavation project coming from beneath the office.

The young inventor got off his chair and walked over to greet his friend. "So there you are! I haven't seen you around for a few days. What have you been up to?"

Bud shook his head. "I've been testing the new X-318's, remember? Hank Sterling just finished the first production units earlier this week, and I was asked to try them out."

"That's right! I'd forgotten all about it. Those are the new repelatron-powered commercial jets! How are they?"

"They're a real blast to fly!" Bud said enthusiastically. "There's no doubt about it – you've got another winner on your hands. I bet they'll sell like hotcakes!"

Tom nodded. "They should be much safer than normal craft, to say nothing of the energy savings gained from switching from jet fuel to solar batteries. Traditional aircraft are fragile by their very nature, but it should be almost impossible for an X-318 to

fall out of the sky. The safety factor that's been built into them is considerable. But you know I didn't design them, right?"

Bud looked at him curiously. "You didn't? Then who did?"

Tom laughed. "I'm not the only employee at Swift Enterprises, Bud! We've got thousands of highly talented people working for us. That particular project was actually spearheaded by Sandy. She has quite a talent for aviation, and thought it was time to bring aeronautics into the modern era."

"You don't say! I guess inventing runs in the family. But what on earth has happened to this lab?"

Tom paused to look at the chaos that had descended upon his private laboratory. "I guess the simplest explanation is that I'm trying to lay the groundwork for my latest invention. My old laboratory just didn't have everything it needed, so I'm doing a bit of remodeling."

Bud pulled up a chair and sat down. "Tell me all about it, professor. What's been going on?"

"Well, let's see. First, a few days ago I met with Dad and asked him to upgrade the test fusion reactor he built here at the plant. I'm going to need a lot of power for my next invention, and our current grid won't be able to handle it. Fortunately, it won't be difficult for him to make the modifications that are necessary for his test equipment to produce commercial levels of power."

Bud's eyes grew large. "Tom, do you realize that just *one* of your father's new power plants can produce enough energy to power all of North America? Just how much energy do you need?"

"All I can get, fly-boy! I've also asked Dad to install a miniaturized fusion plant on board the *Challenger*. He's not going to remove its solar-power cells, but sunlight alone can't provide the energy we need, so an additional power source is necessary. This will also make it easier for the craft to travel in places where there isn't a good supply of sunlight."

"So you're not going to build a new spacecraft?"

Tom shook his head. "I wish I could, but given the deadline our space friends have set there just isn't enough time. It's much

quicker to just upgrade the *Challenger*.”

“That's too bad, Tom! I was hoping you were going to create a new starship. You could have called it the *Exedra*.”

Tom looked puzzled. “I could have called it *what*?”

“It was just an idea. But say, you haven't explained what's happened to your lab!”

“Well, Bud, as I was saying, my new invention needs power – incredible amounts of power. The construction crew over there is laying the superconducting cables that will connect my test equipment to Dad's fusion reactor.”

“Superconducting cables?”

Tom nodded. “They make it possible to transfer enormous amounts of electricity with very little loss. I'm going to need every last bit of power I can get!”

“But why are they digging under the lab?”

“I'm going to need a place to test my prototypes, Bud. I could do that outside, but with all the recent attacks I thought it might be best to conduct my tests underground. They're digging a tunnel that will be about four miles long. In interstellar terms it's pretty tiny, but it will be enough to see if the principle is sound.”

Bud nodded. “I understand. Speaking of that, you never did explain to me the brilliant brain-wave that you had at Lake Carlopa. Just how are you going to break the light barrier? And please keep it simple! Not everyone has a four-digit IQ.”

Tom laughed. “I'll start at the beginning. The alien planet is 367 light-years away, and we want to get there and back in a reasonable amount of time. Say that we want to make the trip in just one year. In reality we'd like to make the voyage much quicker than that, but I'll keep it simple. In order to travel those 367 light-years in just one year we would have to travel 367 times the speed of light. That works out to a speed of just over 68 million miles *per second*.”

“Wow! Now that's fast. Can it be done?”

Tom shook his head. “The laws of physics dictate a maximum possible speed of 186,000 miles per second, which is a snail's pace when it comes to crossing interstellar distances. So I started

looking at alternate explanations.”

“Like wormholes?” Bud asked.

“That was one of my very first ideas. Instead of trying to travel 367 light-years, you simply find a shortcut through the fourth dimension. The problem is that there really isn't a good way to create a wormhole. Even if you could make the exotic forms of matter a wormhole needs in order to exist, the energy requirements for creating it are truly astronomical. We're not just talking about a single fusion reactor, Bud. It would take the combined yearly output of energy from *every single star in our entire galaxy*. It's completely out of the question!”

“You're not kidding! So what was the answer?”

Tom eyes sparkled with excitement. “I realized I'd been looking at the problem all wrong! We don't actually care about how far we are traveling. What really concerns us is the amount of time it takes to get there. So, instead of trying to manipulate space, we'll just manipulate time instead.”

“What do you mean?” Bud asked quizzically.

“Imagine, Bud, if you could stop time, go wherever you wanted, and then start it up again. You're still traveling the same distance, but it wouldn't take as long because you've slowed down time itself.”

Bud frowned. “Now correct me if I'm wrong, professor, but isn't that exactly what happens when you travel close to the speed of light?”

“Not quite!” Tom said. “If you traveled at the speed of light time would stop, but only for you. Time continues passing normally for everyone else. From your perspective you would reach your destination instantly, but hundreds of years would have passed back home. Our space friends don't have hundreds of years.”

“So there's an alternative?”

“I believe there is! I'm working on a device that will temporarily take us out of the Universe's time stream. We'll be able to travel through space without advancing forward in time.”

Bud frowned. “So you're building a time machine?”

Tom shook his head. "Time machines allow you to travel backwards in time. My invention changes the rate at which you are moving into the future. It's completely different."

"If you say so, skipper! It's all way over my head. Do you have a name for your miracle machine?"

"For now I'm calling it a kronolator. It comes from the Greek word "kronos", which means time, and the word dilate. Essentially the machine will allow us to dilate, or stretch out, time itself."

Bud stood up. "I still don't think I understand it, but if you say it works then that's good enough for me! When can we start testing?"

Tom laughed. "Right now all I've got are a bunch of ideas and half-built parts, Bud. In a few days the changes to the lab should be complete. Come back then and we'll put it through its paces!"

The young inventor worked feverishly over the next few days, rarely even stopping long enough to sleep. Days came and went while Tom paid little heed to the outside world. His mind was completely consumed with the intricate problem that was before him. Even the construction noises that surrounded him were insufficient to break his intense concentration.

Chow attempted to coax Tom to eat, but the food the cook brought him was often left uneaten on his workbench. One evening Chow came in to bring his boss supper and saw that that the young man had not even touched the lunch he had brought earlier. The sight was more than the cook could stand.

"Well brand my skillet, Tom, but you gotta to eat sometime! This here work of yours just ain't healthy. You're goin' to make yerself sick!"

Tom looked up from the machine he was calibrating. "What's that, Chow? Oh, did you come to bring lunch?"

"Lunch! Now lookee here, son. I brought in lunch five hours ago. It's still right where I left it! Do you have any idea what time it is?"

Tom saw the tray in the cook's hand and winced. "Sorry about

that, Chow. My mind's been busy lately, I guess.”

“Well get it unbusy, pardner! At this rate you're gonna waste away to nothin' before the week is out.”

Tom smiled as the heavyset cook turned around and stomped out of the lab. He quickly finished his dinner and resumed his work. Hours later, the young man stood up and yawned.

“Well, I think that will about do it,” he said tiredly. He looked over his new invention with pride. Tom had assembled the kronolator in the middle of his laboratory. The device was an irregular mound of parts, wires, and tubes, roughly cylindrical in shape. It had a diameter of roughly nine feet and a height of six feet. Tom looked at it with great satisfaction.

“That unit won't take us to the stars, but it should prove the principle. If this works, I can build a much more powerful model and miniaturize a lot of the components. We should be able to fit a version of this inside the *Challenger*.”

As Tom was about to leave for the night, he suddenly heard a siren go off. Tom instantly recognized the sound. Someone had broken into Swift Enterprises!

CHAPTER VI: THE SHADOW OF DEATH

TOM Swift stopped a moment to think. “I bet they found out about the kronolator! Someone's probably on the way here now to steal the plans for it.”

He quickly looked around and verified that the room had been secured. When Tom had his office upgraded he took special pains to enhance the room's security. The lab's bland, concrete walls hid a thick layer of reinforced steel, and the windows were made of unbreakable tomasite. The plans for his inventions were kept in a secure vault beneath the office. The only door to the room was the size of a vault door, and it was secured by both an ID card system and a biometric sensor.

The room's alarm system had been designed by Tom himself. A network of sensors constantly monitored the room's activities. Even if an unauthorized person somehow made it into the room they would be immediately spotted and an alarm would sound. The security building was located right next to the structure that housed Tom's lab, and armed guards could arrive within seconds. Tom had even taken the pains to design a field generator that could block the Transmittaton's signal. No one would be able to materialize directly into the room unless he first deactivated the protective shield.

With that in mind, Tom walked over to a terminal that was embedded in the wall and checked the source of the alarm. He could see that Harlan was already responding to the source of the break-in. A red light was flashing by Gate 16, indicating that something had damaged the gate and allowed an unauthorized intrusion.

Tom was disturbed. *If someone broke into the plant then they should show up on the radar system, he thought. But I'm not seeing anyone. That either means that no one managed to break in, or that someone has found a way to neutralize the radar impulses.*

He decided to pull up the security footage and review the incident himself. Tom pressed some buttons on the terminal and pulled up the video record that was made at Gate 16 just before the sirens went off. When he played the tape he saw an individual dressed in a nondescript black suit park a sedan in the visitor's lot and walk up to the guard station outside the gate. When one of the two station guards stepped outside to check the man's ID he attacked the guard and quickly disabled him. Before the second guard could respond the man pulled a device out of his suit and fired it at the gate. The resulting explosion blew apart the metal barrier, which allowed the man in black to rush in.

Tom was aghast. Swift Enterprises had been infiltrated many times, but he had never before seen a forced entry by a dangerous, armed man. He hoped that the security response team would be careful.

Something about the incident nagged at Tom. Almost unconsciously, Tom pressed the replay button. As he watched the video a second time he suddenly realized what was wrong. When the man in black stepped in front of the guard post he cast a long shadow on the ground. The shadow, however, was not of a human being! Tom could clearly see the metal frame of a robot outlined against the pavement. He instantly realized that the image of a human was simply a holographic projection of light, intended to hide the sinister being underneath.

Realizing that Harlan Ames had no idea what he was up against, Tom grabbed the phone off the wall and quickly dialed security. No one responded in the security, so Tom tried calling him using his lab's radio. He received no response to his frantic calls.

The robot is probably jamming the airwaves, Tom thought. He mulled the problem over. I'm probably safe here in my lab,

but if I don't do something someone is going to get hurt. But what can I do? The intruder has obviously found a way to remain hidden from radar. How can I find and disable it?

Knowing he had only a few seconds in which to act, Tom looked around his laboratory for anything that he could use. "I wish Bud was here," he muttered. "He always knows what to do in these kind of situations. I'm a scientist, not a fighter, and I'm fresh out of giant robots."

His eyes caught sight of a piece of equipment lying on his workbench. He ran over and grabbed it. *This could work! That robot has got to be built out of electronic parts, and electronics are notoriously sensitive to radiation. This emitter isn't a weapon, but it will send out a strong electromagnetic pulse, and that should stop the robot in its tracks.* Tom quickly grabbed a miniaturized solar battery off the shelf and wired it to the emitter. "It's not pretty, but it ought to do the job," he said grimly.

Tom over to the massive vault door that guarded the only entrance to his lab and then stopped. *Think, Tom. Where are you going? Where would the robot be?* He knew that the intruder could be anywhere inside the four-mile-square complex, and at this time of night it could be impossible to find.

The robot is almost certainly on his way here to this very lab, he thought. *It's a good two miles from that gate to this building, so unless it can run over a hundred miles an hour it ought to take it at least a few minutes to get here. If I can get on top of the infirmary across the street I should be able to see it as it comes down the road and pick it off from a distance.*

Tom went back to the wall terminal and pressed a few buttons. Moments later, a Transmittaton in his lab transported him instantaneously to the roof of the infirmary. He had set the protective shield to lower itself only long enough for him to be transported out, and felt confident that the lab was still safe. *If the robot had beaming capabilities it would never have had to force itself through the gate,* he thought.

Outside it was pitch black. The night sky was obscured by a low layer of clouds, which blocked any moonlight. A cold wind

blew from the north, making Tom wish he had remembered to grab a jacket before he left his parent's house that morning. It was a bitter evening to be outside.

Tom walked over to the ledge and knelt down. The street that led past the infirmary to the gates was well-lit, and it was easy to see the laboratory building's entrance from his vantage point. He clutched his EMP emitter and sat down to wait.

A few minutes later Tom saw a figure darting from one building to the next. He tensed, and waited. To his surprise, however, it went inside the observatory.

Oh no! he thought frantically. *At this hour that building is packed! I've got to get over there immediately.*

He picked up his portable radio and tried to raise Harlan again, but heard only static. Tom glumly put the radio back in his pocket, and then walked over to the building's emergency escape stairwell. Quietly walking down the stairs, he looked around. The wailing sirens had gone off some time ago, and there was no noise to break the silence of the night. Tom could not find any sign of the security team. He hoped that the robot had not injured them.

With great caution Tom made his way to the observatory, being careful to maintain a firm grip on his emitter. Once he reached the building he stole a glance inside. From the street he could see a figure kneeling in front of the megascope space prober. The astronomers that worked the night shift were not in sight.

Tom was taken aback. *It's disassembled my megascope? Why would it do that? They're commercially available! You can find them in observatories all over the world. What gives?*

After taking one final glance down the street Tom picked up the emitter and aimed it at the figure inside. *The glass door shouldn't block the electromagnetic pulse,* he thought, *and I'd rather not get any closer than I have to.* He took a deep breath and pulled the trigger.

The emitter let out an incredibly loud hum, and Tom felt a blast of heat hit his face. Inside he saw the black robot suddenly

stand up, and then wobble backward as if it had been hit with a sledgehammer. Even from a hundred feet away Tom could see sparks flying out the machine.

However, the robot had caught sight of Tom. It leveled its metal hand at the door and fired something. The glass doors burst into shards, and the emitter was yanked right out of Tom's hands. He then felt himself being pulled toward the robot! Tom tried to hold himself back, but was drawn toward the machine with an irresistible force. Suddenly, a few yards from the robot, he stopped.

Tom looked at the robot coolly. The machine was built out of a dark metal and had no extruding wires or parts. The fingers were articulated, but the body was built with a minimum of material. *It almost looks like a skeleton*, Tom thought. The head was a featureless sphere of metal, save for two red eyes that glowed out of the machine's forehead. It had no obvious nose, ears, or mouth, which gave it a chilling appearance.

The device was obviously damaged, but Tom could see that it was still immensely powerful. Tom knew he could probably finish it off with one more shot from his emitter, but it was nowhere to be seen.

The robot turned its full attention to Tom. "I apologize for the mess, Mr. Swift," it said, in a clear, human voice. "It was not my intention to destroy your property."

Tom was taken aback by this. "Just a few minutes ago you blew apart my front gates! That's hardly asking for a warm welcome."

The robot nodded. "It was necessary to gain access to this megascope, and I feared that you might not be cooperative. Please understand that I mean you no harm. In fact, it is you who have enabled me to be here tonight."

"What are you talking about? And what have you done to the astronomers that work here?"

"Your associates are locked in the basement. I have not injured them." Without taking its gaze off Tom, the robot activated the megascope. From where Tom stood he could see

that it was pointed toward the extrasolar planet.

The machine then continued. "First, let me apologize for the unfortunate actions of my associates. I did wish to prevent you from sending messages into space, but the demolition trigger was not intended to injure you. I merely wished to prevent you from learning of my existence. Likewise, the messengers I sent to your island to warn you of the great danger you are in were not sent to harm you."

"Are you kidding? They shot at us!"

The robot nodded. "This is true, but remember, Mr. Swift, they were armed and you were not. Had they chosen to fight you they could have killed you both, but instead they fled. I have only been trying to warn you, and it is you yourself that gave me this task."

Tom felt his anger beginning to boil. He fought to keep it under control. "That's the second time you've said that. I've never seen you before in my life!"

"Of course not. Permit me to explain. You, Mr. Swift, have been asked by unknown parties in space to go to a distant planet and retrieve an alien object."

Tom nodded. "Our space friends need our help. Their survival depends upon it!"

"So they say. Tell me, Mr. Swift. How do you know that the message was sent from your space friends, and not from, say, someone who means you great harm?"

He thought a moment. "This isn't the first message we've received from them, you know. We've been communicating with them for quite some time. The message was sent in their language, using the protocols we established some time ago, and from roughly the same place the messages have always originated. There's no reason to think that it didn't come from them."

The robot nodded – an eerily human gesture that only made Tom dislike the machine more. "That is all true, but you cannot honestly believe that such a message would be difficult to counterfeit, can you? Anyone could have sent that message

provided they had sufficient scientific expertise. That's hardly a foolproof system."

"So what are you suggesting?"

"I am here to tell you that the message did not come from your space friends. In fact, your space friends died just recently. It originated from their enemies, who wiped them out and now want you to retrieve an artifact for them that is beyond their reach. You, Mr. Swift, are going to go get this artifact, and in your ignorance you will give it to them freely. They will then use it to destroy their alien opponents. Thirty years from now, when that war is finished, they will come here, to Earth, and destroy this planet."

"And you know this how, exactly?"

"Because I am from the future, and what I describe has already happened. When you realized what you had done you built a time machine and sent me into the past to undo your great mistake. I am your own invention, Tom. Thirty years from now you will build me with your own hands for this very mission."

Tom's mind reeled. "I don't believe it," he stammered. "Not a word. You're just part of a Brungarian plot!"

"Your future self realized you might react this way, of course. Which is why I am here. I had hoped to persuade you to not help your space friends without revealing myself, but when you proved stubborn I knew I had to take a bolder course. So I have come here and upgraded your megascope. I've taken the improvements that you will make to it over the next thirty years and installed them on this device. I want you to see the true nature of this planet that you are about to visit."

The robot reached over and switch on the megascope's screen. Tom could see the extrasolar planet very clearly now. A thick layer of dark clouds obscured the planet's surface. He could see arcs of electricity shooting through the upper atmosphere. The robot reached out a hand and slowly turned a knob. To Tom's astonishment, the view penetrated the clouds!

He could now see the surface of the planet itself. The sight was horrifying. Vast stretches of the planet's surface were covered

in black, hardened lava, dotted by active volcanoes. In a few scattered patches Tom could see the ruins of once-mighty cities. The southern portion of the planet held a large sea that Tom guessed was made of liquefied methane gas. As Tom watched, the robot adjusted the megascope to provide a view beneath the surface of the methane sea. At the bottom of the ocean Tom could see cities that had clearly been blown apart in a terrible war. Nowhere on the planet were any signs of life.

Tom turned his head from the nightmarish scene and looked at the robot. "What happened there?"

"At one time that was the home world of your space friends, Mr. Swift. Then the group you know as the Space Legion attacked their world and destroyed it. Those same creatures are still out there, and they have not changed. Do you see all of that destruction? That is exactly what they want to do to your own world. If you continue on this expedition, you will be dooming your world to this fate."

Tom opened his mouth to say something, and then closed it again. He turned back to look at the ruined cities that were depicted in the megascope's viewer.

"I know you do not trust me, Mr. Swift, so do not take my word for it. Go ahead and make your trip to that distant point of light. Find out for yourself what happened on that once-fertile world. See if what I told you is true or not."

With that, a shower of sparks suddenly flew out of the robot's upper torso. The glowing eyes in the robot's head went dark, and the machine clattered to the floor.

CHAPTER VII: THE FATE OF THE WORLD

THE next afternoon a small crowd of people had gathered in Tom's private lab. Present in the meeting were Bud Barclay, Harlan Ames, Chow Winkler, and Tom's father, Tom Sr. After the startling events of the previous night Tom had arranged the gathering so that they could discuss what had happened.

Tom was exhausted. After going home to grab a few hours' sleep he went back to the lab and spent hours examining the robot that he had disabled. He wanted to form an opinion on its likely origin before briefing everyone that afternoon. It now lay in many pieces on large a table in the middle of the lab.

Chow looked at it with keen interest. "Well brand my circuits, but that thing just don't look a mite friendly! Where'd you say it came from?"

Tom sighed. He was tired from long hours of work and exhausted from sleep deprivation. He had been working too hard for too long. "That's what we're here to discuss, Chow." He the nodded toward Ames, who rose from his chair, walked over to a terminal embedded in the wall, and pressed a button. A projector then displayed the events of the night before on a large screen. The security system in the observatory had captured the entire exchange.

Harlan Ames had reviewed the tape earlier in the day, but this was the first time the rest of the group had seen it. Tom Sr. was left with a puzzled look on his face. Bud appeared to be shocked. Chow was skeptical, and voiced his doubts. "That robot is plum loco, Tom! I knowed a steer like that once – he was jes' clear out of his head. Tasted good, though. But there ain't no way that

infernal contraption is from the future.”

Tom Sr. held out his hand. “Let's not get ahead of ourselves, Chow. Tom, you've obviously spent some time examining the robot. What are your findings?”

Tom Jr. let out a long breath. “I've never seen anything like him, Dad. He is far more sophisticated than my giant robot. I haven't even heard of any *attempts* to build an intelligent, autonomous machine, let alone of someone achieving it with such tremendous success.”

Tom Sr. interrupted. “So it's not remote controlled?”

His son shook his head. “I've only started scratching the surface on its design, but it's clear that the machine was designed to operate on its own accord. It has intelligence, Dad! The power supply is unbelievable, and the microchips have such tiny circuitry that I can't even see all of them with a microscope. The technology to create this machine just doesn't exist, and frankly, it probably won't exist for at least another century. But there's more to it than that.”

Tom walked over to the table and flicked on a powerful microscope. “I've wired up the microscope to the projector so that you can see what it's seeing,” he explained. Tom then removed a small microchip from the robot and placed it under the microscope. There, etched onto the surface of the chip, was the Swift Enterprise logo!

Bud whistled. “I've sure seen that before! That looks pretty convincing to me.”

Chow shook his head. “I ain't buyin' it, Tom. You've designed some ugly contraptions in the past, but that thing there beats all. You just ain't got it in you to make somethin' that looks like it came out of a graveyard.”

Tom was taken aback. “Ugly contraptions? What are you talking about?”

Bud stifled a laugh by pretending to cough. “Um, Tom, let's talk about that later. The evil killer robot seems more pressing at the moment.”

Harlan Ames spoke up. “I don't think it tried to kill anyone,

Bud. Did it?"

Tom shook his head. "It didn't try to harm me, although it certainly could have. I heard that the guard at the gate was only temporarily disabled, and the astronomers that were imprisoned in the basement were unharmed. The machine could have done far more damage than it actually did."

Tom Sr. started at the remains of the robot thoughtfully. "So you're saying that there is nothing on that table that would indicate the machine is not, in fact, from the future."

Tom Jr. nodded. "That part is easy to believe. What's impossible to believe is that I built it and sent it back in time. First, as Chow said, I don't build things that look like that."

His father nodded. "That's true, Son, but the robot claimed to have been built decades in the future. A lot can happen between now and then. There may be other circumstances that we are unaware of."

"That's true, Dad. But what really gets me is the way the robot behaved. If I built something and sent it back in time there's no way I would have it commit criminal acts. Why not just have the robot approach me, explain what is going on, and ask for help? Why not present some actual evidence that its story is true instead of leaving us guessing?"

Harlan Ames laughed gruffly. "That robot is quite a piece of evidence, Tom. It's even got our logo on it. It'd be hard to ask for more."

"I know, Harlan," Tom replied tiredly. "But the robot claimed that I sent it back in time! That I *built a time machine!* That's crazy. There is absolutely no way to travel back in time. It's completely impossible!"

"Impossible is a strong word," his father cautioned. "You don't know everything, Son. In thirty years it is entirely possible that you may have learned something that would open up new possibilities."

Tom Jr. looked at his father, puzzled. "It sounds like you actually believe its story."

"Not necessarily. I just don't think we can simply dismiss it

out of hand simply because it seems incredible. It may be telling the truth. If it is, the potential consequences are dire.”

Bud finally spoke up. “What are your thoughts, genius boy? Do you think it's all just a trick?”

“That's the thing, Bud. Who would want to do this, and why? Who would even have access to this kind of technology? What could possibly be gained?”

“Let's think this through,” Harlan replied. “There are a couple possibilities. One is, your space friends actually did send the message. If you complete the mission you will save their lives and everyone will be happy.”

Tom nodded. “That's one possibility. In that case the enemy would be someone who doesn't like the space friends.”

“The Space Legion, maybe,” Bud said.

“Or perhaps some other party we are unaware of,” Tom Sr. replied.

Harlan nodded. “But that leaves us with a big problem. If an alien race built this robot, why are they merely *asking* Tom to not help the space friends? Barring Tom's luck with an EMP emitter, I'm pretty sure that gadget on the table can crush just about any defense we've got. Seems to me that if you had an army of those things you could just barge in and take whatever you wanted. For that matter, you could just invade the Earth and be done with it.”

Tom nodded. “That's what bothers me. If the robot isn't from the future then we're not left with any other real possibilities.”

“Which brings us back to time travel,” Harlan continued. “A second possibility is that the robot really did come from the future in order to prevent you from making a terrible mistake. If you complete the mission you will doom our entire planet to total destruction.”

“I've spent all day worrying about that,” Tom confessed. “The destruction I saw last night looked very real. I have a feeling it will look even worse in person.”

Harlan continued. “A third possibility is that helping the space friends was the right thing to do, but someone from the future wants to stop you for some reason we don't know. In that case the

robot would come from some future enemy.”

Tom sighed. “I just find it very hard to believe that we've got a case of time travel on our hands.”

“You and me both, boss,” Chow replied.

Tom Sr. nodded. “I can understand your feelings, Tom, but the consequences for making the wrong decision are very dire. You're going to need to be very careful here. One false move could doom our world and everyone in it.”

“That's the thing about being Tom Swift,” Bud said. “Most people's idea of a big problem is having trouble paying your bills. When Tom has a big problem the entire world is in danger.”

Tom shook his head. “I guess you can't have it all, Bud. Somebody's got to save the planet!”

“So what are you going to do?” Harlan asked.

“The only thing I can do,” Tom replied. “I'll go to the extrasolar planet and see what I find there. One way or another, I should be able to tell if the robot was telling the truth. Once we have all the facts we can make our decision.”

Tom's father nodded. “That sounds reasonable, Son.”

“Jest don't go anywhere without me, pardner,” Chow said.

Tom smiled. “I wouldn't dream of it!”

A few hours later, Tom and Bud were in the newly-installed underground test chamber. Tom had lowered the kronolator into the tunnel and was making a few last-minute adjustments.

Bud rubbed his hands together with glee. “I can hardly wait to see this thing move! How fast do you say it will be able to reach the end of the tunnel?”

Tom grinned. “If all goes well it should make the trip in about a microsecond, Bud. I think I can get more speed out of it than that, but I don't want to push it just yet.” Satisfied, Tom disconnected a large electrical cable that ran from the device to the tunnel wall.

“I'm guessing it's fully charged?”

Tom nodded. “That should do it, Bud. Are you ready?”

“Ready and waiting, skipper!”

Tom and Bud retreated to a viewing area that was protected by a thick, transparent pane of indestructible tomasite. The two of them sat down at a table and donned protective goggles. Tom checked the monitors on the table to ensure that no one else had wandered into the tunnel. Once everything was in place Tom removed a remote control device from his pocket and flipped a switch.

The kronolator disappeared in a blinding white flash of light!

Tom looked out the window, puzzled. He checked the monitor but didn't see anything. "Hey Bud, where did it go?"

"You mean it's gone?"

Tom nodded. "It should be at the other end of the track, but it's not. It's just – disappeared!"

Bud opened the door and rushed outside the viewing area. "I don't see it anywhere," he called back.

Tom went out and joined him. "That's strange," he said. "Where could it have gone?"

While they were standing there, they were startled by a second flash of light. The kronolator then reappeared, exactly where it had been a few minutes before!

Tom groaned. "Look at that – it didn't go anywhere! It left the time stream, all right, but it didn't actually move. What's wrong with it?"

Bud shrugged. "At least you've built a very effective cloaking device! We should bring one of those things along with us the next time we need to do some covert operations."

Tom shook his head. "I don't get it, Bud. It doesn't make any sense." He stared at the device and frowned. "What am I missing?"

Tom and Bud spent the remainder of the day tinkering with the device, but to no avail. When they both went home that evening Tom had been unable to get it to budge so much as an inch. The next morning, however, Tom woke up feeling refreshed and energized. After eating a quick breakfast he raced back to the lab. Bud was already there waiting for him.

"Have you got the problem cracked, genius boy?"

Tom nodded. "The problem was so obvious, Bud. I don't know why I didn't see it before. The purpose of the machine is to take us in and out of the time stream, correct?"

"I think so, skipper."

"Well, Bud, that's a nice thing to do, but just manipulating the flow of time isn't going to actually *move* you anywhere. Once you're in motion this will help you get there quicker, but you've got to actually have some initial momentum first."

Bud nodded. "Makes sense. But I thought you already had that problem licked! That's why you've got all these repelatrions all over it."

Tom smiled wryly. "That's right, Bud. But I forgot one important detail. The repelatrions only kick in *after the device has left the time stream*. But when they're taken out of time the repelatrions can't find anything to push against, so our ship won't move! I need to have it in motion *before* engaging the kronolator."

"Sounds good to me! Let's give it a whirl."

Tom reconfigured his invention and then the two retreated back to the viewing area. After making sure that the tunnel was empty Tom removed the remote control from his pocket.

"For this short test its initial speed is relatively unimportant," Tom explained. "When we're in outer space it will become more of an issue because there are limits as to how much the kronolator can adjust time. We'll need to get up some a fairly reasonable speed before engaging it. That shouldn't be a problem, though."

Tom engaged the repelatrions and watched. When the kronolator hit 30mph he flipped the switch. The tunnel was filled with a blinding flash of light, and the kronolator instantly appeared on the other side of the tunnel!

Bud slapped Tom on the back. "Looks like another astounding success!"

Tom scanned the numbers that were displayed on the terminal that was sitting on the table. "I think so, Bud. It'll need a bit more tuning, but I think we have the problem licked."

"So what's the next step?"

“Dad's almost finished installing his reactor on the *Challenger*. I'll wrap up my work here and then have Arv build a production model of the kronolator. If that tests out we'll install it on the ship, give it a test run, and then leave for the extrasolar planet!”

CHAPTER VIII: MISSION TO MARS

THE next few days were filled with a flurry of activity. Tom Swift rapidly completed the final adjustments to the kronolator and gave Arv Hanson the blueprints, who promised Tom a production version of the unit by the end of the week. With that in the pipeline Tom began laying the groundwork for his first test flight.

Tom and Bud spent several hours mapping out the details in Tom's private office. "As soon as the kronolator is built we're going to fly it down to Fearing Island and install it on the *Challenger*," Tom said. Fearing Island was located just off the East Coast and been given to Swift Enterprises by the United States government. Over the years it had served as the Swifts' primary launching facility, as well as the construction yard for Tom's fleet of spaceships.

"Are you going to use the *Sky Queen* to get it there?" Bud asked, referring to Tom's giant nuclear-powered aircraft.

Tom nodded. "The production kronolator that Arv is building will be quite a bit larger than the model I've got in my lab. The *Sky Queen* is one of the only planes in the world that can carry that large a payload."

"So what are your plans for testing your new invention?"

"I think we should test it in stages, Bud. We'll start by flying it from Fearing to the Outpost in Space, using the *Challenger's* new fusion reactor as its energy source. Once we've verified that piece of the ship we'll use the kronolator to fly to the Moon, and from there on to Mars."

Bud nodded. "Say, skipper, have you ever thought of

renaming your Outpost in Space to something a little more gripping? Why not call it the sky wheel?"

Tom blanched. "The sky wheel, Bud? Are you kidding? First off, it's not in the sky, it's in space. Second, it's not a wheel. It doesn't even *remotely* look like a wheel! It's an outpost, and it's in space. Who would even think of calling it a 'sky wheel'?"

His friend shrugged. "Probably some editor somewhere. You're right, Tom – don't worry about it. You're fine."

Tom turned his attention back to the plans laid out on his desk. "I know for sure that Chow wants to come along on our test run, and I think Dad would like to be there too so he can monitor the performance of his fusion reactor. We'll bring along a small crew as well. If all goes as planned it'll just be a short day trip. We should be back by nightfall!"

"I can hardly wait!" Bud said excitedly. "Are you going to tell your space friends that we're coming?"

Tom shook his head. "I'll leave that as a surprise. Once we're in orbit around Mars I'll give them a call and let them know that we're ready to leave on the expedition. I'm sure they'll notice our presence in orbit!"

Bud smiled. "It'll probably come as quite a shock! I knew you could do it, Tom. But, say, do you really think that your space friends are still out there?"

Tom shrugged. "I don't know what to think, Bud. I'm trying to not dwell on it until I can get out to the extrasolar planet and see for myself. Dad's right – the stakes are too high for me to just guess and hope for the best."

"You know, Tom, we've got to quit calling it the 'extrasolar planet'. There has to be some better name we can use."

"If you even mention calling it the 'City in the Stars' I'll throw something at you," Tom warned. "I'm open to hearing honest naming suggestions, but you've been ridiculous lately! I don't know what's gotten into you. Incidentally, you never did tell me what inventions of mine you thought lacked aesthetic appeal."

Bud looked embarrassed. "Well, Tom, I hate to mention it, but did you notice that Uncle Ned had your atomicar completely

remodeled before it was commercially released? I think one car magazine called your original design the 'Edsel of the Skies'."

"Now that's not my fault, Bud! The original concept was based on a sketch by Orton Throme, remember? I had nothing to do with it!"

"The design for the polar-ray dynasphere was one-hundred-percent yours, though, buddy," Bud retorted. "Orton didn't get anywhere near that baby."

"That was a highly functional design! It fulfilled its purpose admirably. I never intended it for commercial distribution!"

Tom and Bud looked at each other, and then both burst out laughing. "Point taken," Tom said.

"Agreed," Bud replied. "But what are we going to call this new planet?"

"Hmmm. Well, people did used to live there, Bud. I'm sure it must already have a name."

"That's no fun," Bud replied. "How about 'Bartonia' in honor of your grandfather?"

"We already named a piece of space real-estate after Barton Swift," Tom said. "How quickly some of us forget!"

"Oops, you're right," Bud said. "Ok. What about Thanatos? In Greek mythology he was –"

Tom interrupted him. "I'm all read up on my mythology, Bud. Thanatos it is! And if anyone doesn't like it I'll be sure to give them your number."

Arv Hanson was better than his word and had Tom's kronolator ready for shipping by mid-week. Elated, Tom had it loaded on board the *Sky Queen* and was soon flying it to Fearing Island. Bud came with him on the trip and acted as his co-pilot.

"Chow and the rest of the group will join us in a few days," Tom explained, as he flew the giant triple-decker aircraft out over the Atlantic. "It'll take some time to install the kronolator."

"I'm right with you, skipper. You know, it's amazing how far we've come! It seems like only yesterday we were strapping into our seats on the *Star Spear*, about to head into space for the first

time.”

Tom nodded, remembering their first orbital journey. “It sure does! And here we are, about to become the first humans to ever leave the solar system. How long ago was that trip, anyway?”

Bud shrugged. “Beats me! I never was very good with calendars.”

An hour later, Tom landed his plane on Fearing Island. With the help of the base staff he quickly unloaded his invention and moved it into the *Challenger*. A large hangar had been cleared out in the center of the giant spacecraft, and that was where Tom had decided to install his invention.

Bud was shocked at the size of the kronolator. “You weren't kidding about this thing, were you, boss?” The giant machine was fully three times as large as its predecessor, and at thirty feet high it towered over the two young men. On the outside the device was coated with a smooth, polished layer of bronze, dotted occasionally with access panels, extremal connectors, and a variety of switches. Bud could see the access points where the giant power cables would be connected.

Tom eyed the device thoughtfully. “It takes up a lot of space, but we've done about all the miniaturization we can. Fortunately we built a lot of cargo capacity into the ship so we're not hurting for room.”

“Are you going to outfit all of your ships with one of these gadgets?”

Tom shrugged. “I might. Honestly, I haven't really thought about it. So far it hasn't even been field tested! It's a bit premature to think about mass-producing it.”

“Just out of curiosity, how much does one of these things cost?”

Tom looked at his best friend and laughed. “Bud, if you have to ask, you can't afford it. Just be glad Uncle Ned had a good year! Now are you ready to help me get this thing working?”

Bud smiled. “That's my favorite part! You give the orders and I'll make it happen. Where do we start?”

With Bud's help, the two of them were able to get the kronolator installed in record time. By the following week Tom was able to call his father and tell him that everything was ready for the big test. The next morning he and Chow Winkler flew to Fearing Island in a private jet. Tom and Bud met them at the airfield.

“Well brand my stars, pardner, but I'm rarin' to go!” Chow exclaimed, as soon as he got off the plane.

Tom grinned. “You and me both, Chow! Is anyone else coming?”

Tom Sr. shook his head. “The rest of the family will be here when we leave for Thanatos, of course, but since this is just a trial run they decided to stay home. Your mother and sister did wish you the best of luck, though.”

“So you really are coming with us to Thanatos, Dad?” Tom Jr. asked.

“That seemed to be a wise course of action,” Tom Sr. replied. “You are about to take an untried piece of technology farther than any man has ever been from our planet. In the event that something goes wrong you may need all the help you can get. Besides,” he said, his eyes twinkling, “I think it would be fun! I haven't gone on a trip like this in years.”

“That's terrific news, Dad!” Tom was glad that his father would be joining them. Not only did he value his expertise, but they enjoyed spending time together – something that was becoming increasingly difficult to do as Tom got older.

The four of them got into a small electric runabout, and Bud drove them over to the landing pad where the *Challenger* was waiting for liftoff. The giant spaceship towered far overhead and glittered with a golden sheen in the morning sun. Tom had designed the ship to take full advantage of his repelatron lifting technology. The box-like main section of the craft was centered in the middle of three metal rails, each positioned along a different axis and connected in such a way as to allow the main section to rotate freely in the center. Repelatron dishes were mounted on the rails at strategic points and could move along

them in order to provide a repulsive force in any direction.

“I still say it looks like a giant orange gyroscope,” Bud said.

Tom nodded. “Isn't it great? I love gyroscopes! Where would we be without them?”

Chow shot Tom a peculiar look, but said nothing.

“What size crew are you bringing, Son?” his father asked.

“I think we could run the ship by ourselves, but I'm bringing along a full crew, just in case. We're scheduled to lift off in about thirty minutes.”

After reaching the spaceship they parked the runabout and walked toward the ship. Once they were standing underneath it Tom removed a control device from his pocket and pressed a button. An elevator immediately descended from the flight deck to the bottom of the vessel, where the group entered it and rode it into the ship's interior. The four men then made their way to the control deck, where the crew was busy making last-minute system checks.

“Why don't you have a captain's chair up here, Tom?” Bud asked.

Tom scratched his head. “I never really thought about it, Bud. What would I do with one?”

“You could sit in it and give orders! How can you possibly say 'Ahead, warp factor one' if you don't have the proper chair?”

Tom sat down in a nearby chair and shook his head. “First, Bud, going only one times the speed of light would be far too slow. We don't have three centuries to get to Thanatos! Second, the gravity on this ship is kept at 1 G at all times. You don't need to strap in, and you don't need to sit in any particular place. Any chair will do. You could even stand if you wanted!”

Bud shook his head. “I still say you need your own chair.”

Tom shrugged. “My favorite seating accommodation consists of a wooden stool at a workbench, but that's just me. I'll take that over a captain's chair any day.”

Tom Sr. smiled. “I'll second you on that, Son.”

At precisely 0700 hours, crewman James Nathan reported to Tom. “Everything is ready for liftoff, sir. The Outpost in Space

has been notified of our intended arrival time.”

Tom nodded graciously. “Then take us up, James. And thanks.”

James returned to his post. Almost imperceptibly, the craft rose off the ground and soared into the sky. In the distance they could hear the faint hum of the repelatrions, but other than that the launch was completely silent.

Tom's father was standing behind an operator, watching the readouts from the fusion reactor. “Everything looks good so far,” he reported.

Chow settled back in his chair and relaxed. “Now this is what I call a smooth ride,” he said.

Like clockwork, the spacecraft reached the Outpost exactly on time. Tom's giant silver space station dwarfed the *Challenger*. It was composed of twelve massive cylindrical sections, each of which was connected at one end to a central circular hub. The sections were a hive of activity. Tom could see several vessels entering and leaving the vicinity. Most of these were cargo vessels, busy ferrying the solar batteries that were manufactured at the station down to Earth.

Bud nudged Tom Sr. “Don't you think it looks like a sky wheel?” he asked.

“Stow it, Bud,” Tom Jr. warned.

Bud stifled a laugh. “Anything you say, boss.”

Tom looked over the control terminals with satisfaction. “So far everything seems to check out,” he announced.

His father nodded. “I haven't seen any sign of trouble with the power source.”

“Then let's attempt the next leg of the journey.” Tom Jr. walked over to a control terminal and sat down. After carefully reading the figures he relayed a series of instructions to the flight commander. Once he was satisfied he turned to his friends to explain what was going on.

“I've directed the crew to get us up to 30,000 miles per hour, which will take about another ten minutes. Once we hit that mark I'll engage the kronolator, which should take us to the Moon in

less than a second. After we reach the Moon we'll orbit it long enough to make sure that nothing went wrong and then we'll try for Mars.”

“Let's do it!” Bud said enthusiastically.

As the ship crept toward the mark Tom watched the *Challenger* like a hawk. He was nervous, but felt confident that the system would work as he intended. *It's just got to work!* he thought. *So many lives are depending on it. I've got to find out what's really going on while there's still time to do something about it!*

A moment later James Nathan approached him. “We're ready, sir,” he said.

Tom nodded. He carefully typed in a series of figures into the terminal and then flipped a switch. As he did so, the control deck was suddenly filled with a brilliant white light. A second later the light disappeared. Outside the window Tom saw the lunar surface!

The crew broke into cheers. Tom Sr. clapped his son on the back. “Well done!” he said.

“I think you've just broken an all-time speed record!” Bud chimed in.

Chow looked out the window in amazement. “Well if that don't beat all.”

Tom held up his hand. “I'm going to run a few system checks before I get too excited, guys. But thanks!”

The system tests bore out what Tom had hoped. Everything was operating normally. Tom breathed a huge sigh of relief and sat back down at the console.

“James, take us out of orbit, and chart us on a course to Mars. Bring us up to 150,000 miles per hour, and notify me when we've reached that speed.” James nodded, and proceeded to carry out the instructions.

Tom turned around and smiled. “We've got about ten minutes before we're ready. Then – we'll see!”

Bud smiled. “This is going to be great! After all, what's the worst thing that could happen?”

Tom stopped and looked thoughtfully into the distance. “Well, if – ”

“Never mind,” Bud said quickly. “Forget I asked.”

Right on schedule, James announced that they had reached their target velocity. Tom began typing into the terminal in front of him.

“How long will we be engaging this time?” Tom Sr. asked.

“About a minute,” his son replied. “We could go faster, but I don't want to push it on our first trial run.”

Tom Sr. nodded, and gazed calmly out the window. Tom raised his hand over the switch. “Here goes nothing, guys,” he said. He flicked the switch.

Once again, the cabin was filled with a brilliant white light. This time, though, the light slowly faded. Outside the crew could only see blackness. There was not a star in sight.

Chow looked at Tom curiously. “Where did the stars go, boss?”

“It's an effect of the kronolator,” Tom explained. “You can't see them when we're in transit because the kronolator takes us out of normal spacetime. They'll be back when it goes off.”

Tom was watching the seconds tick down when suddenly an alarm went off. “We've got trouble, skipper!” a crewman yelled. Tom's eyes glanced over to the man's station and then widened in shock. A fire had broken out in the lower decks!

Tom knew that in the oxygen-rich environment of the ship the fire would quickly spread out of control. “Quick!” he yelled. “Kill the power to – ” But before he could finish the ship was rocked by an explosion!

CHAPTER IX: COUNTDOWN TO LAUNCH

TOM Swift scrambled to his feet after being knocked across the room by the explosion. “Is everyone all right?” he yelled. A chorus of voices answered him. There were a few bruises and sprains, but no one appeared to be seriously injured. Tom then returned to the terminal and tried to determine the exact location of the fire. Meanwhile, James Nathan killed the power to the kronolator, and the ship dropped back into normal space. Outside the crew could see a host of stars, but no planets.

“The fire is on the third level, just down the corridor from the kronolator,” Tom shouted. “Let's go!” Crewmembers raced to the staircase and started descending to the level of the blaze, with Tom and Bud leading the way. When they finally reached the right hallway, however, a raging inferno blocked their path!

“I thought this ship had a sprinkler system,” Bud shouted over the roar of the fire.

“It'll take more than that to put out this blaze!” Tom replied. “I've got an idea.”

As the crew raced to retrieve fire extinguishers, Tom got on the ship's intercom system and asked everyone to vacate that level of the ship. After receiving word that the floor had been safely evacuated Tom then opened the hangar doors. The level's remaining air was immediately sucked into space, which extinguished the fire.

Tom sighed with relief. “I'm glad we put the kronolator in a repurposed hangar! If this fire had broken out anywhere else we would have had a real problem on our hands, and there's no telling how many people might have been injured. The ship's

firefighting system was just not built to handle this fierce a blaze. It needs a serious design review.”

Tom re-sealed the third level and pumped oxygen back into the hallway. Once that process had completed and the temperatures had returned to acceptable levels he opened the doors and allowed the crew to access the area.

Bud whistled. “It looks pretty bad, skipper.” Tom had to agree. The fire had gutted nearly everything in sight, and what remained looked like a war zone. Most of the walls had been destroyed, and all that was left of the floors was the metal safety layer that separated the ship's decks. The fire had swept through more than a dozen rooms, completely destroying their contents.

“A few more feet and it would have reached the room with the kronolator,” Tom said thoughtfully. “The fire followed the power lines and was headed in that direction.”

“Did it damage the fusion reactor?” Bud asked.

Tom shook his head. “It's located on the floor below this one. The fire didn't touch it.”

As the crew cleaned up the debris Tom quickly located the source of the problem. “Do you remember the superconducting wires we installed the other day, Bud?” he asked.

His friend nodded. “I think it took us all day to run those things from the reactor to the kronolator. They're big and heavy, and all that shielding was a real pain to work with.”

Tom nodded. “That shielding has a purpose, Bud. In order to become a superconductor the wires have to be cooled to hundreds of degrees below zero. This requires a lot of special coolant, which is held by all that shielding. The fire happened because one of the wires sprung a pinhole leak, which allowed the coolant to seep out. This dramatically raised the temperature of the wires and reduced their ability to carry power, which led to a raging inferno. The explosion happened because the fire spread to one of the junction boxes, which ignited and blew apart half the floor.”

“I get it, Tom. So what are we going to do?”

“Going forward, I can coat the wire cases in tomasite. That should keep leaks from happening again, and also provide a bit of

extra durability. Unfortunately for us, though, this whole section of the ship is gutted, and I don't have the necessary equipment on board to fix it. We'll have to turn around and head back to Fearing for repairs, and try the test again another day.”

“At least we made it this far!” Bud said. “The trip hasn't been a total loss.”

“That's the sad part, Bud. The reactor and the kronolator worked just fine – even better than I'd hoped. It's the wiring that failed us. The good news is that's easily fixable. In a couple days we'll be out here again!”

The *Challenger* had not made it far from the Moon when the incident happened, but it still took almost twelve hours to return to Earth using the much-slower repelatron drive. When the ship landed at the spaceport Tom gave orders to have it repaired and its wiring coated with tomasite.

Two days later, the ship was ready for another test run. Tom's father had remained at Fearing Island while the repairs were completed, as had Chow. This time when the ship was launched Tom gave orders to have it taken directly to Mars.

“I've taken the precaution of having extra supplies brought on board just in case something happens again,” Tom told his friends. “If we get to Mars and have another fire I don't want to take a week to get back.”

“You and me both, boss,” Chow replied.

When the *Challenger* got up to speed James Nathan alerted Tom, who engaged the kronolator. This time the vessel engaged the drive without incident. A minute later it dropped back into normal space. Outside the control room the crew could see the planet Mars!

Tom smiled. “Welcome to the red planet, gentlemen!”

Bud spoke up. “It looks like you've got a message coming in!”

Tom walked over to the console and saw that space symbols were being beamed to them from the planet below. “It looks like our friends are sending us a message of congratulation! They must have been monitoring our journey.” Tom sent them back a quick message of thanks and asked them how they were doing.

Their response concerned him greatly.

“They claim they are dying, Dad!” he said grimly. “They say they don't have much time left. Things are worse than ever.”

Tom's father read the message and nodded. “That is consistent with their earlier communications. We need to find out the truth quickly.”

Tom agreed. “Since this test run was successful I don't see why we can't leave for Thanatos tomorrow morning. We'll need to make sure that we have adequate supplies, but that shouldn't be a problem.”

“I agree, Son. Time is running out.”

The *Challenger* was brought back to Earth without incident, and Tom spent the remainder of the day making all the last-minute preparations necessary for the journey. Hank Sterling flew a supply of freshly-made repela-suits to Fearing to be placed on board the ship, and Chow made sure that the galley was well stocked.

“If somethin' goes wrong it's a mighty long walk home, boss,” Chow explained. “I ain't aimin' to be hungry on this trip. Besides, we've got a lot o' mouths to feed.”

Tom looked at the crates of food the cook was bringing on board the ship and nodded in approval. “Good thinking, Chow. We'll be on our own out there. Anything we don't bring we just won't be able to have.”

“Why don't you pack along one o' those matter-makers of yours?” Chow asked. He was referring to Tom's space solartron, which was able to convert sunlight into any form of matter.

Tom laughed. “There's not going to be any sunlight where we're going, Chow! Without sunlight it's useless. I'm afraid it will have to stay right here in our solar system.”

It took the entire day to finish loading the ship with supplies. By nightfall Tom was satisfied that nothing had been overlooked, and scheduled the launch for 0800 hours the next morning.

The remainder of Tom's family flew to the island that evening so they could be there to send the *Challenger* off on its mission. Chow prepared an enormous dinner for all of them, and they

laughed and talked well into the night. Present at the dinner were Tom's parents, Tom Sr. and Mary Swift; Tom's sister Sandra and her best friend Phyllis Newton; and Bud Barclay. Even Ned Newton had flown in from California for the occasion.

"This is a historic moment, Tom," Ned announced. "Never before has any private individual spent so much money in such a short amount of time."

Tom Sr. shook his head and smiled. "He treated me the same way, Son. You should have heard him complain when I was inventing the television."

"You nearly bankrupted the company!" Ned protested.

"Spoken like a true banker," Tom Sr. replied. "I'm pretty sure that happened to be one of most profitable inventions ever."

"It did turn out all right in the end," Ned admitted, smiling. Ned Newton and Tom Sr. had been best friends for decades. In their youth they had founded Swift Enterprises and had many adventures.

Bud spoke up. "This really is a special occasion, Tom. You're about to make the trip of a lifetime! You should say something memorable about boldly going to unvisited places, or something like that."

"Try checking the television, Bud," Sandy said. "I bet they'd have just the phrase for you! It's hard to find a better source of overdramatic lines."

"One of these days I'll get a TV installed in my office," Tom promised. "Is there anything good on it?"

"I didn't say that," Sandy replied. Tom shook his head and smiled.

Tom's mother spoke up. "We're all very proud of you," she said quietly. "I know you'll be careful, but I won't say I'm not going to be worried about you."

"Do come back in one piece, Tom," Phyl said. Tom detected a worried note in her voice.

"We'll be fine," Tom said reassuringly.

"I know, Tom," she said hesitantly. "But you'll be so far away, and you're going to such a dangerous place. If anything

should happen – ”

Sandy interrupted her friend. “If anything happens we'll go after them, Phyl. One way or another they *will* be coming home!”

“I'll leave the keys for the *Cosmotron Express* in my desk,” Tom said teasingly.

“We will be in constant communication with Fearing,” Tom's father pointed out. “The private ear system can easily span the distance between Earth and Thanatos. If something goes wrong we'll be in touch.”

“I wouldn't worry about it, girls,” Bud said. “After all, danger is Tom's middle name! By now risking his life in places only a fool would go is old hat to him. I think he's even got a patent on it.”

Tom shook his head. “You're not helping me here, Bud!”

After the party had come to an end, everyone headed off bed. Before Tom turned in, however, he took his father aside to speak with him privately. “Have you had any more thoughts about what we'll find on Thanatos?” he asked.

Tom's father nodded. “Just this. Two different parties have asked you to do two different things with an alien device on that planet. Whatever that machine may be, it clearly has great power. My hunch is that if you can learn the true purpose of that device then you will know who you can trust.”

“It sounds like it's been there for ages. It may not even exist anymore!”

“That is a possibility, Son. If that's true then all of this becomes a moot point. But remember, both parties that have contacted you have acted as if the machine is still there. Whatever the truth may be, someone must have reason to believe it still exists. No, I think you'll find it – and when you do, the real adventure will just be starting.”

Early the next morning the crew entered the *Challenger* and prepared for launch. As the chief flight officer James Nathan made the final checks, Tom told his family goodbye.

“Don't forget to write, Tom,” Phyl said.

Tom laughed. "We'll be home before you know it."

"I don't think the postal service delivers mail that far," Bud said. "We may have to wait until we get back home to send you a postcard."

"You're awful," Sandy protested.

Tom nodded in agreement. "This is what I have to put up with every day," he said teasingly.

"You will be careful?" Mary Swift asked her husband. Tom's father nodded. "We're taking every precaution, dear. Don't worry about us."

"We are ready for departure, sir," James Nathan announced.

Ned Newton bade Tom's father farewell and then led the group back to the elevator and off the ship. Once they had cleared the launchpad Tom gave the order to depart.

As the ship silently lifted off from Fearing Island Chow spoke up. "How's this gonna work, boss? Are we just gonna zip right there lickety-split?"

Tom shook his head. "Not this time, Chow. Thanatos is so far away that we're going to have to make the trip in stages. Once we get up to speed we'll engage the drive for about an hour. We'll then check our position, give the kronolator's capacitors a chance to recharge, and then make another jump. It'll take us a total of six jumps to get there. The total flight time should be about nine hours."

"Will there be an in-flight movie today?" Bud asked innocently.

"Only in first-class," Tom quipped. "You, however, will be traveling in the baggage compartment."

"Ouch," Bud winced.

Tom's father grinned. "I'll stay up here and keep an eye on the reactor. I'm not expecting any problems, but it will keep me occupied."

James spoke up. "We are ready for the first leg of the journey, skipper."

Tom nodded. He walked over to his control terminal, sat down, and read the numbers on the display. After he was satisfied

that everything was in order he flipped the switch that engaged the kronolator. The room was filled with a brilliant white light – and they were off!

CHAPTER X: ACROSS THE DEPTHS OF SPACE

“THE *Challenger* is in your hands,” Tom told James Nathan. “I’m going downstairs to my lab. Let me know the moment you see any signs of trouble.”

James nodded. “Will do, sir.”

“I reckon I’ll be headin’ down to my galley,” Chow announced. “Gotta rustle up some vittles for lunch! Mebbe this’ll be a great time to introduce y’all to my famous rattlesnake stew.”

Tom gasped in surprise. “You actually brought *rattlesnakes* on board the ship?”

Chow grinned. “Now lookee here, Tom. All these years I’ve been tellin’ you about my most famous dish, and you ain’t never tried it once! You gotta be a bit more open-minded. You might like it!”

“He does have a captive audience,” Bud pointed out. “I don’t see any other restaurants around here.”

Tom looked at Chow with a slight grin on his face. “Just remember, Chow, it’s a long walk home! This might not be a good time to irritate the crew. I don’t think they have taxis where we’re going.”

As Chow headed down to his galley Bud grabbed Tom by the shoulder. “Hey – I’m coming with you, genius boy. I’m not about to spend hours sitting up here twiddling my thumbs!”

“Even if I got you a captain’s chair?” Tom asked innocently.

Bud shook his head. “Only if I can use it for napping.”

“Then come with me, Bud. I’ve got an idea for another invention!”

Tom took the elevator to his private laboratory and was soon

unpacking boxes of electronic parts. Bud grabbed a chair, brought it over to the workbench, and sat down. “So what’s the idea this time, genius boy?”

“Well, Bud, I’ve been thinking. Twice now we’ve been attacked by machines that were cloaked with holograms. Wouldn’t be nice if there was a way we could detect them *before* they nearly killed us?”

Bud nodded. “I could see some usefulness there. But how are you going to catch them?”

Tom took a pencil out of his shirt pocket and grabbed a piece of paper. “I’m not exactly sure yet. I was able to spot the robot by the shadow it cast, but there’s got to be a better way to do it. Maybe I could hit it with some sort of scanning beam...” His voice trailed off, and he began rapidly sketching a prototype out on paper.

An hour later he put his pencil back into his pocket. “That should do it,” he said quietly.

“Already?” Bud said. He looked at the stack of notes on the desk with amazement. “Wow! I must have dozed off somewhere around page three. So how does it work?”

“It’s pretty simple!” Tom said. “All it does is fire a series of brief, high-intensity pulses at the target. These pulses will strike the target and reflect off of it, allowing us to create a picture of what is really looks like.”

“So it’s kind of like radar! I get it. But say, couldn’t you just x-ray the thing?”

“X-rays go right through the object, Bud. That’s why you need film on the other side to create a picture. What we need is something that can go right through the hologram but reflect off of the object underneath.”

“Makes sense. Is this something we can build right here?”

Tom nodded. “I think so. It uses a pretty standard set of equipment – I don’t think there’s anything exotic here. I’ve even got some components we can use to make the display.” Tom began sifting through the parts scattered on his workbench, and he and Bud got to work. Over the next several hours the invention

began taking shape.

“It kind of looks like a futuristic space weapon,” Bud said at last. The body of the device was a long chamber that generated and emitted the pulses. A small dish at the top of the chamber received the reflected pulses, and a tiny solar battery provided the necessary energy. At the back of the machine was a small monitor that would display the assembled image.

Tom nodded with satisfaction. “All we’ll have to do is switch it on and begin scanning. This should even work at night! It’ll be quite effective.”

Bud snapped his fingers. “That reminds me! Couldn’t we just use infrared technology for this? Surely you’ve got some night-vision goggles on board that would work just fine.”

“I don’t think that would help – not in this case, anyway. Remember, Bud, we’re scanning for machines, not people. Given the science involved it’s quite likely that these robots already mask their IR signature. Plus, the surface temperature on Thanatos is probably hundreds of degrees below zero. There’s going to be extremely little infrared energy going around. It’ll be trivial for them to hide in the cold.”

“So you think we’re going to run into opposition once we get there?”

Tom shrugged. “It’s possible. Honestly, though, we have no idea what’s going on. It’s best to be prepared for anything.”

Bud eyed the device on the workbench. “Is there a way we can test it?”

Tom nodded. “I’ve got a telejector on board. We can use it to cast an image around an object and then see if this thing works.”

Chow’s voice suddenly thundered over the ship’s intercom. “It’s lunchtime, y’all! Come and get it!”

Tom and Bud exchanged glances as they remembered their earlier conversation with the cook. “You don’t really think he –” Bud began.

Tom shook his head. “Surely not! He must have been joking. Where would he even get rattlesnakes, anyway?”

Tom’s hunch proved to be correct. When they entered the

ship's dining room they discovered that the cook had provided the crew with a delicious array of fruits, vegetables, and sandwiches. There was nothing strange or exotic in sight. Tom took his seat and began devouring a turkey sandwich, but Bud was unable to resist needling the cook. He ambled up to the good-natured Texan and caught his attention. "Were you fresh out of rattlers?" Bud asked, while attempting to stifle a grin.

Chow gave Bud an innocent smile. "Y'know, come to think of it, mebbe I've got one or two left. I can fix one of 'em for ya if you'd like – it wouldn't be no trouble at all."

Bud stepped back in alarm. "Oh no, no no no no no. Ham is fine, Chow. Thanks."

Tom laughed as his friend grabbed a tray and sat down beside him. "You did ask," Tom said.

"Remind me not to next time, will you?"

"Anything you say, fly-boy. What are friends for?"

After lunch, the two walked back to the lab. "I think we're about ready for testing," Tom announced, as he swiped his ID card in the door. The door unlocked and the two young men stepped inside.

Tom gasped in amazement when he saw the state of his workbench. "Bud – the detector is gone!"

"It can't be!" his friend protested. "We left it right there not an hour ago. Where could it have gone?"

Tom and Bud quickly searched the lab but were unable to find the invention. "It's definitely missing," Tom said glumly.

"Who would have taken it?" Bud asked. "For that matter, who *could* have taken it? The lab was locked! There aren't many people who can get in."

"Only you, me, and Dad have access. No, Bud, I don't blame the crew for this one. I hand-picked all of them, and would trust them with my life. Most of them have worked for Swift Enterprises since I was a kid. I think we have an intruder on board!"

Bud frowned. "Another evil killer robot on the loose, eh? Then leave it to me, skipper." Bud walked over to the intercom

and contacted James, explaining that someone had broken into Tom's lab and giving orders to begin a ship-wide search for the perpetrator. Tom had brought along a dozen EMP emitters, and they were evenly distributed among the search party. Over the several hours Bud led a large contingent of the crew on a detailed search of the ship. Despite their efforts, however, they were unable to locate anyone.

When Bud reported the results of the search to Tom he merely nodded. "I can't say I'm surprised. Without some sort of detector it's almost impossible to spot those robots."

"So you think that your friends are back at work?"

"Why not? We both know how much they wanted to stop me from getting the device on Thanatos. It would've been easy for one of them to have sneaked on board the ship while we were getting ready to launch."

"But how did it get inside the lab?"

"Depending on the kind of cloaking technology it has, it could have walked in with us earlier this morning and been in here the whole time. If it was in here it would definitely have overheard what we were doing and realized the potential threat. Then, when we left for lunch, it simply pocketed the detector and walked right out the door."

Bud shivered. "It gives me the creeps to think of one of those monsters being in here with us all morning."

"That's what doesn't make any sense to me! Why stop at stealing the detector, Bud? There are a thousand things a robot like that could have done that would have prevented us from ever leaving Fearing Island – or worse. Why stoop to petty theft?"

Bud shook his head. "I just don't know, skipper. Do you think you can replace the detector?"

Tom frowned. "I don't really have the time, Bud. We're going to be reaching the exoplanet shortly, and once we get there I'm going to have my hands full. I think we're just going to have to do without it."

Dejected, the two returned to the control room. As soon as Tom walked in James Nathan spoke up. "We should be arriving

in less than thirty minutes, sir,” he said.

Tom nodded and walked over to the control terminal for the kronolator, where he sat down. “The readings look pretty stable,” he said at last.

His father nodded. “I haven't had any trouble out of the fusion reactor either. They seem to work pretty well together, Son.”

Tom smiled. “We make a great team, Dad. The only problem I see with my invention is that it uses an awful lot of fuel. The *Challenger* can only make a few hops from Earth to Thanatos before we'll need to restock the reactor. It's burning through helium 3 like it's going out of style.”

“Fortunately, all we need to do right now is make this one trip. After this mission is over you will have plenty of time to refine your invention. You can't expect the first model to be perfect.”

When they were just a few minutes away from the planet Chow ambled up to the control deck. “Are we there yet, pardner?” he asked Tom.

“We'll be there soon,” Tom promised.

As the final minutes of the voyage ticked by anticipation began to mount. Bud counted down the final seconds. “Fifteen, fourteen, thirteen, –”

He was suddenly interrupted by a brilliant flash of white light. Sirens went off when the ship unexpectedly dropped back into normal space, and the power to the control deck flickered. Outside the window the crew could see stars, but no planet.

“Not again!” Tom said. He scanned the terminal in front of him and became puzzled. “It looks like the unit cut out early, even though it still had plenty of power. Dad?”

His father shook his head. “I'm not seeing any fluctuations on my end. For some reason the kronolator just quit drawing power.”

James Nathan spoke up. “We're showing some intense space-time anomalies, skipper,” he said. “What are your orders?”

“What in tarnation does that mean?” Chow asked, perplexed.

“It means we're in deep trouble,” Bud explained. “History-making, never-before-seen levels of trouble, actually.”

Tom stepped over to another terminal and examined the data. "I'm seeing the presence of an incredibly intense magnetic field. There are also signs of spatial buckling."

"How bad is it?" Bud asked.

"I'm not sure," Tom said slowly. "Space and time are kind of scrunched up here. It's as if spacetime is being warped by an intensely strong gravitational field, only there's no object here to do the warping. I see all the signs of a black hole, but there is no black hole. I don't get it."

Tom's father spoke up. "That could explain the emergency. The kronolator may not be able to operate under these space-time circumstances, so it simply shut down."

"Could be," Tom Jr. agreed. "I've never seen anything like this before. Something really bad happened here."

Bud shook his head. "Imagine coming across something weird and unexpected while on your very first interstellar journey. If that doesn't beat all!"

Tom smiled ruefully. "I can't say it's the first time, Bud! I guess it comes with the territory. James, are you getting reports of any actual damage to the ship?"

"No, sir. All systems appear to be fully functional."

"That's what I thought. How far away are we from the planet?"

James consulted with the navigator. "If we use only the repelatron drive, sir, we can reach it in about ten minutes."

"That's not bad. Let's go in, then. Silence the alarm, but keep an eye on things."

The crew kept a careful watch on the ship as the extrasolar planet drew closer. Bud could see that Tom was very unhappy with the readings he was getting on the ship's sensors. He at last spoke up. "What's eating you, skipper?"

"This place is a mess," Tom replied. "I'm reading wildly fluctuating levels of radiation, bizarre subatomic particles, gravity anomalies – you name it."

"Land sakes alive!" Chow exclaimed. "That sounds mighty bad, Tom. It ain't gonna kill us, is it?"

Tom shook his head. “Probably not today, Chow. The tomasite coating on the ship should protect us. Exploring the planet could be tricky, though. These readings are getting worse the closer we get to Thanatos.”

The planet in question was soon visible outside the main window of the control deck.

“Woah,” Bud said. “We're not really going to land there, are we?”

In the complete blackness of deep space the planet would have ordinarily been impossible to see, but its upper atmosphere was lit by unceasing electrical storms. Enormous arcs of brilliant blue and white light flew across the planet at incredible speeds, giving the world an eerie, almost haunted glow. Violent storms raged over the planet's surface and made it impossible to see the ground.

“Surface wind speeds are exceeding 300 mph in some places,” Tom's father noted. “Its gravity is twice that of Earth, and its magnetic field is more than fifty times stronger.”

Tom shook his head in wonder. “But the planet is only half the size of Earth! What could it possibly be made of?”

His father continued. “Temperatures seem stable around 300 degrees below zero. The atmosphere is mostly nitrogen and methane. Radiation levels are quite high. Thanatos is actually an energy source, Tom. It's an amazing scientific discovery!”

Bud nodded. “It's probably also the most dangerous planet this side of the Milky Way. You sure can pick 'em, Tom!”

“What are your orders, sir?” James asked.

Tom gazed through the window at the planet for a few moments. A smile slowly crept onto his face. “Are you ready for an adventure?” he asked aloud.

“We're right behind you, Tom,” Bud said. “Lead the way!”

“Then let's do a little exploring,” Tom replied.

CHAPTER XI: A WORLD MADE OF SHADOWS

“FIRST we need to do our homework,” Tom said. “There's a lot we need to know about that planet before we can send a manned expedition. James, deploy the satellites.”

“Satellites!” Chow said, surprised. “What do we need them for?”

Tom explained. “We came to this planet to find a device that gives off a particular energy signature. I figured the quickest way to locate it would be to scan for it from space, so I asked Hank Sterling to design something that could do the job. His team has taken the damonscope and made an orbital version of it. Not only will it be able to locate the energy signature, but the satellites will also create a ground map and obtain other important planetary data. By the time they're done we'll have a complete picture of the planet and will know exactly what we're getting into.”

“The satellites have been deployed,” James announced. “I'm tracking them now.”

“How many are there?” Bud asked.

Tom thought for a moment. “Hank ended up building thirty-six of them. We probably could've made due with only a handful, but then it would have taken much longer to scan the entire planet. The larger fleet should enable us to start seeing results within a couple hours.”

“A couple hours!” Bud exclaimed. “How long do you expect to work tonight? It's already nine o'clock.”

Tom grinned. “You know me, Bud – I'm definitely a night owl. We probably won't actually land on the planet until tomorrow morning, but there's a lot I need to do before we can

take that step. I didn't come all the way out here just to catch up on my sleep.”

“What are your orders, sir?” James asked.

“Let's hold our current distance and continue to orbit the planet,” Tom replied. “There's so much turbulence in this area that I really don't want to get too close to Thanatos just yet. I want your men to watch the ship in round-the-clock shifts and notify me the minute anything serious happens.” James nodded, and proceeded to delegate the workload to the crew.

“I'll monitor the satellites, Son,” Tom's father said. “I'm not quite as young as I once was, but I'm good for at least a couple more hours. When I turn in I'll pass the responsibility over to the crew.”

Tom nodded. “Sounds good, Dad. Bud – you're with me. We've got some testing to do.”

Bud yawned. “Whatever you say, boss.”

The two made their way to the lowest deck of the ship. “Here we are, Bud – room 113.” Tom swiped his ID card in the door and the two walked in. Inside the room Bud saw a Transmittaton, which was attached to a bank of computers.

Bud smiled approvingly. “Very nice! I didn't realize that matter transporters now came standard with this model of spaceship. I'll have to order one.”

“It seemed like a good idea,” Tom replied. “The real question is, can we get it to work?”

“You mean it's not fully installed?”

“Oh no, that's not the problem. What worries me are the spatial anomalies that surround this planet, to say nothing of the horrible interference that the atmosphere must be kicking up. I'd seen it all on the megascope, of course, but I didn't realize it would be quite this bad. It's going to take some effort to make the Transmittaton operate in these conditions.”

“Don't tell me! Let me guess. That is our task for the evening.”

Tom nodded. “You got it, fly-boy!”

The two worked far into the night. Tom removed the outer

housing from the equipment and began rewiring it to cope with the interference. He sent Bud to his lab several times to retrieve boxes of parts, which he started tacking onto his invention. As the night wore on Tom turned the once-pristine room into a disorderly wreck. Small bits of electronics littered the floor, and wires were strewn everywhere. Tom pressed on, oblivious to the havoc that he was causing around him.

At about three in the morning Tom laid down his screwdriver and yawned. "Man, I'm beat. I think that's all I've got in me tonight."

Bud stirred. He had fallen asleep in a chair and lost track of events. "What's that?" he mumbled.

"Go back to sleep, fly-boy. We'll finish this tomorrow."

"Did we get it to work?" he asked sleepily.

Tom shook his head. "Not unless you like leaving most of your vital organs behind. It's great for weight loss, though."

Bud did not respond. He was already fast asleep. Tom quietly left the room and went to bed.

The next morning Tom woke up and took a quick shower. After eating breakfast he raced up to the control room. His father and Bud were both already at work.

When Bud saw Tom he spoke up. "Where have you been? I've been up here for hours! You're missing all the fun."

Tom Sr. smiled and shook his head. "Don't let him fool you, Son. He's been here for all of five minutes."

Tom sat down at a terminal and began paging through satellite data. "So what did I miss, Dad?"

"I wouldn't say you missed anything, exactly. The satellites have been performing admirably and have scanned about 40% of the planet. Hank did an amazing job designing them."

Tom nodded. "I'm glad he installed such heavy shielding! Without it they wouldn't have lasted five minutes out there. The radiation level in this area is unbelievable."

The ship suddenly trembled, as if it was experiencing a small earthquake. The shaking subsided after a few seconds.

“What was that?” Bud asked, startled.

“Gravity waves,” Tom Sr. replied. “We’ve been getting them fairly regularly ever since we started orbiting the planet. They come every couple hours or so.”

Tom couldn't resist teasing his friend. “You know, Bud, we got quite a few of them last night! You must have slept through them while you were helping me fix the Transmittaton.”

“And a rotten night of sleep it was, too,” Bud retorted. “I’ll bring a mattress next time. You just can't get any quality sleep in those chairs.”

Tom Sr. spoke up. “I do have some good news for you. The satellite network has located the energy signature given to us by our space friends!”

Tom's eyes widened. “Really? That's outstanding news! Have they been able to pinpoint an exact location?”

“Two locations, actually. One appears to be at the bottom of a methane sea, and the other is toward the polar region of the planet.”

Tom was taken aback. “*Two* of them? Our space friends didn't say anything about that. What do you think we should do?”

His father thought for a moment. “Why not send them a message and ask? We have been in touch with Fearing Island all night, and they can certainly send a message to Mars.”

“Whoops – I forgot all about letting them know we made it,” Tom said apologetically.

“That's why you've got a crew, Son,” his father said with a smile. “No one man can think of everything – not even Tom Swift.”

“Some would say *especially* Tom Swift,” Bud interjected.

Tom laughed. “So what did Fearing say when you talked to them?”

“The last time I talked to George was about an hour ago. He said that everyone is glad we arrived and that he's passed the news along to your mother and sister. Both send their congratulations and their love and asked that we be careful.” George Dilling was the chief communications officer on Fearing

Island. He had been with the Swifts for many years.

Tom nodded. "Thanks, Dad."

Timothy Stryker, the communications officer on board the *Challenger*, relayed a message to Fearing and asked that they pass it along to the space friends. About a half-hour later they received the following message in response:

ALL DEVICES EMITTING THE SIGNATURE ARE OF
VITAL IMPORTANCE AND SHOULD BE
RETRIEVED IF AT ALL POSSIBLE. PLEASE HURRY.
WE HAVE VERY LITTLE TIME LEFT.

Tom nodded. "I guess that answers our question! So Dad, can you show me on a map where the energy signature is coming from?"

Tom and his father spent the next hour examining the information that they had gathered from the satellites that were orbiting the planet. During their meeting Bud wandered down the galley and came back with a box of donuts.

"Where did you get those?" Tom asked. "I didn't see any donuts in the galley this morning!"

Bud shook his head. "That's because there weren't any. It was a terrible oversight. I actually asked Chow to make these, and he was only too happy to oblige. They're quite good, too – nice, warm, and fresh from the deep-fryer."

Tom sampled one and had to agree. "Not bad at all! But still, what made you think of donuts?"

"If I'm headed down to that planet of nightmares with you, Tom, I'm going to eat well before I go. There's no telling when we'll be back on board! A fellow like me needs all the calories I can get."

Tom Sr. looked at his son with concern. "Were you not able to get the Transmittaton to work?"

Tom Jr. shook his head. "I'm afraid not, Dad. There's just too much interference. We were able to make transfers, but the object never survived. It was pretty depressing. I can overcome some of

the problems, but while a 60% precision rate might be better than 0%, that's still not good enough to transport even the simplest objects."

"I understand. So what's your plan? Are you going to take the *Challenger* down to the planet?"

Tom shook his head. "That would be very dangerous, Dad. The surface winds are incredibly strong and would make a safe landing almost impossible. It would be like trying to land in a category five hurricane. I think we're going to have to take a shuttlecraft down to the surface."

His father nodded. "I can see the wisdom in that. A small shuttlecraft that was designed for a harsh environment would have a much greater chance of success. As hardy as the *Challenger* is in space, it's simply too fragile to survive a fierce gale. What is your plan for the expedition?"

"I think we should aim for the undersea location first," Tom said. "The liquid methane will protect us from the surface winds and should provide a relatively calm environment. Bud and I will take a shuttle down to the location and scout around. If possible, we'll locate the device and examine it. After we know what we're dealing with we can decide how we can extract it. If it's small enough we might be able to carry it back to the ship ourselves, but that seems unlikely."

"How are you going to stay in touch with the ship?" his father asked.

"If you'll recall, the robot that paid us a visit made some modifications to my megascope to enable it to view the surface. I've taken some of those changes and incorporated them into my private ear network. We should be able to communicate with the ship without any problems."

Bud smiled wryly. "Of course, Tom hasn't field-tested it, and you know how that goes."

Tom shrugged. "It's the best we can do. I think we'll be fine, though! Locating the device under the sea is a huge break. I was really dreading trying to work in that gale."

James spoke up. "Excuse me, skipper, but there is another

possibility. Couldn't you send some of us down to the surface to do the initial scouting? We should be able to handle that for you. After all, there is only one Tom Swift Jr., and I wouldn't want anything to happen to him.”

Tom shook his head. “I appreciate your concern, but if I'm going to put someone's life in danger then I'd rather it be my own. No one on this ship is expendable, James. I can't sit back and watch someone else put their life in jeopardy while I rest above the fray. Bud and I will go alone.”

“Notice how he's not nearly as concerned about my safety,” Bud joked. “I have to go whether I like it or not.”

Tom slapped his friend on the back and smiled. “That's what you get for being the best pilot in the business! You're going to be the one who flies us down into that awful mess. I'm counting on you.”

“You know I wouldn't miss it for the world, Tom. When do we leave?”

Tom stood up from his chair. “Right now! Dad, you are in charge of the ship. Take care of her for me, will you?”

Tom's father nodded. “Of course, Son. And we'll keep an eye on you too. If you get into any trouble let us know and we'll come after you.”

Tom and Bud bade the crew goodbye and took the elevator to a lower level of the ship, where they entered a hangar. Inside they found two small, disc-shaped ships, the *Extrasolar I* and the *Extrasolar II*. Each ship was about twenty-five feet in diameter and was made from a strong metal alloy. The dome of the ship was built of transparent tomasite, and revealed an all-leather interior outfitted with two plush seats. An imposing array of controls was installed on the ship's dashboard. “They kinda look like little flying saucers,” Bud noticed. “Did you design them just for this mission?”

Tom shook his head. “Oh no – definitely not! These ships were built some time ago for exploring the outer planets of our own solar system. Some of them are quite windy, so I wanted something that could maneuver in a hostile environment. As it

turned out, this mission came up before the one to Neptune. We just got lucky, Bud.”

Bud smiled. “It’s about time. Hey, what equipment are we going to be taking with us? I’m hoping we’re not going to go empty-handed!”

Tom walked up to the *Extrasolar I*, opened the cockpit, and removed a remote control from the dash. He pressed a button on it and a compartment in the rear of the ship opened. “Nice!” Bud exclaimed. “I’m guessing that works via a miniaturized radio transmitter?”

“You got it, fly-boy,” Tom replied. “One day I need to get around to installing these remotes in my atomicars.”

“It’d probably be a real hit. So what’s in the trunk?”

Tom smiled, then walked over to give Bud a tour. “It’s got everything you need for exploring alien worlds! You have a few repelatron for keeping the methane sea at bay, an electronic retroscope for reading faded engravings, a couple EMP emitters for battling hostile robots, a set of private ear devices, and a couple other odds and ends.”

“You even brought a box of spare parts!” Bud said approvingly. “Nice. But what about the repela-suits?”

“We’re going to don those before we get inside the ship, and put the backpacks in the trunk. The suits have been tweaked to withstand extreme conditions and should handle fine at the bottom of the methane sea. When we’re ready to use them we’ll grab the repelatron backpacks and be on our way!”

“That’s another thing that bothers me, Tom. How are we going to get out of the ship once we land? Is the interior waterproof?”

Tom smiled. “The ship flies by use of repelatron, Bud. It can create a bubble around the ship that we’ll use for entering and leaving the vessel. On its highest setting it can create a bubble with a diameter of more than a hundred feet, which is way more than we should actually need.”

Bud nodded. “It sounds like you have the bases covered! But where are you going to put the device we’ve been sent to fetch? I

don't see much in the way of cargo space in these ships.”

Tom shrugged. “If it's small enough we'll put it in the glove compartment box and call it a day. As I told Dad, we have no idea how big or small these things are. Once we see what we're dealing with we'll come up with a way to get it into space.”

Tom and Bud quickly put the repela-suits on over their clothes and stashed the repelatron portion of the suit into the trunk. After shutting it firmly the two entered the *Extrasolar I*, with Bud taking the driver's seat. He looked over the controls and nodded. “Very nice! I see how this works.” He pressed a button that lowered and sealed the transparent canopy. “Are you ready, skipper?”

Tom double-checked the restraining harness that held him in his seat. “Ready and waiting, pilot. Take us down!”

Bud contacted the *Challenger* and told them that the ship was ready for departure. The air was quickly pumped out of the hangar and the massive hangar doors opened. Bud then activated the repelatrons and flew the ship into space. Once they had cleared the hangar he set a course for the coordinates that Tom's father had supplied.

They didn't have to get very close to the planet before they realized they were in for a rough ride. Violent arcs of electricity lit the fast-moving clouds that raced along in the upper atmosphere. Bud carefully watched the discharges and attempted to fly around them. “It looks like they're concentrated in a few areas,” he noted aloud.

As the ship entered the atmosphere Bud began watching the wind current data on the console. He picked a jet stream and carefully slid the shuttlecraft into it. “We're going to ride with the currents for a while, Tom. Trying to fight these winds is suicide. We'll get to the lake, but it may take us some time.”

Tom smiled. “That's fine, Bud. As long as we get there in one piece I won't have any complaints. Just do what you need to do.”

As the ship descended into the clouds their view of the planet became obscured. The utter blackness that now surrounded them was occasionally illuminated by distant flashes of energy.

Lightning sent ripples of light through the clouds, revealing a stream of rapidly moving particles that swirled around them. The stars were quickly hidden from view, replaced by a random blue glow that pulsed in the sky.

“The repelatron stabilizers are really helping,” Bud said. “I like the way the ship tries to automatically compensate for sudden changes in the wind.”

Tom nodded. His attention was fixed on the console that displayed their location. “We’re still pretty high,” he said.

“The winds near the surface are awful, Tom. Up here it’s not too bad. I’m going to stay at a high altitude until we approach the sea, and then plunge down into the ocean.”

“Plunge?” Tom asked.

“It’ll get interesting, Tom. I just hope this craft is built out of sturdy stuff! I’ll do what I can to slow us down, but we could end up hitting the water pretty fast.”

As they drew near the methane lake Bud began taking the ship out of the upper atmosphere. When they got below 10,000 feet the ship suddenly started moving erratically. Violent gusts of superfast wind tore at the ship, tossing it around like a feather in a tornado. Tom grabbed the sides of his chair and tried to hold himself still. Bud fought desperately with the ship, attempting to regain a measure of control.

Below them the black, tortured surface of the planet stretched endlessly for miles. In the distance Tom could see glimpses of an active volcano that was spewing lava into the utterly black sky. A few rivers of molten rock emitted an eerie red light that illuminated small portions of the ground. Above them streaks of lightning continuously flashed across the sky, sending booming waves of thunder that deafened the ship’s passengers. Occasionally a bolt of lightning would hit the ship, but the tomasite coating prevented it from doing any damage.

Tom watched the sea approach far too rapidly for comfort. “Bud – ”

“I’m on it, Tom!” he replied tersely. Bud pushed the repeltrons to their limit in an attempt to stop the *Extrasolar I*

from plowing into the ocean. “Tom!” he shouted.

It was too late. The shuttlecraft slammed into the methane lake at blinding speed!

CHAPTER XII: LOST IN THE DARKNESS

THE crew of the *Challenger* had watched the progress of the *Extrasolar I* from the moment it left the hangar. Tom's father had connected a large display on the control deck to the ship's megascope space prober, and used its automatic tracking ability to monitor the progress of the shuttlecraft. Worry began to mount when Bud lowered the ship out of the upper atmosphere and started losing control.

Chow was the first to voice the crew's concerns. "Those fellers are in a world o' hurt. Ain't there somethin' we can do for 'em?"

Tom Sr. shook his head. "I'm afraid they're on their own, Chow. All we can do now is pray for their safe arrival."

"Bud is the best pilot in the business," James said. "If anyone can make it it's him."

"That is what worries me," Tom Sr. replied, with genuine concern in his voice. "What if he can't?"

All conversation in the room ceased when the *Extrasolar I* drew near the methane ocean. "C'mon, Bud," one of the crewmembers whispered. They all watched as the wind violently tossed the shuttle around in the sky. The picture on the megascope was so sharp that they could see right through the ship's transparent canopy. Everyone could see that Bud was trying desperately to regain control over the ship.

"They're getting too – " James stammered, and then it happened. A powerful gust of wind slammed the *Extrasolar I* into the sea with tremendous force. A few people involuntarily gasped as they watched the shuttle get torn apart by the sudden impact.

Their view of the crash was briefly obscured by an enormous methane wave, and then the picture went black and was replaced with the message “HOMING BEACON NOT FOUND”.

Tom's father was the first to react. “The megascope has lost its tracking signal,” he said tersely. “McGinnis, do you see the ship on radar?”

The *Challenger's* radar officer shook her head. “I'm no longer picking up a signal,” she said quietly.

“What about their suits?” Tom Sr. demanded. “There are tracking beacons in both of their repela-suits. Does that register? We may be able to rescue them with the Transmittaton if – ”

James spoke up. “We're no longer reading those either, sir.”

Tom Sr. said nothing. Dark fears clutched at his heart, and waves of anguish washed over him. He struggled to keep from breaking down. “It can't be,” he whispered to himself. “I can't have lost them. They've got to still be out there. They've just got to be.”

He struggled to regain control over his emotions, and failed. With an uncertain voice he said, “Are you seeing any signs of debris or wreckage? If their beacons were damaged by the impact they may no longer be transmitting, or the signal may be so weak underwater that it cannot break through the planet's interference.”

Over the next few minutes there was complete silence as the crew used the megascope to scan for signs of the missing vessel. Tom's father was the first to speak. “I think I've found something,” he said, with obvious anguish in his voice. He redirected the megascope to a new set of coordinates. There, drifting underwater, was the transparent tomasite dome of the *Extrasolar I*. The ship itself was gone.

“That's amazing!” James said, astonished. “How did you ever find a transparent piece of plastic in a dark ocean?”

“Because I wasn't looking for just a stupid piece of plastic,” Tom Sr. shouted. “I was looking for signs that my son might still be alive.”

“Tom's gone, isn't he?” Chow said quietly.

Tom Sr. calmed down and shook his head. “They've got to be

there somewhere, Chow. I refuse to believe that they died. The beacons on those suits were designed to withstand anything short of a direct hit with a nuclear weapon. They've got to still be operating. Maybe – ” his voice trailed off.

“What would you like us to do, sir?” James asked.

Tom Sr. did not respond for several minutes. He just sat quietly and watched the tomasite dome drift slowly toward the bottom of the methane ocean. “The beacons and the canopy were both made of tomasite,” he said at last. “If the canopy survived – and it was much more fragile than the beacons – then surely the beacons survived as well, even though we can't detect their signal. I'm guessing that the impact was too rough for the ship to handle and so it disintegrated. But I refuse to believe that it took its passengers with it.”

“But how'd they escape?” Chow asked.

Tom Sr. shook his head. “I don't know, Chow. It doesn't seem possible. But there's no way the impact should have destroyed the homing beacons on their suits. I think they're still out there, and that something on the planet is blocking us from receiving their homing signal.”

James spoke up. “What about the beacon on the ship itself? We're not picking that up either.”

“I know, James, I know. But if Tom and Bud are still alive, they'll head toward that device they came all this way to get. We need to go find them, and our best best is to investigate that undersea city.”

Tim, the ship's communications officer, spoke up. “Excuse me, sir. I hate to bother you, but we're getting a call from George Dilling on Fearing Island. He wants a status update, sir. What should I tell him?”

Tom Sr. glanced at his watch. “I guess it is time to report in,” he said heavily. “I had lost all track of time. Tell him – ” and then he stopped.

“Should I tell him that we've lost our communications lock on Tom?” Tim asked.

Tom Sr. shook his head. “No, Tim, tell him everything. Don't

mince any words. My wife deserves to know what has happened to our son.”

Tim nodded and relayed the message. Chow then spoke up. “So what're you gonna do, boss?”

“We're going to go after them,” Tom Sr. replied.

“But how're you gonna do that? You're not gonna take the other shuttlecraft, are you?”

Tom Sr. shook his head. “No, Chow, we're not going to do that again. This time we're going to take the *Challenger*.”

Tom Jr. heard Bud's voice through their suit's communication system. “Woah! What was that?”

Tom's eyes fluttered opened. He saw that he was still strapped into his seat in the *Extrasolar I*. Bud was sitting beside him and slowly coming around. “We must have hit the ocean pretty hard,” Tom replied groggily. “All I remember is – ” and then he stopped in amazement.

The shuttle was resting quietly on a small grassy knoll beneath a clear blue sky. At some point they must have lost the ship's tomasite canopy, for there was no sign of it. Tom suddenly realized that they were on the edge of a wide mesa that towered above a large, fertile valley. Behind them a waterfall thundered over a rocky ledge and turned into a wide river that snaked through the valley below. Large, old-growth trees clustered thickly around the river. On the horizon they could see a city of some sort.

“I don't think we're in Kansas anymore, Tom,” Bud remarked. “Do you think we're dead?”

Tom shook his head. “I don't think you get to take your flying saucer with you when you die, Bud. But I have no idea where we're at. This doesn't look anything like Thanatos.”

“Could we be delusional?”

Tom shrugged. “I guess it's a possibility, but it doesn't seem likely. This seems pretty real to just be a hallucination. Besides, in my hallucinations you make better jokes.”

Bud shook his head in confusion as he pressed buttons on the

ship's dashboard. "So let me get this straight, Tom. We collided with the ocean so violently that we lost our protective canopy and were magically transported to another planet. You didn't put a warp drive in this thing that you forgot to tell me about, did you?"

"Nope, Bud, I'm afraid not. It does seem really unlikely, but here we are!"

"*Really unlikely* is putting it mildly, Tom! Thanatos is a dead, uninhabited wreck, and there were no other ships in the area. Do you really expect me to believe that someone beamed us up at the last possible second, transported us to *another planet*, and then beamed us down again safe and sound?"

Tom shrugged. "Not really. But all of your logic isn't making the valley disappear, fly-boy. I'm sure there is a perfectly logical explanation, but right now I can't think of it."

Tom unbuckled the restraining harness and stepped out of the ship. He used his suit's sensors to check the environment. "Hmmm. My suit is telling me that the atmosphere is breathable and devoid of any life-threatening toxins. I'll take the chance." He stretched, removed his helmet, and took a deep breath of the warm summer air. "Ahhhh. Now that's what I'm talking about!"

As Bud worked to remove his own helmet Tom took a better look at the area around them. A cool breeze blew across the mesa, and a bright yellow star shone high in the sky. As he listened he could hear birds chirping in the distance. He knelt down and ran his fingers through the fresh green grass. "Amazing," he whispered. "This could be somewhere on Earth, Bud. It's uncanny."

Bud stepped outside the ship and joined Tom. "Hey, that's weird," he said.

"What?" Tom asked.

"Take a look at the ship and tell me if you see anything strange."

Tom turned around and studied the *Extrasolar I* closely for a minute. "I don't see anything offhand, Bud. Oh, wait, I get it! Where's the hull damage?"

"Exactly! The ship is absolutely pristine, even though we hit

the ocean so hard we both blacked out. How is it possible we didn't even scratch the paint?"

"I have no idea," Tom said. "Say, how long were we out?"

Bud looked at his watch. "Let me think. We left the ship around 8am, and it took us about an hour to get to the lake. My watch tells me it's now three in the afternoon, so we've been out for a while. That's assuming it's still the same day. We could have been out for weeks for all I know."

"That's interesting. What I want to know is, why aren't we floating somewhere in the methane ocean?"

"Beats me, skipper. So now what do we do?"

Tom got back in the ship and strapped himself in. Bud followed him a moment later. "Can you raise the *Challenger*?" Tom asked.

"Nope," Bud replied. "I already tried that. I'm not picking up any vessels in orbit, either. We appear to be the only ship out there."

"Very strange. Well, unless you have a better idea, I suggest we fly over to that city over there. Maybe its inhabitants can explain where we are and how we got here."

"Sounds good to me!" Bud said. He lifted the shuttlecraft off of the mesa and flew it across the sky.

Hours later, Tom Sr. was still on the control deck of the *Challenger*. This time he was having a long talk with Ned Newton, who was located in California. George Dilling had relayed the call through Fearing Island.

Ned was talking. "That sounds like a long shot, Tom."

"I know," Tom Sr. replied. "But if there's even a chance that they're still alive then I'm going to act on it. I've got to try."

"Are you sure that's wise? I didn't think your ship was really built to handle that kind of weather. What's going to keep you from suffering the same fate?"

Tom Sr. sighed. "I think Tom and I were both wrong, Ned. Tom felt that a smaller, sleeker craft would be more suited to flying in extreme weather conditions, and I agreed with him.

What we failed to take into account is that his ship just didn't have enough power to stand up against the eddies in the wind. Once it hit violent turbulence Bud lost all control and they fell out of the sky. What you really want is a very, very large ship – one so large and heavy that the wind's vortices don't affect it.”

“I think I understand. A ship is only effected by eddies in the wind that are as large as itself, and if you have a really large ship then there won't be many eddies large enough to buffet it about. But what does that have to do with the *Challenger*?”

Tom Sr. grabbed a stack of papers from the desk in front of him and began combing through them. “I've been crunching some numbers, Ned, and I think we can beat the wind. Ah, here we go. My plan is to use the ship's repelatrns to create a bubble of force around the ship. We'll tune them to the makeup of the wind and keep it at bay.”

“Kind of like the way your deep-sea hydrodomes create enormous bubbles of air at the bottom of the sea,” Ned replied.

“Exactly. The repelatrns on this ship are incredibly powerful. I think we can create a sphere that's roughly a mile and a half in diameter, and depending on how we aim the other repelatrns we can make the ship appear to be much heavier than it is.”

“We're still talking about 500mph winds,” Ned pointed out.

“But the wall of force should keep the winds from striking the fragile surface of the ship, and make it much harder to bounce us around. The repelatrns are designed to accelerate this ship to speeds exceeding a hundred thousand miles per hour. Surely it can keep a 500mph wind at bay.”

Ned was silent for a moment. “I wish I could be there with you,” he said at last. “We usually do things like this together.”

“I know you do. I'll be careful, and will stay in touch.”

“Please do. If I don't hear anything from you within 72 hours I'm going to fix up the *Cosmotron Express* and come out there myself.”

Tom Sr. was taken aback. “Surely you're not serious! Do you have any idea how expensive that would be?”

“I think so,” Ned replied. Tom Sr. could hear him rustling

papers on the other side of the line. “I’ve been running the numbers on it since I heard the news. If you include the cost of the fusion drive, plus the kronolator, plus wiring and installation, it comes to around \$2 billion – which is a lot, even for Swift Enterprises. We could probably get it done in a month, if we really pushed it. Which we would.”

Tom Sr. gasped. “I had no idea this setup was so expensive.”

Ned laughed. “You never were one to keep an eye on the budget, were you, Tom? But I am dead serious here. If you don’t come back I will come looking for you. The world is not going to lose its collection of Swifts – nor am I willing to lose my best friend.”

“Thanks, Ned,” Tom Sr. said warmly. “That means a lot.”

After signing off he began giving orders to prepare for landing on Thanatos. He picked up a stack of printouts and went over them with James. “I’ve got some figures here that should do the trick,” he said. “If we set up the repelatron along these lines it should – ”

Tom Sr. heard a sudden scream behind him. He whirled around and gasped. Standing calmly in the middle of the control room was a black metal robot with a skeletal frame. It looked exactly like the one that had confronted Tom Jr. in the observatory! Its piercing red eyes were locked on Tom.

“I apologize for startling you,” it said in a polite, even voice. “I mean you no harm.”

“Nobody move,” Tom Sr. said sharply.

“There is really no cause for alarm,” the robot continued.

“What do you want?” Tom Sr. demanded.

“I am here to lend you a hand, Mr. Swift. We would like to help you rescue your son.”

“We?” Tom Sr. asked.

The robot nodded ever so slightly in the direction of the stairwell. Four other robots suddenly materialized. Tom Sr. realized that they had been using their holographic projectors to blend in to the room. “I apologize for this deception. We felt that if you knew of our presence you would not allow us to join you

on your quest.”

“You guessed rightly,” Tom Sr. replied. “What do you want from us?”

“As I said, we are here to help you. Your plan for descending onto the planet is a wise one, but it will not work as it is currently formulated. It is impossible for a human to react quickly enough to keep the ship steady. Your repelatrions must be computer controlled for this venture to succeed.”

Tom Sr. was taken aback by this. “I suppose that would help, but we don't have the time or the resources to design a system like that. It would take weeks under the best of circumstances, and these are not the best of circumstances.”

“But we could do it in a few hours. Writing software is trivial to us, Mr. Swift, and we have all the necessary hardware. If you allow us to help you we can greatly increase your chance of success.”

“And if we don't?”

The robot nodded toward another robot in the crowd, and it stepped forward. Tom Sr. saw that it was carrying the holographic penetrator that had been stolen from his son's lab. The robot walked up to Tom Sr., handed it to him, and then walked back to its leader.

“I apologize for stealing that marvelous invention,” the robot said. “I was afraid that you would use it to locate us, and up to this point we wished to remain unnoticed. But that time has passed, and so I have returned it. I trust you have one of your EMP weapons nearby?”

Tom Sr. looked around. “I've still got mine with me, sir,” James said. He reached down under the desk, picked it up, and handed it to Tom. “I was afraid we might need it,” he explained.

“Your choice is simple,” the robot continued. “We would like to help you rescue your son. If you will allow us to do that then we will lend a hand. However, if you do not trust us then you can use that weapon to destroy us. It is your choice.”

Tom Sr. was astonished. “You can't be serious!”

“It was never our desire to see your son and his friend perish,

Mr. Swift. We came from the future to save him, not to watch him die, and if we can save him now then we will. We are here for the good of all mankind. There are many things we could have done to this ship had we wished to harm you or prevent you from coming here, but we left you in peace.”

On an impulse Tom Sr. aimed the EMP emitter at one of the machines and fired. As the electromagnetic energy struck the robot it staggered backwards, and bright yellow sparks flew out of it. Tom pulled the trigger again, and the second blast caused the robot to finally collapse onto the floor. A second later its red eyes went dark. The four robots around it made no attempt to move or get out the way.

“You're serious,” Tom Sr. said at last.

The lead robot nodded. “Yes.”

Tom Sr. put the EMP emitter down. “Then come lend us a hand. I appreciate your offer for help.”

“At this point I do not ask you to trust us, Mr. Swift. I only ask that you allow us to lend you a hand. How you decide to end this mission is entirely up to you.”

“So you say,” Tom Sr. said cryptically.

CHAPTER XIII: THE CITY BENEATH THE SEA

IT took Bud about fifteen minutes to fly the *Extrasolar I* from the mesa to the city in the distance. During their short flight Tom experimented with the radio but was unable to pick up any ground stations. “Hmmm,” was all that he said.

As they approached the city Bud lowered the ship to an altitude of a thousand feet so they could get a better view of the area. The metropolis appeared to cover roughly ninety square miles, and the river that meandered through the valley ran right through the heart of the city. Tom was surprised to see that the buildings were all stone and brick structures, exactly three stories tall, and tightly packed together. A network of wide, twisty roads wound its way through the city.

“It kind of looks old-fashioned,” Bud commented.

Tom nodded. “I’ve seen cities like that in Europe. A lot of towns there are centuries old and have grown up around ancient streets and buildings. That kind of looks like what happened here.”

Bud began looking for a place to land when he suddenly noticed something. “Hey Tom, I hate to mention this, but where are all the people?”

Tom removed a set of binoculars from the glove compartment box and used them to get a closer look at the city. “Well, what do you know. There’s no one there! It looks like the town is deserted.”

Bud shook his head. “Freaky. Mind if I scout around a bit before we set down?”

“Be my guest, fly-boy. At least we won’t have any trouble

parking.”

Bud circled the city for a half-hour and carefully scanned for signs of life. At last he admitted defeat. “I just don't get it, Tom. What gives?”

Tom shrugged. “I'm not sure. Maybe this is normal for weird alien planets. Let's land and take a look around.”

“Do you have any particular spot in mind?”

Tom thought for a moment. “Wasn't there a big, important-looking building in the middle of the city? I seem to remember it having a nice, large lawn out front. Let's land there. It might be the capitol or something.”

As Bud landed the ship he shook his head sourly. “You do realize that we have no idea what we're getting into, don't you? This place could have been ravaged by a horrible disease, for all we know! It could be a death trap!” Bud neatly set the *Extrasolar I* down on a patch of lawn just in front of the imposing stone building. He then killed the ship's power and sighed.

Tom unbuckled his restraining harness, got out of the ship, and stepped onto the lawn. “If so, Bud, it's a well-manicured death trap. Look at this grass! Even my lawn at home doesn't look this nice. They must be using an incredible fertilizer.”

Bud exited the ship and joined his friend. “I don't like this,” he muttered. “What gives? If this city is abandoned then it should be an overgrown wreck, but this place has clearly been cared for. But who's been looking after it?”

“I've got no idea, Bud. To be honest, it doesn't really worry me.”

“And that's another thing.” Bud grabbed his friend by the arm and looked him in the eye. “What's up with you? Ever since we got here you've been in some kind of daze. We're in big trouble, Tom. Why *aren't* you worried?”

Tom frowned for a moment. “That's a good question, Bud. All I can say is that somehow this feels right. I think I was expecting this.”

Bud looked at his friend incredulously. “You were *expecting* to be abducted from Thanatos the moment we hit the methane

ocean? Then why didn't you warn me? I mean, c'mon, Tom. If I'd known that I would have stayed in bed this morning!"

Tom shook his head. "That's not what I mean. I wasn't consciously expecting it, but when it happened it made sense. It's as if this confirmed a theory I had a long time ago and can't quite remember. I wish I could explain it, but I can't. Something tells me that this is where we need to be right now. That's all I know."

Bud nodded. "I don't understand it at all, but I'll play along. Now, believe me, if it was anyone other than you talking I would have called the guys with the white coats, but I trust you, Tom. Just please, don't be wrong. I've got a date with Sandy I don't want to miss."

Tom smiled. "You two have become quite the couple, haven't you? I've noticed that you almost never miss a date with her."

"Except when I get trapped underground when your subocean geotron malfunctions, or we get stranded in space, or something like that. You know how it goes."

"What can I say? That's what you get for hanging around the Swift family! We're not really the couch-potato type."

The building in front of them was a massive, imposing structure that was built from large blocks of reddish sandstone. Tall, narrow glass windows dotted its exterior, and a flight of stairs in front of the building led up to two wooden doors at its entrance. At the top of the building was a pinnacle with a device that Tom assumed was a clock of some kind.

As they began climbing up the stairs Bud spotted a large brass plaque hanging just beside the entrance. "Capitol Building, City of Townsend. Established 4319," he read aloud.

Tom looked at him in amazement. "When did you learn to read space symbols?"

His friend shrugged. "I have no idea, Tom. Maybe I just picked it up from spending so much time with you. A day hardly goes by without you getting some message from space."

"Perhaps you're right," Tom said. After they reached the top of the stairs he opened one of the doors and walked into the structure. Bud followed behind him.

The two young men were startled to find that the building was completely deserted. Inside they found no carpet, no furniture, and no signs of life. They spent more than an hour combing through it before they made their discovery. The building had four basements, and on the lowest basement was a library, filled with shelves and shelves of books. Rows of soft, white lights hung from the ceiling and gently lit the room.

Tom walked among the shelves and quickly scanned the titles. "Now here's an interesting one. 'HISTORY OF THE MATHEMATICIANS'."

Bud shook his head. "I don't think you got that last symbol quite right, Tom. It's more like 'race of people who really loved math'."

"It's something like that," Tom agreed. "I don't think we have a word that quite corresponds to it. That term could be what our space friends call themselves."

"I think I'll stick with 'space friends'," Bud said. "Mathians just doesn't have the same ring to it." He looked around and shuddered. "Man. Doesn't this place give you the creeps? I keep expecting Rod Serling to step out any minute and tell us we've entered the Twilight Zone."

"The what?" Tom asked.

"Never mind, Tom. I keep forgetting that you don't watch TV."

Tom shrugged. "I'm more of the adventurous type. You're more likely to find me in a cave in Africa than sitting in front of a television."

"Which explains why we're in the city of the undead, instead of back on Earth with the rest of the human race," Bud joked. He watched as Tom took the history book off the shelf, settled down in an overstuffed leather chair, and opened it to its first page. "I take it you're going to be here a while?" Bud asked.

Tom nodded. "If this book is about our space friends then it might offer us some clues. It's worth looking into."

"Could be. I'll leave you to your book, Tom, and will go explore the city a bit. I'll try to be back in a couple hours." Bud

then walked up the stairs, out of the building, and down a deserted street.

Tom Sr. was on the control deck of the *Challenger*, making the final preparations for their attempt to land on Thanatos. The day was far spent, but he was not willing to delay the search-and-rescue operation any longer than necessary. Most of his time had been spent working with the robots and helping them make the necessary changes to the ship's control systems.

Earlier in the day he had a brief, private conversation with James Nathan. "You have to admit those robots are good at their work," he had told Tom.

"If only I knew what work they were up to," Tom Sr. replied thoughtfully. "Did you take the downed robot to my lab?"

James nodded. "I also rigged up the holographic penetrator as you ordered. If a robot attempts to get inside we'll know about it immediately."

"I'm telling you I don't trust them, James. I don't believe for a minute that there are only four of those monsters left on the ship, and I don't believe they're here to help us. The answer to our questions is somewhere in that robot I blew apart, and after we land on Thanatos I'm going to find out what is really going on."

"Pardon me for saying this, sir, but what happens if they really are benevolent creatures that are only trying to save the human race? I believe you were the one that told your son he should seriously consider that possibility."

Tom Sr. stopped and thought for a moment. "If I find out that's the case then I guess I'll have to fix that robot. The electromagnetic pulse shorted it out, but I think it's still relatively intact. It should be possible to start it again. I bet their leader could tell us how to do it. But I have a hunch we won't be going down that road."

By the end of the day Tom Sr. had to admit that the robots had done a thorough job rewiring the *Challenger*. After the final test was completed Tom Sr. turned to the lead robot. "I really believe this has an excellent chance of working."

The robot nodded its head, a gesture that irritated Tom Sr. as much as it had its son. The only distinguishing feature of the machine's head were its two red eyes. The robot had no nose, ears, or mouth. Watching it perform a human gesture gave Tom a fleeting feeling of horror. "I agree with your conclusions, Mr. Swift. I believe this ship is ready for departure."

"Do you have a name?" Tom Sr. asked.

"I do not. But if you wish, you may give me one."

Tom Sr. thought for a moment. "I think I'll call you Andy," he said at last.

"After your old nemesis Andy Foger, I presume?" the robot said, with no change in tone.

"Could be," Tom Sr. replied. "Only time will tell."

After checking with James to make sure that everyone was in place, Tom Sr. gave the order to descend to the planet below. The four remaining robots took positions on the control deck. The lead robot stood beside Tom Sr. and watched as he worked at his terminal.

On Tom's command, the *Challenger* left its orbit around Thanatos and began descending into the planet's atmosphere. Tom closely monitored the ship's progress, and was pleased that it was able to enter the upper atmosphere with very little trouble. "Of course, the real test won't happen until we get closer to the surface. How far are we from the ocean?" he asked.

James consulted the navigation console. "About a half-hour, sir."

"Start watching for that homing signal as of right now," Tom Sr. commanded. "Let me know the moment you find it."

"Will do, sir."

Tom Sr. nodded, and looked out the window as the spaceship slowly made its way through the planet's atmosphere. The ship's repeltrons created a wide void around it. In the distance Tom could see fast-moving clouds, which were occasionally lit by arcs of energy. It was hard to see anything through the utter darkness.

The mood was a somber one. Tom thought about what had happened that morning. He kept replaying the disaster in his

mind, wondering if he had missed anything. “They’ve got to still be alive,” he whispered to himself.

When the ship was nearing the methane ocean James spoke up again. “We’re taking her down into the turbulent area, sir.”

Tom Sr. nodded and said nothing. Andy, the robot, stood behind him and watched silently. The ship slowly descended into the hurricane-force winds that raked the planet’s surface. They could feel a slight jar from time to time, but the ride was extremely smooth.

Andy spoke up. “The repelatron’s are under a great deal of stress, Mr. Swift.”

Tom Sr. nodded. “I see that. So far, though, they’re staying out of the danger zone. I do have to hand it to you, Andy. Without the automatic controls you installed we would not have survived.”

The robot said nothing.

Everyone was silent as the ship approached the methane lake. This time, instead of striking its surface with tremendous force, the ship slid smoothly into the sea. The repelatron’s forced the liquid methane far from the ship, creating a bubble nearly a mile across.

“As we descend we’re not going to be able to maintain that diameter,” Tom Sr. said. “The weight of the methane is going to be too great. I think we should be able to handle a half-mile, though.”

“I agree,” Andy replied.

“Are you picking up any signals?” Tom Sr. asked his crew.

“Not yet, sir,” James replied.

Out the window the crew could see absolutely nothing. James ordered his crew to turn on the ship’s giant searchlights, but they were not able to penetrate any distance. Visibility was zero.

Tom Sr. tracked their progress by radar, and as the weight of the methane above them grew too great he lowered the radius of the repelatron’s force wall. The city was located a mile beneath the surface, and it took them roughly an hour to descend to its depth. During that time the crew was unable to locate the signals from the homing beacons.

“We've reached the city,” James announced suddenly. Tom Sr. looked out the window but could see absolutely nothing. The radar, however, told him that they were right above it. Its coverage was so good that Tom Sr. was able to make out a rough map of the city.

“It looks like it's made up of a lot of small, stone buildings and wide, twisty streets,” Tom Sr. said. “Curious. I would have expected something more modern from a race capable of space travel.”

Andy spoke up. “Your space friends were a quiet race that spent their time studying the higher sciences. They had no love of grand buildings, but lived in the ancient structures built by their ancestors. You would have liked them.”

“Where would you like us to land?” James asked.

Tom Sr. consulted the radar map. “The energy signature the space friends told us about seems to be coming from underneath that large building in the middle of the city. Let's land there. I think its lawn is large enough to hold the ship.”

James nodded and gave the order. A few moments later the *Challenger* landed at the bottom of the ocean. The ship's repelatrons pushed away all the liquid methane within a quarter-mile radius, and its giant searchlights easily penetrated the now-empty space. Directly in front of the ship they saw a massive building made out of a reddish sandstone. At one time it must have been an imposing structure, but it was now in ruins. “It looks like it's been bombed,” one of the crewmembers said.

“It was,” Andy replied. “At one time this was a beautiful world. Then one day the Space Legion attacked and turned it into what you see now.”

“And time and erosion finished the job,” Tom Sr. replied. “If the boys are anywhere, though, that's where they will be. They've got to be there!”

Andy spoke up. “I believe I see a sign on the side of the building, by the entrance.”

Tom Sr. shook his head. “It's too far away for my eyes to see. Let me train the megascope on it.” A moment later a picture of a

cracked, worn sign appeared on a large monitor. "It's covered in space symbols," James said.

"I can translate them for you," Andy replied. "The sign reads 'Capitol Building, City of Townsend. Established 4319'."

Late that night, Bud wandered back inside the capitol building's basement. He found Tom still sitting in his chair, reading. Books were piled around Tom, who had obviously been busy.

Tom looked up as his friend walked in and took a seat. "Find anything?" he asked.

Bud sighed. "Yes and no. The city is more or less completely deserted, Tom. There's one building north of here that has a bunch of working computer equipment, but every other building is completely empty. I didn't search them all, of course, but I went into quite a few of them. They're all the same."

The mention of the computer equipment intrigued Tom. "You didn't happen to experiment with the computers, did you, Bud?"

Bud shook his head. "You know me, Tom – I didn't touch them! I was afraid I might press the wrong button and cause the world to end. I figured I'd leave that part to you."

Tom nodded and was about to say something, but Bud cut him off. "It just doesn't feel right, Tom. I'm nervous. Every single building was empty. Every street was empty. There's no one in this whole city, but there's also no dust, no dirt, and no signs of wear. It doesn't make any sense! If this city has been deserted for ages then there ought to be evidence of decay. It looks for all the world like the entire city was built just this morning and then abandoned."

Tom smiled. "I have a theory, Bud. I don't know everything, but I've found some clues. It turns out that this is the home planet of our space friends."

Bud looked surprised. "Are you sure, Tom?"

He nodded. "Oh, there's no doubt! This history book goes back to the earliest time of their race, and mentions the city of gold that we found at the bottom of our ocean, the settlements we

discovered on Earth, and the colony they founded on Mars. This is definitely their home planet.”

“Then where are all the people?”

“I'm getting to that,” Tom replied. “I won't go into everything right now, but our friends had a real passion for higher mathematics. Humans are generalists, Bud – we've got experts in the physical sciences, experts in music, experts in biology, and experts in pretty much everything else. These people weren't. Their whole civilization was built around mathematics, and they just didn't care about other things. Even their written language was based on that concept.”

“Weird,” Bud said. “Why not surfing, Tom? I could understand a civilization built around the joy of beaches. They could have – ”

Tom cut him off. “The thing is, this single-minded devotion eventually got them into trouble. One day something happened that caused their world to become constantly bathed in high levels of radiation. I don't know if something went wrong with their atmosphere, or if their star changed, or what, but their DNA began mutating far faster than normal. However, they didn't notice it – not at first. That's what did them in.”

“You lost me, Tom. Mutations?”

Tom nodded. “In order for a race to remain viable the DNA it passes from generation to generation has to remain intact. DNA was designed to handle a certain amount of errors, but the more you accumulate the more problems you're going to have, and it can be really difficult to fix things once you have a problem. These people started noticing that something was seriously wrong when they began falling ill with very strange diseases. By the time they realized what had happened it was too late.”

“Too late for what?” Bud asked.

“Too late for their species to survive,” Tom replied. “When this book was written they were only a few centuries away from a complete genetic meltdown. Their DNA had become so damaged that they were on the verge of not being able to produce viable offspring.”

Bud was shocked. “When did all that happen?”

“I don't know, Bud. The book gives exact years, but I don't know how to correlate that with our own calendar. All I know is they were just beginning a project to deal with their imminent extinction when the book ended.”

Bud sighed. “That's awful, Tom. But how does that help us?”

Tom smiled. “I told you I had a theory, didn't I? Well tell me, Bud. What time is it?”

Bud checked his watch. “Nine thirty-seven. Man! I didn't realize it was so late.”

“Have you been hungry or thirsty today?” Tom asked.

Bud shook his head. “I haven't been tired either, come to think of it. In fact, I'm not even tired now.”

“Think, Bud. You don't need food or rest. What does that make you think?”

Bud scratched his head. “That I'm dead?”

Tom laughed. “No, Bud, you're not dead. But you might not be exactly alive either. For the moment let's call it being undead.”

“Are you kidding me?” Bud asked.

“In a way I am. And in a way I'm not.” Tom grabbed a large book that was lying on the floor and opened it to a place he had marked. Bud realized that volume was an atlas. “Do you see this city?” Tom asked.

Bud nodded. “It looks like Townsend to me. I can see the river, the valley – yup, that's it!”

Tom turned the book to its front, where it displayed a map of the entire globe. “According to these notes the planet described in this book has a radius of about 2000 miles, which is roughly half that of Earth, and its surface terrain just happens to match that of Thanatos. I didn't realize it before, but the landforms on this map are quite similar to the ones on the extrasolar planet. In fact, the valley we're in and the location of Townsend resembles the floor of the methane ocean and the location of the underwater city. There are some differences, but there are even more similarities.”

Bud felt a chill go up his spine. “What are you saying, Tom?”

“I've got a hunch that we never left Thanatos, and that we

made it to that underwater city. I believe I know what that mysterious device was meant to do.”

“And that is?” Bud asked.

Tom smiled. “Take me to that room you found that's filled with computers, Bud, and I'll show you!”

CHAPTER XIV: HOME OF THE EXMEN

TOM Sr. carefully examined the screen in front of him. “It looks like the repelatrons are going to hold,” he said at last.

“I believe you are correct, Mr. Swift,” Andy replied. The robot gazed at the screen with an unblinking stare. “The *Challenger's* repelatrons will be able to keep the methane ocean at bay while maintaining a considerable margin for safety. We could remain down here for weeks if necessary.”

Satisfied, Tom Sr. then walked over to James and began discussing the landing party. “Before we go any further I want to lead seven men outside to explore the area. Once we know what we're dealing with we can plan accordingly. The energy signature we've been tracking is coming from beneath the capitol building, so our first priority will be to find a way inside. That is where Tom would have gone, and that is where we are most likely to find them.”

“Very good, sir,” James replied. “I will remain with the ship but will select seven of my men to accompany you. Given the conditions outside I suggest you wear repela-suits. The temperature out there is hundreds of degrees below zero.”

Tom Sr. nodded. “That was my plan.”

Andy spoke up. “What will you do if the path to the device has been lost?”

“When my son was planning this trip he realized it might have become buried,” Tom Sr. replied. “He wanted to bring along a subocean geotron, but since that craft was far too large to get on board he brought an atomic earth blaster instead. It should be able to drill to whatever depth we need.”

The robot nodded, but said nothing.

Tom Sr. instructed Kelley McGinnis, the ship's radar officer, to continue searching for Tom and Bud. "Are you picking up any signs of interference?" he asked.

Kelly shook her head. "No, sir, I am not. The methane does not appear to be impairing our scanning equipment."

Tom Sr. sighed. "The boys' signal disappeared the instant they hit the ocean. Maybe the beacons really were destroyed. Or maybe they were transported to a location where their signal is being blocked. I don't know. Just – don't stop looking for them. Something happened to those two young men, and I am going to get to the bottom of it."

James spoke up. "I have instructed my communications officer to stay in touch with Fearing Island. They have been told that we landed safely and will be kept informed of our progress."

Tom Sr. looked surprised. "You mean to tell me that you can contact George Dilling from the bottom of this ocean?" he asked incredulously.

"Not directly, sir. But we can contact the satellites that we placed in orbit after we arrived, and they can relay the signal to Fearing."

"Excellent! Good work, James."

After the landing party had gathered their equipment Tom Sr. led them to the ship's elevator, which they rode to the ground. The party consisted of eight men and the four remaining robots. Tom Sr. had given the robots no particular orders, and they chose to accompany him on his search of the city.

When they stepped out of the elevator they were almost overwhelmed by the gloom of their surroundings. Directly above them loomed the *Challenger*, which lit the surrounding area as best it could. Its repelatrions had formed a sphere of force a half-mile in diameter and was keeping the methane ocean at bay. Within the sphere the ship's lights illuminated the ruins, but beyond the wall of force was the utter blackness of the bottom of the sea. All around the landing party were ruined buildings, twisted pieces of metal, and shattered stones. No structure had

survived intact, and many homes had been completely destroyed. The streets were filled with rubble. It was obvious to everyone that the city had been destroyed in a violent war.

As soon as they got outside Tom Sr. activated the repelatron on his suit and flew up into the air, to get a good look at the surrounding area. The remainder of the party followed him, but the robots stayed on the ground.

Andy spoke up over their suit radios. “We do not share your ability to fly, Mr. Swift. We will search for an opening from the ground.”

The remark grabbed Tom Sr.'s attention. *So they claim to be from the future, he thought, and built by my son, but yet they lack simple repelatron technology.* Aloud he said “Very good, Andy. Let us know if you find anything.”

While the robots scattered around the ruined capitol building the rest of the search party flew around its exterior, looking for a way in. After a half-hour one of the crewmembers made a discovery. “I’ve found something!” he cried. About thirty feet off the ground a large hole had been torn in the side of the capitol building. Tom Sr. flew over to join the crewmember and pointed his suit light inside the crevice, where he saw a large room with a hallway beyond it.

“It looks safe enough,” Tom Sr. said at last. “David, Mark, Joe – come with me. The rest of you stay outside and see if you can find another way in. I want to know if you see any signs of instability.”

Tom Sr. flew inside the hole and cautiously dropped onto the room's stone floor. The remaining three men followed behind him. As they shined their lights around the room they saw that it was in ruins. At one point it had been a large office of some kind, but a fiery blast had blown it apart and left burn marks on the floor and walls. All that remained of the room's original furniture were a few fragments of twisted metal.

The party left the room and walked down the hallway, where they found a stone staircase. Large portions of the building had caved in, but they were able to slowly make their way downstairs.

“This building doesn't look so bad from the inside,” Joe remarked. “I thought it was going to be a complete loss.”

Tom Sr. nodded. “It could have been a lot worse. We could see from the *Challenger* that most of the structure had collapsed, but I'd hoped that the central portion was still intact. All we really needed was a way to reach the machine below us. The rest of the building isn't important to us right now.”

After walking down three flights of stairs they reached the ground level. Tom Sr. was delighted to find that the stairs continued to lead underground. He leaned over the railing to get a better look. “It looks like this building has a couple basements – four, by the look of it. We may be in luck!”

David contacted the rest of the expedition over his suit radio. “Have you found another way inside?” he asked.

“Negative,” Donnie McGinnis replied. “The building's in awful shape.”

“Well, keep looking,” David replied. “If one part of the building is intact then other parts might be as well. We're going to descend into the basement.”

Tom Sr. led the way underground. He passed the first basement and continued down.

“Aren't we going to explore each level?” Mark asked.

“Eventually,” Tom Sr. said. “According to my suit the energy signature we're looking for is originating from deep beneath the building. I'd like to reach it before we do anything else.”

When they reached the lowest basement Tom Sr. opened the door walked in. The group followed close behind. Inside they could see rows and rows of shelves, each stocked with books.

“This room looks intact!” Tom Sr. said, surprised. “I guess it was so far underground that it survived unscathed. Look at all those books! This must be a library of some kind.”

The four men separated and began exploring the room. David walked over to the nearest shelf and scanned the titles. “These characters look a lot like space symbols,” he said.

“That's exactly what they are,” Tom Sr. replied. “Some of them I can read, but a lot of them are new to me. Apparently our

space friends have had some contact with this planet.”

Andy spoke up over the suit radio. “This is their homeworld, Mr. Swift. If you could read those books they would tell you their history.”

Tom Sr. removed one from the shelf. “It’s frozen solid,” he remarked.

“Being at the bottom of a methane ocean probably didn’t do it much good,” Joe remarked.

“You’re probably right. Here – let’s take a few of them with us. Maybe we can find some way to extract their contents without destroying the book. There might be a lot they can tell us.”

“I’ve found something!” David said. He gestured toward the far wall, where they saw a large, metal door. Beside the door were signs covered in space symbols.

“What do the signs say?” Mark asked.

Tom Sr. walked over and examined them closely. “I’m not exactly sure, Mark. It says that this elevator leads to a fallout shelter of some kind. That’s about all I can read.”

David tried to open the door, but it refused to budge. “I’ll handle it,” Tom Sr. said. After using his suit’s repelatrions to firmly anchor his position, he aimed another repelatron at the door and fired. The force of the blast shattered the door and blew its pieces into the elevator shaft, where they fell into the darkness. Tom Sr. then stepped over and calmly looked down into the deep, bottomless hole.

“That’s what we’re looking for, gentlemen,” he said crisply. He then activated his suit, flew into the shaft, and led the party down into the darkness.

Tom and Bud were standing in front of a large, brick building. It was late at night, and a beautiful array of stars filled the night sky. Two small moons were overhead, emitting a gentle glow that lit the empty city. The area was quiet, except for the sound of a breeze that blew down the wide streets.

“How did you ever find this place?” Tom asked. “This building looks just like all the others!”

“Remember how I was gone for hours?” Bud asked. “I checked building, after building, after building...”

“I get it,” Tom replied. “Now that's what I call persistence.”

“I would call it *wanting to get out of here*. I don't know about you, Tom, but I don't intend to spend the rest of my life in the Twilight Zone.”

Tom laughed and led the way into the building. As soon as he stepped in the door he realized that Bud had struck gold. The room was enormous, covering thousands of square feet and housing dozens of pieces of electronic equipment. Every empty space on the walls was covered with a giant glass monitor. The ceiling consisted of large, white squares that emitted a soft yellow light. Comfortable leather chairs dotted the room.

“Woah,” Tom said. “They've got more stuff here than I have in my lab back home!”

Bud nodded. “Now you see why I didn't want to touch anything! There's no telling what this place does.”

“There's one way to find out!” Tom replied. He sat down in a leather chair and rolled it over to a large keyboard that was covered in symbols. He examined it for a moment and then pressed a button. The entire room suddenly came to life. Pictures appeared on every display, and mathematical figures began scrolling by. Tom pressed another button, and the pictures shifted.

Bud shook his head in wonder. “Why do I get the feeling I would have picked the one button that blew everything up?”

Tom smiled as he continued working at the keyboard. “It's not that bad, Bud. Remember, I've spent the entire day reading up on these people. I think I know exactly what is going on. The information on these screens is confirming my suspicions.”

Bud sat down in another chair and rolled over to Tom. “Please, do tell! You were about to explain how we can leave the land of Oz and get back to Kansas. I'm homesick, Tom. I want to see Auntie Em again.”

Tom laughed. “You'd better not let Sandy know you called her that! She's been on your mind ever since we left Shopton, hasn't she?”

Bud blushed. “She did ask me to send her a postcard, remember? I don't want to let the poor kid down.”

Tom shook his head with mock seriousness. “If you don't watch out she's going to capture you and you're going to end up an old, married man like Dad. Ah, here we go!” Tom pressed a button and then shouted in triumph. “I knew it! There you have it, Bud. Success!”

Bud looked at the blankly screen. “I see lines of meaningless data, Tom. You're going to have to explain it to me in simple terms. What's going on?”

“Hmmm,” Tom said thoughtfully. “I guess I'd better start at the beginning. Do you remember Exman?”

“Are you kidding? How could I forget? I mean, how often do we get alien visitors from outer space?”

Tom thought a moment. “Actually, that happens quite a lot. Don't you remember the Green Orb?”

Bud shuddered. “Now there's an adventure I've tried to forget. Talk about weird! But, ok. *Most* people rarely get visited by aliens. I'll admit that you're not 'most people'. Even by our standards, though, Exman was a bit unusual.”

Tom nodded. “And why was Exman so strange?”

“Because he wasn't a physical being! He was made out of some strange brain energy. You had to build a metal case for him just so he could walk around and interact with the physical world.”

“Exactly!” Tom said. “Here's what happened. As I told you a few minutes ago, our space friends learned that their DNA was rapidly mutating itself into oblivion. When they found this out it was too late to reverse the damage, so they started looking for other ways to survive. What they decided to do was build a machine that could convert them into energy-based beings – a translator, so to speak. They became a race of Exmen.”

Bud was taken aback. “Now, wait just a minute, Tom. I thought these people were terrible at biology! Don't you remember our moon expedition? They were so panicked about an illness that had struck their livestock that they sent some of their

diseased animals to our moon so that we could find a cure. I don't know about you, Tom, but to me, sending your cows to a primitive alien race in hopes that they can find a cure has to be one of the most clear-cut cases of desperation I've ever seen."

"Cows?" Tom said, puzzled. "I don't remember there being cows on that ship. But regardless, you're right. They could not have built the translator on their own, but they didn't have to. According to the history book I read, when our space friends realized they had a problem they started searching the galaxy for a race of biologists. I think the translator was a joint venture. The biologists provided the expertise necessary to do the conversion, and the space friends provided the mathematical know-how."

"They provided what?" Bud asked. "What does math have to do with this?"

"Don't you remember Exman? He was helpless in the physical world! The translator doesn't just convert people to energy, Bud. It also provides them with an environment to live in."

"You mean our space friends now live in a giant electronic brain?" Bud asked doubtfully.

Tom shook his head. "Not exactly. Our computers back home are good at executing instructions, but our space friends weren't looking to build a giant simulator. They wanted to build an environment in which energy beings could live and interact. Think of Sandy's aquarium back at home. Her fish can't live outside it, but inside they are free to swim around and enjoy their surroundings. The translator acts like an aquarium for the Exmen. It provides them with a rich environment – one that is expressed in terms of higher mathematics. Our space friends found a way to translate those equations into something that the Exmen could perceive as a real place."

Bud frowned. "So you're telling me that millions of Exmen live in the translator that's right here in this room?"

"Well, yes and no. First, remember that there are two translators on Thanatos, neither of which is located in this room. The machinery you see here just offers us a way to interact with the translator that resides at the bottom of the methane sea. From

what I can tell based on these logs, the space beings that still live on this planet reside in the translator that's north of here. They probably thought that living in the one under the sea was too great a risk, and I can't say that I blame them. No, the one that rests beneath the sea is currently home to only two people.”

Bud's eyes suddenly grew wide. “You're not serious, Tom. You can't be serious! Please tell me that those two people are not the two of us.”

Tom nodded. “You got it, Bud. This world that we see around us is being generated by the translator. It was modeled after the way Thanatos looked before the war happened and the planet was destroyed.”

“Now, woah there, Tom. Wait just a minute! Are you telling me that you and I have been turned into *brain energy*?”

Tom nodded. “It makes sense a lot of sense if you think about it. I knew all of this fit together somehow, but until I entered this room I couldn't consciously put the pieces together. The reason that Townsend looks brand-new is because it actually is – the translator created it for us just a few hours ago. No one has ever lived here before. We don't get tired or hungry because we're now made of energy. Exman didn't have to be fed, Bud, and neither do we.”

“But that's crazy! How did we even get here? I don't remember asking anyone to do this!”

“That's what I was trying to figure out. Do you see this data on the screen?” Tom asked. Bud nodded. “You see, after our space friends built the translator they decided to put off becoming energy-based beings as long as possible. To accomplish this the translator was set up to monitor all life forms on the planet. In the event that one of them began to die the machine would scan them and convert them into brain energy. When we hit the ocean our ship broke up and we were moments away from death. So, the machine did what it was designed to do: it grabbed us and placed us here. It probably saved our lives, Bud.”

“I still don't get it,” Bud replied. “These people were aliens, right? We're not talking about humans here. Why did the process

even work on us? How could we be that similar to them?"

Tom shrugged. "I admit this would be the first alien race we've seen that had any biological similarities to us at all. But that could be exactly why the space friends made settlements on Earth in the first place. It's possible that of all the planets they'd found we were the only world that resembled them, so they made contact. After all, if you're going to make colonies it makes sense to plant them on worlds that are like your own. I don't have any proof of that, but it is a theory."

"Where does the war fit in?" Bud asked. "And what about our space friends on Mars? After all, energy beings don't need to keep herds of livestock around – they can just eat electrons for breakfast, or whatever it is they do."

Tom shook his head. "I don't know. I think I can find out, though, given a little time. The memory of these computers is pretty extensive."

"And here's another question for you, genius boy. How do we get out of here?"

Tom sighed. "I don't know, Bud. I just don't know. It may not be possible. Outside of this machine I think we may be dead."

CHAPTER XV: THE LIVING DEAD

IT took Tom Swift Sr. less than a minute to reach the bottom of the large elevator shaft that led deep below the surface of Thanatos. Once there, he knocked the elevator doors open with his suit's repeltrons and stepped past them into a small room. David, Mark, and Joe followed a few moments later.

"This looks like a large airlock," Tom Sr. said, as they directed their lights around the room. The floor, walls, and ceiling were made of bare concrete, and the room was completely devoid of furniture. Directly opposite the elevator shaft was a massive iron door. It showed no signs of corrosion or wear. Beside it was a control panel that emitted a faint green light.

David spoke up. "My suit indicates that we're about 640 feet below the ocean floor."

Tom Sr. nodded. "The energy signature appears to be coming from directly behind that door. I think we've found it."

"Do you think Tom and Bud are behind that door?" Joe asked.

Tom Sr. paused before answering. His voice trembled slightly as spoke. "If Tom were down here, he would have had to blast the elevator doors open just like we did, but the doors were intact. My son never made it here."

There was silence for a moment, and then Mark spoke up. "Should we force this door open as well?"

Tom Sr. shook his head. "That might damage the equipment inside, and we don't want to risk that. Let me try to open it using that control panel. We'll only force our way in if there's no other way."

For a few moments Tom Sr. worked silently at the control

panel. "I wish I'd brought my space dictionary," he muttered. Then, suddenly, the door made a deep grinding noise and slowly slid open. Through the door they could see another small room, with yet another massive door barring the way.

The four men stepped through the opening into the room beyond, and Tom Sr. made his way to the second airlock door. After pressing a few buttons on its control panel the first door shut itself behind them, and they heard the sound of the room becoming pressurized. Tom Sr. checked the atmosphere readouts on his helmet display and was surprised to see that the room now contained a breathable air supply.

"Should we remove our helmets?" Joe asked.

"I don't think that would be wise," Tom Sr. replied. "We don't know how long this atmosphere will last. I imagine it's been a very long time since anyone has serviced this machinery."

Once the air pressure stabilized the second massive door slid open, revealing a giant room that seemed to stretch forever into the distance. At first it was pitch dark, but as the group stood there and watched the room's lights slowly turned themselves on, illuminating what appeared to be a giant morgue.

The party stepped out of the airlock and found themselves on a small iron walkway that was at least thirty feet off the ground. A ladder off to their left stretched down to the floor. In front of them were rows and rows of shelves, each of which contained countless metal coffins. The shelves stretched more than a hundred feet into the air and ran the length of the room.

"This place is massive!" Mark exclaimed. "I can't even see the end of the room. It goes on forever!"

David spoke up. "Is this room really what I think it is? I mean, you don't suppose there are *bodies* in all of those, do you?"

"There's one way to find out!" Joe replied cheerfully.

"Yeah. Let's not find out that way," David replied.

Tom Sr. suddenly interrupted. "There it is! At last. Look down there on the floor, gentlemen." He pointed to a small control station located directly below them, where a large, black cube was resting. The cube measured five feet in every direction,

and had space symbols engraved on its side. Flashes of blue light would occasionally streak over the surface of the device.

“That's it, gentlemen,” Tom Sr. announced. “That device is definitely emitting the radiation we've been tracking.”

“It doesn't look too large,” Mark said thoughtfully. “It should be easy to load it onto the *Challenger*.”

Tom Sr. nodded, then activated his suit's repelatrions and flew to the floor. When he reached the cube he looked it over carefully. “Interesting,” he said, as he read the space symbols. “I can't read all of them, but they claim this machine provides an environment of some sort.”

“So it's providing the air in this room?” David asked doubtfully.

“I don't think so. The symbols seem to indicate that there is an environment *inside* the cube. I'm not sure what that means.”

As he studied the symbols, Mark walked over to the control station beside the cube and activated the display. “It looks like this thing still works,” he said.

Tom Sr. walked over and looked at it. “Hmmm. It looks like you were right, gentlemen. This place is indeed a morgue. The terminal displays what bodies reside in which receptacles. I can't read all of this, but it looks like the room is empty. No, wait – I see two entries. They're located four aisles to our right, then down the row a couple hundred feet. That's odd. Why build such a large room and only house two bodies?”

David spoke up. “Maybe both cubes have rooms like this, but they used the other one first, and this was just used as overflow.”

Tom Sr. nodded. “Could be. Let's go check out those two coffins. Maybe we can learn something there. I'd really like to know what that device does before I take it on board the ship.”

“Should we let the rest of the landing party know that we found the device?” Mark asked.

“I'm sure they've been monitoring our communications,” Tom Sr. replied. “Shouldn't they already know?”

“I haven't heard from anyone recently,” Joe said. “Hello? Is anyone else out there?” There was no response.

“That's strange,” Mark commented. “The room must be blocking our signal.”

“The room was probably shielded to protect the device,” Tom Sr. said. “The planet's atmosphere emits a lot of dangerous radiation that could be fatal to electronic equipment. We'll go back to the elevator shaft in a minute and let the crew know we're safe.”

As they turned the corner to go down the aisle they saw something that caught their attention. There, right beside the coffins they were about to investigate, was the wreckage of the *Extrasolar I*. The ship was battered almost beyond recognition.

Tom Sr. rushed over to look at it. A quick examination revealed that it did not contain any bodies.

“How did that get here?” Mark asked.

Tom Sr. shook his head. “I don't know – it never would have fit through the elevator shaft.” He paused a moment as he fought to control his emotions. “Do you see any signs of Tom or Bud?”

All four of them turned their gaze to the two coffins that rested beside the ship. Unlike all the other coffins in the room, each of these had a small display affixed to its side. The display was covered in space symbols and gave off a faint green light.

“It says the temporal seal is engaged,” Tom Sr. said curtly. He roughly pressed a button on each of the displays. After a moment there was a hissing noise, and the lid slowly opened. A cold, gaseous cloud rose out of the coffins and spilled over into the floor. Inside they could see the bodies of Tom Swift Jr. and Bud Barclay. One look at their condition confirmed their worst suspicions.

The blood drained from Tom Sr.'s face. “They're dead,” he said weakly. “My son is dead.”

Bud stood up and stretched. “So what now, Tom?”

Tom Jr. started intently at the display in front of him. “We've got a lot of work to do, fly-boy! Our first order of business is letting Dad know that we're still alive. He's probably worried sick. Oh, and we also need to find a way to get out of here.”

“What can I do to help? It's nothing personal, Tom, but I don't want to spend the rest of my life inside one of your Exman suits. They're nice and all, but I just don't think Sandy would go for it.”

Tom smiled. “Now are you sure, Bud? I mean, I can always redesign my brain energy container to be a spherical, basketball-sized Orb, or something. Then I could design another robot to carry you around. I mean, the possibilities are truly endless!”

Bud glared at Tom. “I am *not* going to be turned into a robotic, wisecracking sidekick, buddy. Don't even think about it.”

Tom laughed. “I would never dream of doing that, Bud. Don't worry – we'll get out of here one way or another. Now that you mention it, though, there actually is a way you can help. You can read space symbols now, so why don't you see if you can find any records of the war that destroyed this planet? We still need to discover the truth about those metal robots. Maybe if we can learn the real history of the war we'll have our answer.”

“Sure thing, Tom. Oh, that's another thing. Why can I understand space symbols?”

“It's a side-effect of being inside the translator,” Tom replied. “You see, the information on these displays is really just a mathematical construct that your electric brain is converting into a visual display. The translator is feeding your brain with all the information it needs to translate the symbols into something that is meaningful to you.”

Bud shook his head. “I didn't follow any of that, Tom, but I'll take your word for it.” He grabbed a chair again and sat down at a keyboard. “You say that this console is safe? I'm not going to blow anything up?”

Tom laughed. “Don't worry about it, Bud. If you just stick to logs and history reports you probably won't get near anything dangerous. Let me know if you find any footage of the war itself. Or if you find a way to communicate with the other translator on this planet.”

Tom and Bud worked silently for several hours. Tom was the first one to speak. “I think I have something,” he said at last.

“That's great, because I've got pretty much nothing. I'm just

not a computer guy, Tom. I'm Bud Barclay, not Ben Walking Eagle. Alien computers are *especially* beyond my limited understanding.”

“Ben who?” Tom asked.

“Never mind,” Bud said. “Different time, different universe. What did you discover?”

Tom gestured toward the screen he had been working with. “It turns out the translator does have a way to communicate with the outside world. It's not very sophisticated, but we can transmit information, including visible light.”

“So you can beam out a message?” Bud asked.

“I think I can do more than that. The translator contains a complete scan of every cell in our bodies – that is, the bodies we used to have. I think I can use that information to construct a holographic image that we can beam outside.”

“Can you even see outside?” Bud asked. “I didn't realize we had a window.”

Tom smiled and pressed some buttons on the console. “I haven't tried it, but I think we can get a video feed from the real world. Let's try this and see what happens.” The picture on the display was suddenly changed to show the planet Thanatos, as it appeared from space.

“Nice!” Bud asked. “Can you find the *Challenger*?”

Tom worked at the console for a few minutes. “You know, I just don't see it in orbit anywhere. I've found our satellites, but not the ship.”

“You don't suppose they landed on Thanatos, do you?”

“I hope not! There's no way they could have survived.”

Bud thought for a moment. “Can't you track it somehow, Tom? Its repelatrions emit energy, right? Can't you pinpoint it that way?”

Tom nodded thoughtfully. “That just might work. Give me a minute to work out the details.” A few minutes later Tom smiled in triumph. “Got it! This machine is amazing. It looks like our ship is located...” he referenced a map, and then grew pale. “Bud, it's at the bottom of the ocean!”

Tom quickly redirected the viewer to the coordinates of the *Challenger*. There, at the bottom of the sea, was his ship. It was resting quietly, its repelatrions creating a sphere around it a half-mile in diameter. The ship was parked in the midst of the ruined city.

“Hey, that looks like Townsend!” Bud said. “I think the ship is parked right in front of the capitol.”

Tom nodded. “The city’s in bad shape, but that’s exactly what it is. I just can’t figure out how Dad got the ship to the ocean floor. Wow. What an accomplishment!”

“Hey Tom,” Bud said nervously, “I hate to bug you, but who are those little guys walking around the capitol building?”

Tom zoomed the viewer closer and gasped. There, beside the capitol building, were four of the black skeletal robots. They appeared to be talking with several Swift employees who were wearing repela-suits. From their gestures it looked like they were discussing an opening in the wall that was thirty feet above them. Tom’s nervousness subsided when it became apparent that the robots were not threatening the humans. “I don’t get it, Bud. Where did they come from? Why are they working with the crew?”

Bud shrugged. “I guess it’s not too big of a surprise. You figured they were on board when your holographic penetrator was stolen. I guess this confirms it. It looks like a lot has happened since we left.”

“I bet Dad went straight to the translator,” Tom said thoughtfully. “Let me see if I can find it.” Tom worked at the console and was soon able to locate the translator’s energy signature. “Hey, Bud, that’s weird. The translator is buried under the capitol building! It looks like there’s an elevator shaft that leads right to it from the basement library.”

“That is weird,” Bud said. “I don’t remember seeing anything like that in this reality. I think we would have noticed an elevator.”

Tom nodded, and then snapped his fingers. “I bet it’s because this world doesn’t have a translator! All it’s got is this building,

which is used to interface with the outside world. Since there is no actual translator the builders didn't see a need to include it in this environment.”

“Whatever you say, Tom.” Bud said. “All I know is, I want our old reality to become our *only* reality. This energy aquarium just isn't my thing.”

“It wasn't a bad solution for our space friends, though,” Tom commented. “They can exist indefinitely inside the translator, and since the environment is made from energy they can manipulate it at will. It's got its advantages, but I'm with you, Bud. I'll take good-old-fashioned terra firma any day.”

Tom entered the coordinates of the translator into the viewer, and a picture of a giant room appeared on the screen. The room was lined with rows and rows of shelves, each of which contained countless coffins. At the front of the room was a control station with a giant black cube, which Tom confirmed was the actual translator.

“So you mean to tell me we're inside that little thing?” Bud asked, incredulous.

“I'm afraid so,” Tom replied.

“I would have expected it to be a lot bigger. How can that possibly hold millions of energy beings?”

“That's a good question,” Tom said. “It may be that the energy is stored in a very compact form. It's also possible that the inside of the cube is larger than the outside. It may contain a lot more than 125 cubic feet of space.”

“Do what?” Bud asked. “How would that work?”

“Oh, you'd just distort space. Kind of like the way the kronolator distorts time. I haven't tried it, but it's theoretically possible.”

“Hey – is that your Dad?” Bud pointed to a small group of four figures that were standing beside a stack of torn metal. They appeared to be studying the contents of two coffins.

Tom redirected the viewer to get a closer look. “That metal debris does look like the remains of our ship, but I don't know about the figures. I mean, come on, Bud. The suit helmets have a

reflective gold coating! You can't see inside them. How could you possibly tell which one is Dad?"

Bud shrugged. "He seems to be the one giving the orders, and I figured your Dad would personally lead the landing party. It's just a guess. By the way, what are they looking at?"

Tom moved the viewer so they could get a closer look at the two coffins that were the object of attention. Bud paled when he saw the figures inside. "Hey, Tom. Don't those two bodies look an awful lot like us?"

Tom nodded. "And they're in bad shape too. Judging by the look of them I think we can safely say that we're dead. Physically, at least."

Bud shook his head. "So how are we going to get out of this machine?"

"Well, the good news is that I think it's possible. The machine works both ways – it can take a person and convert them to brain energy, and it can put the brain energy back in the person. The problem is that it's got to have a body to put them into. Putting ourselves back in those corpses isn't going to help us any."

"Should I be worried?" Bud asked. "I mean, we've been in some tight spots before, but being dead is new even for us."

Tom smiled. "I'll let you know when to worry, Bud. Right now let's try to contact the landing party. I'm guessing that they are communicating by radio, so I'll need to emit a visual hologram that speaks over our Swift radio frequency. Hmmm."

Tom Swift Sr. was standing over the bodies of Tom and Bud. He had been in the underground vault for hours, unable to tear himself away. His first emotion had been anguish, followed by anger and despair. Now he felt completely spent. All that he had left was a feeling of emptiness.

Mark touched him on his shoulder. "The atomic earth blaster is working its way toward the second machine, sir. It should reach it in a couple hours. The crew is going to stop it right in front of the vault and then dig the rest of the way. We should be able to go back home tomorrow."

Tom Sr. nodded, but said nothing. At last he stood up. "I just can't believe they're actually gone, Mark. How could this have happened?"

Suddenly a brilliant flash of white light filled the room. Tom Sr. turned around, startled. There, standing a few feet away from them, were Tom and Bud.

Tom Sr. whirled around, looked at the bodies in the coffins, and then looked back at the figures in the aisle. "Who are you?" he demanded.

"Hi, Dad," Tom Jr.'s voice sounded over their suit radios. "I am so sorry it has taken us this long to get in touch with you. I would have called sooner but we ran into a few technical difficulties."

"You're not kidding," the voice of Bud Barclay said. "But old genius boy found a way."

Tom Sr. took a step toward the glowing figures. "Tom and Bud are dead," he said firmly. "Their bodies are right there. You are nothing but impostors."

"Well, yes and no, Dad. Those are our bodies, but we are actually quite alive. I can't tell you how good it is to see you again."

Tom and Bud spent the next hour talking to Tom Sr. and explaining what had happened to them. It took some convincing, but Tom Sr. at last understood what was going on.

"I can't believe you're still alive," Tom Sr. said, with tears running down his face. "I had given up all hope, Son. Please don't ever scare me like that again. You have no idea what it's like to lose your only son."

"I'm sorry, Dad," Tom Jr. said. "I wish we could have reached you before you got to the vault. It just took us a long time to figure out what was happening."

"It's ok, Tom," Tom Sr. said.

"I hate to change the subject," Bud said, "but why are there evil killer robots outside?"

"I guess it's my turn to do some explaining," Tom Sr. said. He then told Tom what had happened on board the *Challenger*.

“I just don't understand,” Tom Jr. said at last. “Maybe they really are from the future. Can they overhear our conversation?”

“No, Son, they can't. This room is shielded, which is why we couldn't locate your homing beacons. The translator must have moved you here right after the crash. In order to talk to the ship Mark is having to step outside into the elevator shaft. He actually just left a few moments ago to let the crew know that you've been found. They're going to be overjoyed.”

“I wouldn't exactly say we're home free just yet,” Tom Jr. warned. “Right now I'd say we were, um – ”

“Undead,” Bud quipped.

“I think we can remedy that problem,” Tom Sr. said. “Didn't you tell me that you created the hologram by accessing the scan the translator made just before you died?”

Tom Jr. nodded. “It's extremely complete.”

“And right now you're transmitting information from within the translator to me, so you can obviously relay data.”

“That's right, Dad. But that won't help us until we have a body that the translator can move us back into.”

Tom Sr. smiled. “Then the answer is obvious. You already have a machine that can convert energy into matter. Don't you remember?”

Tom Jr. gasped. “The Transmittaton! We can just send it the information it needs to recreate us – ”

“And then use the translator to place your brain energy back inside your bodies,” Tom Sr. finished. “I'll need to adjust your invention to receive a high-bandwidth signal, but I can handle that. I'll return to the ship and begin work immediately. It shouldn't take more than a couple hours. By then the atomic earth blaster should have reached the other translator, and we can take them both and get out of here.”

Tom Jr. nodded. “Meanwhile, Bud and I will do a little more research. We still don't know how to contact the other translator or whether the robots are actually telling the truth. I'd give a lot to know what those robots are actually up to, and what is really happening on Mars.”

“Sounds good, Son. Is there a way I can contact you?”

Tom Jr. shook his head. “Not that I’ve found so far. We’ll check back in later.”

“Ok, Son. Take care of yourself. I love you.”

“I love you too, Dad.”

With that, Tom Jr. closed the connection, and the holographic image disappeared.

CHAPTER XVI: SPACE INVADERS

JAMES Nathan gently tapped on the door as he walked into the *Challenger's* transporter room. "Do you have a minute, sir?" he asked.

Tom Swift Sr. looked up from the electronic assembly he was rewiring. "Sure," he said cheerfully. He stood up and stretched, and then laid his wire cutters down on a table.

James looked around the room and saw that it was almost usable again. When he had made his last status report to Tom Sr. a few hours earlier the Transmittaton had been lying in pieces all over the floor, but since then Tom Sr. had almost finished his work. There were only a few pieces of machinery that had not yet been reinstalled.

"It looks like you've been busy," James remarked.

Tom Sr. nodded, and then yawned. "It took some time, but it actually wasn't very hard. I just had to tweak it a bit to allow it to receive an external data stream, and that meant taking apart the main assembly. But overall it wasn't too bad a job."

"How long have you been awake, sir?" James asked. "Do you realize it's six in the morning?"

Tom Sr. laughed. "And I haven't had a bit of sleep all night, have I? It's ok, James. I'll grab Tom and Bud from the netherworld and then I'll get some rest. I can last that long, at least."

James nodded. "I wanted to tell you that the crew has returned with the second translator. Both of the units are now secured in Hangar 1. We are ready to depart on your command."

"Wonderful! My son will be glad to hear that. By the way,

what has our friend Andy been doing?”

“He – or it, I guess – helped bring both units on board, sir. I believe Andy is on the control deck right now, waiting for us to return to Earth.”

Tom Sr. nodded. “That's fine. Speaking of departing, I told Tom to contact me at half past six. The Transmittaton should be ready by then. We'll do a few dry runs, and then we'll go for it. Once Tom and Bud are safely on board we'll head for home.”

“Dry runs?” James asked.

“I've talked to Tom, and he thinks we can test our setup on a few common items, like rocks and shrubs. If we can successfully reassemble a number of complex objects then we'll feel a little better about trying it on something more serious.”

“Very good, sir. Should I pass the news along to Fearing?”

Tom Sr. shook his head. “No, and don't tell the robots either. We'll wait until they're actually back before we announce the good news. But do tell Chow. He really wanted to be here when Tom and Bud materialized.”

“You don't trust the robots, do you, sir?”

Tom Sr. was silent for a few moments. “Let's just say I don't like taking unnecessary risks. Did I tell you that before I came in here I stopped to look at the robot I destroyed?”

“No, sir, you didn't. Did you find anything?”

Tom Sr. nodded. “I didn't spend a lot of time on it, but I did notice that the Swift emblem was not printed on the parts. Chances are Swift Enterprises didn't build that one – or any of the others.”

“You're expecting a rough ride home, then,” James said.

“I am,” Tom Sr. replied.

“I'll warn the crew to keep their EMP weapons with them, sir,” James replied.

“I think I've found something, Tom!” Bud said excitedly.

Tom Jr. wheeled his comfortable leather chair over to Bud. The two of them were inside the translator interface room that Bud had discovered the previous day. They had spent the entire

night looking for a history of the war that had devastated Thanatos. Even though they had not gotten any sleep, neither of them were tired.

Tom looked over the screen carefully. “I think you're on to something, Bud! Let me take a look at this. Do you think you can find any video footage?”

“Let me check and see,” Bud replied. While Tom scanned the report his friend rolled over to another console and began working. After half an hour Tom leaned back in his chair and let out a long, slow sigh.

Bud spoke up. “I didn't read that report in detail or anything, but it looks like it roughly follows the outline given to us by those metal monsters.”

Tom nodded. “More or less. Evidently at one time Thanatos was in a system with a class G star. Based on the timelines I've seen, I'm going to guess that the war happened about five hundred years ago. It could be a lot later, though – it's hard to tie their dates to ours.”

“Class G, skipper?”

Tom explained. “A class G star is a yellow star just like our own sun. They're not terribly common, but they do exist. This one appeared to have two habitable planets – Thanatos, and another world. I think there may have been several uninhabitable planets and maybe a couple gas giants, but these records don't talk much about them.”

Bud nodded. “I'm guessing the Space Legion lived on the second world, and the two planets got into a fight. Right?”

“That's exactly what happened. I think the second world was actually colonized by the first, though. What came to be called the Space Legion was just a group of colonists that created a society on the second planet. The two worlds lived together in peace for a long time, but eventually the Space Legion decided they wanted to control Thanatos. The problem was that the Space Legion was the weaker of the two. Our space friends may have been a race of mathematicians, but their grasp of theoretical physics was astounding, and their homeworld was well-defended.”

“So they were expecting the Space Legion to attack?” Bud asked.

“Not necessarily. There are other hostile aliens out there, as we've found out. The galaxy ghosts ended up being friendly, but what if things had gone the other way? I'm sure that there are all kinds of threats out there that we don't even know about yet.”

“I get you. So if our space friends were so strong, what happened?”

“It was the genetic meltdown that did them in,” Tom replied. “When their race started to die their power faded, so they took what strength they had left and poured it into building the translators. When they started converting themselves to energy beings the Space Legion struck, and struck hard. I don't know what weapons they fought with, but they absolutely devastated Thanatos. It used to be like Earth, Bud. You've seen what it's like now.”

Bud shuddered. “It must have been horrible. An entire race – gone, just like that.”

Tom shook his head. “That's the thing, Bud. The race wasn't wiped out. The translators were designed to find people who were dying and convert them. When the attack came they powered up and converted everyone at once. I think hardly anyone died. The planet was destroyed, but the race lived on. In fact, judging from this report, it looks like the Space Legion was the party that lost the war.”

“You're kidding!” Bud said, startled. “How could they have lost?”

“It's true that the Space Legion did a lot of things to this planet. They destroyed every living thing off its surface. They cracked its crust and turned it into a volcanic nightmare. But they still lost. Tell me, Bud. How many other objects are there in this star system?”

“What star system?” Bud asked.

“Exactly,” Tom replied. “The only object still left is Thanatos. Everything else is gone, including the home world of the Space Legion. You see, in their haste to defeat our space friends the

invaders launched a weapon designed to make it impossible to enter hyperspace within a light-year radius. They wanted to keep the space friends from retaliating with their faster-than-light weapons and force them to fight with more traditional ships, which would give the Space Legion an advantage.”

“I take it something went wrong?” Bud asked.

“You could say that,” Tom replied. “The weapon accidentally collapsed the gravity wells of the star and its planets and converted them into unstable singularities. The entire solar system was destroyed in a matter of hours.”

“But how did Thanatos survive?”

“It almost didn't. The collapse started with their star and worked outward, and their planet happened to be the furthest away from the danger. That gave them enough time to use the growing singularities to transport their planet to another region of space. They were hoping to reach another class G star, but the wormhole collapsed while they were en-route and they ended up here, in deep space. The collapse had the nice side-effect of damaging space-time in this area and making it impossible to move the planet again. Then temperatures slowly dropped to what they are today, turning the planet into an uninhabitable nightmare.”

“I like the way you say things like *move the planet*, as if people did it every Saturday evening,” Bud said. “That's the great thing about hanging around with Tom Swift. You get to hear all sorts of interesting phrases. But really, Tom. I'd like to see *you* try to move a planet.”

Tom grimaced. “I'd really rather not, Bud. This is the only case of planet-moving I've ever come across, and I can't say it was a success.”

“I have to agree with you there, Tom. It sounds like both side lost.”

“Nuclear wars tend to be like that,” Tom replied, “and this war was fought with weapons much, much bigger than nukes. When two nations with that much technology get into a war it just isn't possible to have a winner. But I think our space friends fared

the best. Their world was devastated, but at least they had their translators. The Space Legion ended up with nothing.”

“So the entire Space Legion was wiped out?” Bud asked dubiously. “Then who was bothering us when you were building your subocean geotron?”

“That's the other piece to this,” Tom replied. “Both the Space Legion and our space friends had colonies in our own star system, and they were apparently the only extrasolar colonies that both groups had. I know for sure that our space friends settled on Mars. I have no idea where the Space Legion settled. But both of them ended up marooned around Sol when their home star system was destroyed. The people on Thanatos couldn't reach Mars, and vice versa. The two groups couldn't even communicate with each other.”

“But at one point they must have had the ability to travel between Thanatos and Mars,” Bud argued. “What happened?”

Tom shrugged. “If you and I were stranded on a desert island I might know how to build the *Challenger*, but that doesn't mean the two of us could build one with only palm trees and coconuts. It takes a civilization to build things like that, and once it's gone it's gone. Plus, I'm guessing our space friends on Mars are trapped in a translator of their own, and have only a very limited ability to communicate with the outside world.”

“Which is why they do everything via remote-controlled ships,” Bud said. “I get it. And our space friends seem to have the ability to drive the Space Legion off whenever they want, so the Space Legion can't be doing very well these days. But what does all that tell us?”

Tom drummed his fingers on the desk. “It tells us a few things. First, the robot I met in the observatory told me that our space friends had died, which might be true. If their translator was damaged for some reason – and we know they have one, because they sent us Exman – that could have wiped them out. I suspect that they're not all energy beings, since they still care about their food supply, but probably at least 90% of them are.”

“But didn't the robot say that the translator was a weapon of

some kind?" Bud asked.

"Not exactly," Tom said. "The robot said that the Space Legion wanted it and was not able to get to it. That I can believe. If they are facing the same mutational meltdown that affected the space friends – and I imagine they've got to be, because they come from the same race – then chances are they're on the brink of extinction. They would want a translator really badly."

"I'm positive the robot said something about using it as a weapon," Bud insisted.

"It kind of did, in a roundabout way," Tom replied. "It said the Space Legion wanted to use it to wipe out their enemies. We know that our space friends have remote-controlled spaceships. If the Space Legion had a translator they could come back from the verge of extinction and live long enough to finish any wars they wanted to start. That is, if they had the necessary armies."

"I guess I could see that," Bud said grudgingly. "So you think the robots are telling the truth?"

"It's very possible," Tom admitted. "By the way, have you found any video footage of the war yet?"

"Kind of," Bud replied. He pressed some buttons on the console. "It turns out that the capitol building used to have video surveillance, and the surveillance was still working when the enemy ships invaded. I think I've got some footage of the building being stormed, but that's about it."

"Let's see it," Tom said. Bud pressed another button, and a view of the courtyard outside the capitol appeared on the screen. The two watched as the sky grew dark and a torrent of energy poured out of the sky, striking buildings in the distance. A handful of sleek, saucer-shaped vessels flew across the sky. One of them broke formation and headed toward the capitol building. After bombarding it from a distance it landed in the courtyard.

"It doesn't look like our space friends are putting up any resistance at all," Bud said worriedly.

"They were probably being translated into energy beings while this was going on," Tom replied. "I imagine their response to the attack came later."

As they continued to watch they saw the saucer open and a stream of soldiers poured out. The troops scattered all over the courtyard, shooting at will. When one of them caught sight of the camera it fired at it, and the picture was lost. The last frame of the recording captured a black metal robot shooting an energy weapon at the camera. The robot had a skeletal form, a featureless head, and two glowing red eyes.

Bud gasped. "Tom – will you look at that!"

Tom whistled. "Boy, does *that* ever look familiar!"

"So much for your inventing Andy thirty years in the future," Bud replied. "It looks like they stormed Thanatos centuries before you were born – "

" – and now they're using me to get a translator so they can live long enough to complete the war they started five hundred years ago," Tom finished.

Tom stared at the picture of the robot for a few moments before speaking. "I think we've got a problem, Bud. Now, keep in mind I don't understand everything that the robots have been up to. But something tells me that our metal friends are not going to let us deliver the two translators to Mars."

"You're not kidding," Bud replied. "So what do we do now?"

"I don't know," Tom confessed. "I just don't know."

CHAPTER XVII: HOMEWARD BOUND

“SO how did that one go?” Tom Swift Jr. asked.

“Not so good,” Tom Sr. said, frowning.

A holographic image of Tom Swift Jr. was standing in the *Challenger's* transporter room, and six potted plants were on the floor around him. None of the plants were recognizable. For the past twenty minutes Tom Jr. had been sending data from the translator to the Transmittaton in an attempt to create a live object, but he had not met with any success.

“I just don't get it,” Tom Jr. said, puzzled. “We were able to fabricate an endless array of rocks without any problems. Why are plants any different?”

“Plants are a lot more complicated than rocks, Son. It's possible that we may be getting some interference that's blocking a portion of your data stream. If the Transmittaton is only receiving part of the signal it won't be able to accurately reproduce the object.”

“But the translator is located right down the hall from you!” Tom Jr. objected. “The signal is traveling about thirty feet, tops. How much interference could there possibly be?”

“We can easily design a test and find out,” Tom Sr said. “Let's try beaming the signal to the Transmittaton but have it not build the object. I'll analyze the signal that it receives and we can compare notes.”

Tom Jr. nodded. “It sounds like this could take a while.”

“I'm afraid so. We've never tried using your invention to fabricate objects before. You have to expect a few problems.”

“And, unfortunately, there probably isn't another way back

into the real world,” Tom Jr. said, sighing. “All right, Dad. Let's get started.”

An hour later Chow Winkler ambled into the room. The overweight cook gaped in amazement as soon as he walked in. “Well brand my germaniums, what's goin' on here?” he thundered. The transporter room was cluttered with dozens of different plant species. Some of them were intact and thriving, but others were clearly dead.

“Hey there, Chow,” Tom Jr. said, waving. His holographic image turned away from examining a large white Easter lily and faced the cook. “Where have you been? You were supposed to be here an hour ago.”

“Sorry 'bout that, boss. I had to feed the crew breakfast, y'know, and time sorta got away from me. But what are all the plants for? Are you tryin' to start a greenhouse, or somethin'?”

Tom Jr. laughed. “Not exactly, Chow. We've been trying to use the Transmittaton to fabricate objects, and we've been testing the process with plants. It looks like we finally got it licked, though. The past six plants worked flawlessly.”

Chow nodded. “And just in time, too. There ain't much room left in here. What was the problem?”

“It turned out it was my fault,” Tom Jr. admitted. “The signal I was generating from the translator wasn't focused enough. Instead of sending the data over a narrow band of frequencies I was allowing part of the message to leak. The Transmittaton wasn't getting the whole picture, so it was creating a mess.”

“I get it, boss. So what's next?”

Tom Sr. spoke up. “I think we're ready to attempt the extraction. Who wants to go first – you, or Bud?”

There was silence for a moment, and then Tom Jr. laughed. “Bud just told me that he needs to go first, since I'm the only person who knows how to work this thing. He doesn't want to be marooned inside the translator for the rest of time.”

“That sounds reasonable,” Tom Sr. replied.

“What's gonna happen, Tom?” Chow asked nervously. “You

ain't gonna produce hundreds of Buds, the way you made all those mushrooms that one time, are you?"

"Don't worry, Chow – there's no danger of that! Bud won't actually be alive again until his brain energy is returned to the body that we're about to make. There is only one copy of his brain energy, and it can't be duplicated, so there can only be one Bud Barclay."

"Whatever you say, boss. It don't make no sense to me. It sure will be good to see you again, though."

"I'll see you soon," Tom Jr. promised. The holographic image of him disappeared, and there was silence for a minute. Then the Transmittaton came to life, and there was a brief flash of light. When the light faded they saw Bud Barclay lying on the platform!

The figure was still for a moment, and then Bud groaned. His eyes fluttered open, and he attempted to rise to his feet. Tom Sr. rushed over to help him.

"Let's not ever do this again," Bud said weakly.

Tom Sr. smiled. "It's good to see you again, Bud. How do you feel?"

"Like I just fell off a cliff," Bud replied. "I feel awful. I think I'll live, though."

The two men quickly cleared off the platform to make room for Tom. Several minutes went by, but nothing happened.

"Where is he?" Tom Sr. said at last.

Bud shrugged. "He'll be here. When he beamed me out he had to sit there and manage the whole process. He's probably looking for a way to automate it, so it'll happen without him sitting at the controls. Give him a little more time – he'll show up."

As Bud predicted, a few moments later Tom Swift Jr. appeared on the platform, wearing khaki pants and his trademark striped shirt. Tom groaned, opened his eyes, and attempted to stand.

"I see what you mean," Tom Jr. said weakly. "This does feel awful. I guess our space friends still have some work to do on the rematerializing part."

Tom Sr. helped his son over to a chair, where he sat down. "It is so good to see you again, Son," Tom Sr. said. "I thought I had lost you."

"We weren't feeling too good either there for a while," Tom Jr. commented. "It's good to be back."

Chow nodded. "It surely is, Tom. You two got a real talent for gittin' into trouble, you know that?"

Tom Jr. laughed. "You're not kidding! I just can't figure out how I get into these situations. These things just seem to happen."

"So what now?" Bud said, as he settled down into a chair and relaxed.

"I think it's time to go home," Tom Sr. replied. "Have you made a decision about the translators, Son?"

Tom Jr. nodded. "Yes, Dad, I have. It turns out the robots were right. If we take the translators back to Sol we will be dooming the human race. I'm going to personally destroy both of them."

"Are you kidding?" Tom Sr. asked, aghast. "Those machines are home to millions, possibly billions of life forms! You can't destroy them!"

Chow spoke up. "Do not worry, Mr. Swift. Your son is lying." The image of Chow Winkler suddenly disappeared, revealing a black metal robot with two glowing red eyes.

Bud gasped. "You're not Chow!"

"I had a feeling that would flush them out," Tom Jr. said quietly.

Tom Sr. sighed. "I should have known. Chow would have been here right on time. You've already kidnapped the entire crew, haven't you?"

The robot nodded. "We took control while you were distracted in here. It worked out rather well."

"Are you Andy?" Bud asked. "Or are you someone else? I can't tell you creatures apart."

The robot turned its head to face Bud. "That is because the members of the Space Legion's robotic tactical division are all identical, save for our serial numbers. I am not the one Mr. Swift

named Andy. But you may call me Andy as well if you like.”

Bud shook his head. “I prefer the term *evil killer robot*, if it's all the same with you. Truth in advertising, and all that.”

“What did you do to the crew?” Tom Jr. demanded.

“Oh, they are all safe. We have placed them in one of your storage compartments. We took the liberty of emptying it first, of course. And now you will join them.”

“There are a few things about all this I don't understand,” Tom Sr. said. “First you try to keep us from going to Thanatos to get the translators, then you actually help us get the translators, and now you're stealing them from us. Why the change of heart?”

“Don't encourage him,” Bud pleaded. “He's going to start monologuing, and then we're going to be here for hours. Once an evil villain starts bragging about their evil plan it's almost impossible to get him to shut up.”

“Ignore him,” Tom Jr. pleaded. They suddenly felt the ship tremble slightly.

The robot spoke. “It makes no difference. We have now left the ocean floor and are headed into space. We will be back at Sol by the end of the day. There is nothing you can do about it. It will do no harm to answer your pathetic questions. We had you fooled all along.”

“On the contrary, I think I know exactly what you were doing,” Tom Jr. said boldly. “Your first plan was to keep us from ever going to Thanatos. Rather than reveal yourselves to us, though, you hired a couple local thugs and had them plant the jamming device and give us the warning on Rattlesnake Island.”

“Why would they do that?” Bud asked. “I mean, why use unreliable help when you're a space-age killer robot?”

“I bet it's the space friends,” Tom Jr. said. “They're afraid of them!”

The robot interrupted. “The Space Legion is not afraid of those you call your space friends. We simply find it best to avoid their attention where possible. Why provoke an unnecessary conflict?”

“You mean, if they caught you the jig would be up,” Bud

retorted. "They have you scared silly."

The robot ignored him and continued. "Our original plan was indeed to prevent you from coming here. We knew the translator that housed your allies had become damaged in an earthquake and was about to stop working. If we could discourage you from going it would ensure their defeat."

"But it would ensure your defeat as well," Tom Sr. said. "Tom told me about the genetic meltdown that happened here. Our space friends weren't the only ones on the verge of extinction."

"It would be better for both races to perish than for our enemies to live," the robot replied.

"What I don't get is why that robot revealed itself in the observatory that night," Bud said. "If you guys were trying to be all secretive then why give the game away? You had to realize that your story about time travel was pretty thin."

"The security system at Swift Enterprises is very strong," the robot said. Bud nearly burst out laughing, but a sharp glance from Tom silenced him. The robot continued. "We could not find anyone who was willing to challenge it, so we were forced to do it ourselves. Our original plan was to have a robot cloak itself with human form and complete the mission in that disguise, so that it would appear that a human was responsible. However, when our operative spotted Swift Jr. on the infirmary roof holding an EMP weapon we realized that our disguise was known."

"You guys spotted me?" Tom Jr. said, astonished.

"We?" Bud asked, interrupting. "Who is this 'we'?"

"The robots in the tactical division maintain constant communication with each other at all times," the robot explained. "Contact is only broken when the division is dispersed across multiple planets – or star systems, in this case."

Tom Sr. spoke up. "I believe I understand. Rather than challenging Tom, your group decided to change plans and have the robot pretend it was from the future."

"But what about the Swift logos that were on the parts?" Bud asked.

“Paint is easy to fabricate, Mr. Barclay,” the robot replied. “We had hoped that the original human disguise would not be penetrated but we felt it wise to have a backup plan ready. It is always wise to have options.”

Tom Sr. nodded. “That explains why the robot I destroyed didn't have the logo on it.”

“We had hoped you would not examine that machine,” the robot said. “It was a calculated risk. After this ship left Earth we could have overpowered you, but we were concerned that there would be difficulties getting to the translator. Since you and your son are excellent at overcoming technical challenges it seemed best to have you on our side. As it turned out our fears were unwarranted, but we did not want to take any unnecessary risks.”

Tom Jr. spoke up. “So once you realized we were actually going to make it to Thanatos you decided to hitch a ride, help us get the translators, and then steal them for your own use.”

“Our plan goes further than that,” the robot said. “If that was the extent of our plan then you would already be dead.”

“I wondered about that,” Bud muttered.

The robot continued. “It is entirely possible that those you call your space friends will find a way to repair their damaged translator. We do not wish for that to happen, so we are going to use these two translators to trick them into revealing the location of their base.”

Tom Jr. snapped his fingers. “That's it! You need us alive because you think our space friends will scan the ship for our presence and will get suspicious if only you robots are on board. And you know for sure they won't give up their location if the translator isn't here.”

“In fact we cannot be on board at all,” the robot replied. “Your friends are very adept at detecting our presence, so we will not be joining you on your trip to Mars. We will stop at one of your outer planets and return to our base, while this ship's autopilot flies all of you to Mars. Once it arrives it will automatically contact your space friends and tell them the good news. When your space friends reply with their coordinates this ship will

inform the Space Legion, and we will invade.”

“This ship doesn't have an auto-pilot,” Tom Sr. said.

“Something tells me it's got one now,” Bud muttered.

“It is time to go, gentlemen,” the robot said. “I trust you will not be so foolish as to attempt to stop me from escorting you to the holding area.”

Bud glanced at Tom Jr., who shook his head. Bud let out a heavy sigh, but took no action.

The robot led them out of the room and down the corridor. At the end of the hall was a heavy steel door that led to a storage room. Beside it was an armed robot. When the group reached the door the guard robot unlocked and opened it. After Tom Jr., Tom Sr., and Bud were ushered into the room the guard closed and locked the door behind them.

Inside the surprisingly spacious room they saw Chow, James, and the rest of the crew. Most of them were sitting on chairs, but a few were milling about. None of them appeared to have been injured. When the crew caught sight of Tom and Bud they eagerly crowded around and welcomed them back. Tom Jr. personally shook everyone's hand.

“Checking to make sure they're all real people?” Tom Sr. asked.

“Could be,” Tom Jr. replied nonchalantly. “It never hurts.”

“Hey, this really is a pretty big room,” Bud remarked, after the commotion had died down.

Tom Jr. nodded. “Normally it houses the space solartron, but we didn't take it with us this time.”

“Oh, of course,” Bud said. “That makes sense. A device that turns sunlight into matter wouldn't work very well in deep space, would it? But didn't the robot say something about emptying the room? What was in here earlier?”

“All my galley supplies,” Chow groaned. “I had enough food in here to last all winter, Tom, and now it's all gone. Those blasted robots made off with all my vittles.”

Tom Jr. was surprised. “How long did you think we'd be at Thanatos, Chow? This was just going to be a quick trip! I've

actually got to speak at a graduation ceremony in two weeks. Who told you we'd be there for months?"

"You can never tell," Chow replied vaguely. "There ain't many grocery stores out in space, Tom. You gotta be prepared for anything."

"So what do we do now?" Bud asked.

"Haven't you asked me that before?" Tom Jr. replied. "In fact, come to think of it, haven't you been asking me that ever since we got here?"

"Tell you what," Bud replied. "I'll make a deal with you. If you'll get us safely home and wipe out all the evil killer robots, I'll lay off with the questions for a week or two. Deal?"

Tom Jr. smiled. "Deal. But don't worry. All we need to do is wait."

"Wait?" Bud said, surprised. "You mean, as in sit here and do nothing?"

"Something like that," Tom Jr. agreed. "That is, unless you have your own super-secret plan for defeating a horde of invisible robots with only your bare hands."

"So I guess we wait," Bud said glumly.

CHAPTER XVIII: RENDEZVOUS IN SPACE

THE storage room that held the *Challenger's* crew was suddenly filled with a brilliant flash of white light.

"Looks like we're headed home, boys," Tom Sr. remarked sadly. "The kronolator just engaged."

"We must have just begun the first leg of our journey back," Tom Jr. said. "There will be another flash when the machine shuts down. Bud, can you help me track the bursts? I need to know when we reach Sol."

"Sure, Tom. How many jumps does it take to get there? Was it four?"

"Six," Tom Jr. corrected. "It's a nine-hour trip. Each jump will last about an hour."

"What if the robots make bigger jumps?" Bud asked.

"They can't. The kronolator doesn't have that much capacity. They might attempt fewer jumps, but then we'll be able to tell by their duration."

Tom Sr. yawned and sat down. "I'm sorry to leave you, boys, but I'm going to get some sleep. It's been a long, long day."

"All right, Dad," Tom Jr. replied. He settled into a chair across from his father. "We'll wake you up when we reach Sol."

As his father started falling asleep, Tom Jr. removed a notebook and a green pencil from his pocket, and began making notes.

"Hey there! Where did you get those?" Bud asked.

"I had the translator beam them along when I was rematerialized," Tom explained. "You didn't think I was just going to sit here for nine hours and do nothing, did you?"

“I should have known,” Bud groaned. “You didn't happen to bring along a book too, did you?”

“I'm afraid not, fly boy. But I do have two more pencils. Take your pick – do you want the red one, or the blue one?”

Bud shook his head. “No thanks – I'll pass. What are you inventing this time? Something bigger than the kronolator?”

Tom smiled. “Not exactly. This is something much, much smaller. Submicroscopic, actually. It should be a fun challenge.”

“Just try not to get us killed again, ok?” Bud pleaded. “Once we deliver the translators to Mars we're not going to have an escape hatch.”

“So you think we'll get out of this?” Tom asked.

“Of course, Tom! We always do. You'll figure something out, one way or another. I'm not worried.”

Tom stared at him. “You're not? Honestly?”

Bud shrugged. “Ok, so I'm a little worried. But something will come up.” He looked over at his friend and began to ask another question, but the young inventor was already lost in thought. Bud sighed, took a seat, and prepared for a long wait.

Hours later, Tom Jr. nudged Bud. “C'mon, wake up! We're almost there.”

“What's that?” Bud asked sleepily. “Did I miss something?”

Tom smiled. “Only the entire nine-hour flight! According to my watch the kronolator should disengage in just a few minutes.”

Bud looked around and saw that Tom's father and the crew was alert and watching the young inventor. He had obviously told them that something was about to happen.

“So what's going on?” Bud asked.

“Wait just a minute,” Tom Jr. said. “It's almost time for the kronolator to disengage.”

Four minutes later, the storage room was filled with a brilliant white flash of light. As soon as Tom saw the flash he grabbed his green pencil and pressed a hidden button on its side. At first nothing happened, but a few seconds later they heard the sound of a distant explosion. As the floor rumbled beneath them the lights

suddenly went out, plunging the room into complete darkness.

“What’s going on?” someone shouted.

A moment later the emergency lights came on. A single bulb lit the room with a soft yellow glow.

“The famous green pencil strikes again!” Bud said gleefully. “Did you plant the bomb where we’d discussed?”

Tom Jr. nodded. “I’m sorry, Dad, but I’ve had to damage your fusion reactor. I needed to cut power to the ship to prevent the robots from escaping. Now we just need to sit tight and wait. Things should start tipping in our favor in just a few minutes.”

“So you and Bud had a plan all along!” Tom Sr. said. “I should have known. Why didn’t you tell me, Son?”

“I wanted to, but we were afraid our conversations were being monitored. I’m sure that there are listening devices in this room.”

“You’re probably right,” Tom Sr. conceded. “Is that why it took you so long to materialize after Bud?”

Tom Jr. nodded. “I needed time to arrange the simultaneous transmission of myself, the pencils, and the bomb. It had to be done all at once so that the Transmittaton would only activate a single time. I didn’t want the robots to become suspicious.”

“So both of you knew the real situation before you left the translator,” Tom Sr. said. “I take it Bud has just been playing along to make it look more convincing?”

“Exactly,” Bud replied. “The robots were easy to spot – even the cloaked ones. It turned out there are nineteen of those things on board. If you count the disabled one in your lab that makes it an even twenty.”

“But if you knew what was happening, why not plant EMP bombs to disable the robots – or maybe transport them into space? You must have known where they were.”

Tom Jr. nodded. “The problem was that a couple of them were in the hangar beside the translators. An EMP blast would have destroyed the translators as well, and I didn’t want to risk that. And there was no way we could transport them all at once – the Transmittaton can only handle one person at a time. By the time we got to the last robot there would have been plenty of time

for them to retaliate. Besides, our space friends were concerned that we wouldn't be able to destroy them all and one of them might destroy the translators in an act of revenge.”

“The space friends?” Tom Sr. asked.

“It was a little tricky to contact them from within the translator, but we found a way,” Tom Jr. said. “I figured out how to emit radio signals when I first contacted you in the room below the capitol, so it was just a matter of pushing a signal to one of the orbiting satellites and relaying it to Fearing.”

Tom Jr. was interrupted when members of the crew began disappearing, one by one. The abductions appeared to be purely at random.

“It looks like the cavalry's here!” Bud said gleefully.

“Who?” Tom Sr. asked.

“The *Cosmotron Express*!” Tom Jr. replied. “The space friends told us the Space Legion had a base on Neptune, so I arranged for them to meet us there with a Transmittaton. That was the only risky part of the plan, since we didn't actually know where they intended to go until later. I thought there was a chance they would proceed straight to Mars, but took a gamble. The *Cosmotron Express* doesn't have a kronolator, but nine hours was plenty of time for the latest model to reach Neptune – and bring an army with it.”

“But Swift Enterprises doesn't have an army,” Tom Sr. protested. “The *Cosmotron Express* isn't even armed!”

“No, we don't,” Tom Jr. admitted. “But our space friends do.”

Tom Sr. suddenly disappeared. Over the next few seconds a few more crewmembers were beamed off the ship, but then the evacuations stopped. Minutes ticked by, but nothing else happened. Tom and Bud were still in the holding cell, along with four crewmembers.

Bud spoke up. “I'm going to step out on a limb here and guess that something bad has happened.”

Tom Jr. nodded. “Somehow I knew it wasn't going to be this easy. It never is. I guess it's time for Act Two.”

“Remind me again what Act Two is,” Bud said. “I don't

remember discussing an Act Two.”

“That's the part where we walk into the corridor and fight the robots with our bare hands,” Tom explained.

“Ah. You mean *that* Act Two. I was hoping that was just a bad dream.”

Tom shrugged and removed the red pencil from his pocket. Bud looked at it in disbelief. “You're going to use a soldering iron to get us out of here?” he asked.

Tom shook his head. “No, I'm not. You are right, though. Normally the red pencil would be the soldering iron. But that didn't seem very useful in our situation, so I've packed it with explosives instead.” Tom affixed it as near the door lock as he could and ordered everyone to stand back. The crew piled up chairs in one corner and crouched behind them to protect themselves. Tom then removed the green pencil from his pocket.

“Ah, radio detonation,” Bud said. “Nice! But you used that pencil just a few minutes ago! Why didn't it go off then?”

“Because I hadn't armed it yet,” Tom replied. He pressed the secret button once again, and an explosion went off in with thunderous roar. Smoke billowed out of the doorway, and a shockwave scattered the chairs.

Bud cautiously lifted his head over the chairs and peeked out. The metal door had been blown down the hallway, and the room was filled with debris. There were no robots in sight. “Someone *must* have heard that,” Bud said.

“I'm hoping our space friends have already eliminated the robots,” Tom replied. “If they haven't then we're going to be hurting. Quick – to the Transmittaton!”

The group of six ran to the door. Bud cautiously peered out of the doorway. After verifying that no robots were in sight they started running down the hallway. “The Transmittaton is down one level,” Tom whispered. “Let's go!”

As they raced down the hall Bud stepped into a side-room and came out holding two EMP emitters. He raced to catch back up with the rest of the group. “I thought we might need these,” he said. Bud took one for himself and handed the other one to

Donnie McGinnis.

“Don't I get one?” Tom asked, as they ran down the stairs.

“Do you know how to shoot?” Bud asked.

“I hit the robot in the observatory,” Tom replied.

“He *wanted* you to hit him,” Bud argued. “Besides, you've got to work the Transmittaton and get us out of here. Leave the fighting to me.”

When they reached the door at the bottom of the stairwell Bud turned to Donnie. “You stay here and keep watch. I'm going outside to make sure that the coast is clear.”

Bud cautiously opened the door to the hallway. After firing a few shots down the hall he quietly crept toward the transporter room.

“I guess that's one way to look for invisible robots,” Tom muttered to himself. “Just shoot at random and see if you hit anything! Where's my holographic penetrator when you need it?”

As they watched, Bud reached the door that led to the transporter room. He cautiously cracked it open and peeked inside, then threw it wide open and started shooting. Bud tried to step out of the doorway, but before he could move something caught him in the chest and violently threw him against the opposite wall. His EMP emitter flew out of his hands, and he slumped down onto the floor.

A robot calmly walked out of the transporter room toward Bud. As soon as it stepped into the hallway, however, Donnie shot it twice. The robot collapsed onto the floor in a shower of sparks.

Tom started to run toward Bud when Donnie grabbed him. “Not yet,” he hissed. “Let me make sure there aren't any more.” Tom nodded, and Donnie stepped into the hallway. After he had verified that the area was clear Tom rushed over to Bud, who had begun to stir.

“I'm fine, Tom,” he said weakly. Tom helped him to his feet. Donnie picked up the EMP emitter that Bud had dropped, and handed it back to him.

“Are you sure?” Tom asked. “You hit that wall pretty hard.”

“I think I broke some ribs, and my back is aching, but it's nothing that won't heal,” Bud replied. “But look, Tom, we can talk about that later. Get that invention of yours up and running and get us out of here, ok?”

Tom nodded, then helped Bud into the transporter room. As the five of them stepped onto the platform Tom started working at the terminal.

“I think we can run the Transmittaton on emergency power,” Tom said. He pressed a few buttons on the terminal and frowned. “It looks like there are other robots on board – someone is trying to get the fusion reactor back online.”

“All the more reason to get out of here,” Bud replied.

“Man, but there are a lot of ships outside,” Tom muttered, as he looked at the screen. Little green dots were flying all around the area, and pages of data scrolled by. “There's quite a fight going on out there.”

“We've gotta be going, Tom,” Bud replied urgently.

“Just give me a minute to find the *Cosmotron Express*,” Tom said. “There's a lot of congestion out there.” He paused for a moment. “Ok, I think that one's it.”

“You *think*?” Bud asked.

Tom pressed a button on the terminal, and one by one the remaining crewmembers disappeared. After the fourth crewmember disappeared, however, the Transmittaton powered down. The emergency lights suddenly went out as well, plunging the room into complete darkness.

“I think we've been noticed,” Tom said. “I had a feeling that kind of power drain wouldn't go unnoticed for long. A reception committee is probably on its way here now.”

“And I bet they can see in the dark,” Bud commented. “I say we get out of here pronto!”

“I'm right behind you,” Tom called out.

Tom Swift Sr. suddenly found himself on the bridge of the *Cosmotron Express*. It took him a moment to orient himself. Yellow lights were flashing, and crewmembers were shouting out

information. Outside the window Tom Sr. saw a fierce battle raging in space. Saucer-shaped ships were flying at high speeds, shooting energy weapons of some kind at each other. Beyond the battle the giant planet Neptune rested serenely in space. In the middle of the confusion Tom Sr. saw his daughter Sandy sitting in the pilot's chair, giving orders. "When are we going to have the transport working again?" she shouted. "I need propulsion back online! We can't stay here. There's a war going on!"

"Sandra Swift!" Tom Sr. gasped. "What on earth are you doing here?"

Sandra turned her attention to her father. "Dad!" she said, beaming. "You made it! I was so worried about you. Ned must have beamed you right onto the bridge. But where's Tom?"

"Last I saw he was still on board the *Challenger*," Tom Sr. replied. "But why aren't you at home in Shopton?"

Sandra flipped a switch on the ship's intercom. "Ned, what's the deal with the transporter? We've still got people over there!"

There was no response. A moment later Ned Newton's voice rang out over the intercom. He was gasping for breath. "We got hit," he said. "There's been a hull breach in the transporter room. It's a total loss."

Tom Sr. gasped. "How many were killed?"

"We all made it out alive, but we've got severely injured people on our hands. A team from the infirmary is working with them now. I was at the terminal when the blast hit so I emerged pretty much unscathed. But there's no way we can repair that machine."

Sandra clenched her fists and stared out the window into space. Outside she could see that the *Challenger* was at the heart of the battle, drifting helplessly in space.

"We've got to rescue them," she said. "I didn't come all this way to lose them."

Tom Sr. walked up to the intercom. "Ned, why did you bring my daughter into this mess? And what are *you* doing here?"

"Sandra wanted to come and wouldn't take no for an answer," Ned replied. "Besides, Tom taught her how to fly all Swift

aircraft, including this one. Do you realize that all of your experienced space pilots are out in space somewhere? It was practically impossible on such short notice to find someone who had actually flown this thing!”

“And so you chose *my daughter* as a pilot? Are you completely out of your mind? After my only son is nearly killed you decide to put my only other child in danger as well?”

“We were kind of in a hurry,” Ned replied. “But can we discuss this later? I need your help down here – if we don't get the propulsion system back online we're not going to make it.”

Tom Sr. sighed. “I'm on my way,” he said.

Sandy looked at her father. ““Phyl sends her regards, by the way. She would have come too, but she was at the dentist. Root canal, you know.”

“I don't know what I'm going to do with you,” Tom Sr. said, sighing. He glanced at the radar scope and paled. “There are dozens of ships out there! Whatever possessed you to come out here?”

“We're letting the space friends do all the heavy lifting, Dad, although we can do a little fighting with the x-raser,” Sandy explained. “But mostly we just came to beam you guys off the *Challenger*. Our space friends don't have beaming technology.”

“But how have you survived?” he asked.

Sandy frowned. “The inertite coating protects us from some of their energy weapons, and we've got a couple repelatrions to fend off missiles. Mostly, though, we're not surviving. By the way, I'd grab a spacesuit before heading down below. We're sustaining a lot of damage on the lower levels, and I can't promise that the hull integrity is any good.”

“Right – thanks. But don't think our conversation is finished, young lady. It's just – postponed.” Tom Sr. then made his way through the chaos on the bridge and headed into the elevator shaft.

CHAPTER XIX: DEFEATED

“WHERE are you, Tom?” Bud Barclay asked quietly. He was standing beside the doorway to the transporter room, still clutching his EMP emitter. It was pitch black. “I can't see a thing!”

A hand reached out and grabbed Bud. “There you are,” Tom Jr. said. “C'mon – Dad's lab is just down the hall, to the right. I've got an idea.”

Tom started sprinting down the hallway in the darkness, and Bud ran after him as best he could. Bud suddenly slammed into the far wall and gasped in pain. After reorienting himself he touched the wall and began feeling for the laboratory door. Over to his right he could hear Tom muttering.

“It's not taking my ID card,” Tom said at last.

“You do realize the power has been turned off, right?” Bud said.

“I know,” Tom sighed. “At least the electromagnets holding the door closed should be dead. Here – help me slide the door open.”

Bud finally reached the door, and together the two of them were able to slide it into the wall. Inside the lab they could see a few faint lights, but they were not bright enough to illuminate the room. Tom and Bud quickly stepped inside and then slid the door shut again.

Tom walked over to the right and fumbled around in the darkness. Bud heard a thud, then a crash, and then a few groans.

“Are you all right?” Bud asked.

“Just give me a minute,” Tom replied. A moment later a beam

of white light pierced the darkness.

"I knew there was a flashlight around here somewhere," Tom said. He directed it around the room and saw that he had knocked over a telejector. Small electronic parts and bits of broken glass were now scattered all over the floor.

"Where are all those faint lights coming from?" Bud asked.

"Some of Dad's equipment is powered by solar batteries," Tom explained. "I think we're safe in here for the moment."

Bud walked over to the center of the room and picked up Tom's holographic penetrator, which he aimed at the door. He gave his EMP emitter to Tom. "If anything tries to get in through the door I'll be able to spot it and shoot it."

"Sounds good," Tom said distractedly. He was scanning his father's workbench, looking for something. "We need time to come up with a plan."

"I'm way ahead of you," Bud replied. "Let's go to the hangar, grab the *Extrasolar II*, and get out of here. We can zip over to the *Cosmotron Express* and they can take us back to Earth."

Tom shook his head. "I'm not leaving until I get my ship back, Bud. The Space Legion is *not* going to get away with the *Challenger*."

Outside they heard a clanking noise. It grew louder, and then faded down the hall.

"They're looking for us, Tom," Bud said. "It's not going to take them long to realize that we left the transporter room and came here. We're outnumbered and outgunned. We've got to abandon ship while we still can."

"There has to be something we can do," Tom insisted. "There's just got to be. We know the Transmittaton is still functional. If we can somehow restore power to it –"

"And how are you going to find the robots, Tom? The transporter can't detect them! The *Cosmotron Express* has a lot better chance of retaking this ship than we do."

As they argued, Bud noticed that the door to the lab was starting to slide open. Tom and Bud immediately stopped talking. Tom clicked off his flashlight and quietly crouched behind some

equipment, and Bud activated the holographic penetrator and peered onto its display. As the door slid open he could see the outline of a robotic hand pushing against the door.

Bud fired the penetrator's EMP emitter, and then fired it again. The hand jerked off the door and threw off sparks, and finally disappeared out of his range of vision. Bud waited a moment and then slowly walked up to the door, using the penetrator's display to work his way through the darkness.

“What are you doing?” Tom whispered.

“Quiet!” Bud hissed.

After Bud made it to the crack in the door he scanned the hallway with the penetrator. Once he had verified that there were no other robots in sight he dragged the downed robot into the lab and slid the door shut.

“If we left it outside it would be a dead giveaway,” Bud explained. “But Tom, we've got to get out of here. We can't retake this ship by ourselves. We need to go while we still have a chance.”

Tom sighed, and turned his flashlight back on. “I guess you're right. Let's go.”

“Leave the flashlight off – it's a dead giveaway,” Bud said. “I'll lead with the penetrator. Just put your hand on my shoulder and stay behind me. We'll go to the stairwell and then take the stairs up to the hangar.”

Tom turned off the flashlight and got into position. Bud then crouched behind the door, slid it open, and scanned for robots. None were in sight. The two cautiously made their way to the stairwell at the far end of the hallway. All around them was complete darkness. When they were halfway to the stairwell they felt the floor start to rumble.

Bud grabbed Tom and hustled him into a doorway. “What's that?” he asked.

Tom frowned. “I'm not sure, Bud. It could be – ”

Before he could finish, they both heard a metal grinding sound in the stairwell up ahead. A bright light suddenly shone from beneath the cracks of the stairwell door, followed

immediately by a thunderous explosion! The door was blown into the hallway, narrowly missing Tom, and smoke poured out of the ruins.

Bud used the penetrator to scan through the smoke. "This is bad," he said. "Very, very bad."

"The stairwell has collapsed?" Tom asked.

Bud nodded. "It's now buried under tons of steel. The robots must have wanted to make sure that we remained trapped down here."

Tom stared thoughtfully at the penetrator's display. "At least they can't get to us now."

"Right," Bud said. "Because there is no way they could possibly cut a hole in the ceiling and drop down on top of us. Evil metal robots from space are incapable of cutting holes. Or of taking the elevator, come to think of it."

Tom winced. "Ok, so maybe I was a little off-base there. But the elevator is not a bad idea. Why not use it to reach the hangar?"

"How are you going to climb up the shaft with no power, Tom?" Bud asked.

"Come with me," Tom said. He and Bud raced back to Tom Sr.'s lab, where Tom took out his flashlight and made his way to the workbench. He scanned it for a second and then grabbed two silver machines that looked like futuristic pistols.

"Ah, repelatron guns!" Bud said. "I see what you're thinking." He took one from Tom and put it in his pocket as Tom turned off his flashlight. The two of them then ran out of the lab, down the hallway, and to the elevator.

Bud scanned the hallway. "I'm not seeing any more robots," he said at last. "I don't like it."

"They probably know the elevator shaft is our only way out," Tom replied.

"Which makes me like it even less," Bud replied. "But at least we're on the lowest level of the ship. They can't come at us from both directions."

Tom pointed his repelatron gun at the elevator door, switched

the gun into low-power mode, and pulled the trigger. The doors held for a second, then buckled, and then collapsed inward. Before stepping into the shaft Bud took a few steps back and used his penetrator to scan the area. Before he had completed his search, however, a small metal sphere dropped down the shaft and landed on the floor. It began to give off a soft white light.

“Tom – run!” Bud shouted. Tom saw the bomb and began running away, but he was too late. The sphere erupted into a ball of flame and blew the elevator shaft apart. A violent shockwave hurtled Tom down the hallway, where he crashed violently into the far wall. His flashlight clattered to the floor. Bud watched in horror as he slumped to the ground, unconscious. He quickly grabbed the flashlight and raced over to his friend.

“Stay with me, Tom,” Bud whispered as he checked his pulse. He glanced over to the elevator shaft and saw that the blast had blown a wide hole where the elevator doors used to be. There was a clear path up into the shaft.

“This is going to be tough,” Bud thought. He was still in pain from his own encounter with the robots, and knew it would be difficult for him to carry Tom upstairs. Bud first checked Tom's injuries. “Hmmm. A nasty blow to the head, but no obvious signs of bleeding. There may be internal injuries, though. He hit the wall pretty hard.”

Bud quickly thought the situation over. The infirmary was located several levels upstairs, which placed it well out of reach. “The lab probably has medical supplies somewhere, but I really don't have that kind of time. I've got to get Tom out of here before the metalheads realize we're still alive.”

As carefully as he could Bud hoisted Tom over his shoulder and carried him into the elevator shaft. He then took out the flashlight, turned it on, and put it in his shirt pocket. The flashlight shot a brilliant beam of light straight up into the shaft. After making one last scan with his penetrator he backed into a corner, aimed the repelatron gun at the floor, and held down the trigger. The force of the repelatron pressed him into the corner of the shaft, and they both started to rise off the floor.

“The hangars are two levels above us,” Bud thought. He looked down at the repelatron gun, which was humming quietly. “I sure hope this thing holds out. Man, am I hurting. Why couldn't the artificial gravity have gone out with the lights? That would have made this so much easier.”

The climb in the darkness was excruciating. Bud held both the repelatron gun with one hand, and with his other arm he held his unconscious friend. Bud found it very difficult to hold Tom and maintain his balance, and he did not have a free hand for the penetrator, which he was carrying under his arm. He realized that if the robots found him in the shaft there was no way he could defend himself without dropping Tom. On top of that, it was very difficult to hold the repelatron gun steady. “The gun just wasn't designed for this,” Bud thought wistfully.

When he finally rose to the floor that contained the hangar Bud saw that the elevator doors were closed. “I should have known,” he thought, grimacing. He gently backed off the power on his repelatron gun so that they would stop rising. After staring at the doors for a moment, he used the arm that was holding Tom to reach into his friend's pocket, where Tom had placed his repelatron gun. Once he had the second gun in his grasp Bud aimed it at the door and fired.

The blast blew apart the two doors and knocked them into the hallway. It also jerked the gun out of Bud's hand, and knocked Bud off-balance. As the gun clattered down the elevator shaft he struggled to hold onto Tom and keep from plunging into the darkness. In desperation he used his feet to push off of the elevator shaft wall and launched himself into the hallway.

As he landed he heard a clanking noise approaching. Bud dropped everything, grabbed the penetrator from under his arm, and did a quick scan of the hallway. He saw nothing.

“You're out there,” he muttered. “I'll find you yet.”

While still clutching the penetrator, Bud hoisted Tom over his shoulder again, turned off the flashlight, and started making his way down the hallway. It was pitch black, but the penetrator's screen offered a view of the surrounding area. He crept slowly

along one wall and continued to watch his back, convinced that something was following him.

When he had almost reached the hangar he heard something clatter down the hall. He whirled around just in time to see a small metal sphere roll toward him. Bud aimed the penetrator at it and fired an EMP blast. The sphere emitted a few sparks, but it did not explode.

Sweat poured off of Bud's brow. He was weak from exertion, and the pain from his broken ribs was becoming much harder to ignore. "I'm almost there," he told himself. When he reached the hangar door he stopped and looked at it. "Let's assume this room is full of metalheads," he thought grimly. Bud carefully opened the door and then started firing wildly, raking the entire room with waves of EMP. He felt something shake the floor under him, and saw groups of brilliant white sparks flare all over the hangar. As he stood in the doorway and scanned the room he saw that there were four robots inside. All of them were on the floor, disabled.

When Bud stepped through the hangar door he heard a clanking sound behind him. He immediately lunged inside and slammed the door behind him. As he ran away from the door and into the darkness of the hangar he heard a tremendous roar in the hallway. The door to the hallway was blown open, but it remained on its hinges.

"I hate those bombs," Bud thought. "Where's a cesium force field when you need it?" He raced over to the *Extrasolar II*, opened the hatch, and gently placed Tom inside, all the while keeping an eye on the doorway. After securing the still-unconscious Tom in place he jumped inside the craft and closed its tomasite canopy. "I am so glad Tom coats these craft in an EMP-resistant coating," Bud thought, as he powered up the ship. "You just gotta love inertite."

Bud used the ship's repelatrions to blast open the hangar door, and then flew the ship out into space. Outside everything was still. The planet Neptune loomed in the distance, and a small group of ships were flying toward it. Wrecked ships were

everywhere, and a handful of live ships charted a course through the debris field, heading toward an armada of vessels in the distance. Bud saw no signs of shooting.

“Let's see,” Bud said aloud, as he scanned his cockpit display. “I'm seeing four ships heading toward Neptune. There are a couple dozen dead ships, and, wow, a whole bunch of active ones. There's the *Challenger*, completely dead. And there, right in the middle of an army of alien spaceships, is the *Cosmotron Express*, with signs of heavy battle damage. Oh boy. This is clearly not my week.”

Bud opened up a communications channel. “This is Bud Barclay, calling the *Cosmotron Express*. How is life treating you these days?”

Bud heard Sandy Swift's voice come in over the radio. “Bud! You're alive! How is Tom?”

“Um, well, Tom has been better, actually. He needs urgent medical attention. But is that you, Sandy? What are you doing out here?”

“Just come on in,” Sandy replied. “We'll have a medical team standing by.”

“Right. You want me to head toward you because all those big alien ships surrounding you are...?” Bud asked.

“Our space friends,” Sandy replied. “Come on in and I'll explain everything. I think we've defeated the Space Legion once and for all.”

Bud then flew the *Extrasolar II* toward the *Cosmotron Express*. “It looks like we've done it again, genius boy,” he said to his unconscious companion. “Now we just need to get you patched up and head for home.”

CHAPTER XX: A MEETING OF FRIENDS

SANDRA Swift sat on the bridge of the *Cosmotron Express* and looked through the window at the giant planet Neptune. Her father, Tom Swift Sr., sat beside her. A few hours ago the bridge had been a flurry of activity, but it was now empty except for the two of them. A clock on the wall indicated that it was almost midnight.

Bud Barclay stepped out of the elevator and onto the bridge. "So there you are," he said. "I figured I'd find you here."

Sandy turned her head and smiled. "I don't get to visit Neptune very often, you know," she said teasingly. "I'd better make the most of it while I still have the chance! Dad is threatening to ground me for the rest of my life."

Tom Sr. laughed quietly. "You gave me quite a shock, young lady! I still don't know what possessed you to come out here and rescue us, but I'm glad you did. You handled yourself like a true Swift."

"Speaking of Swifts, how's my brother doing?" Sandy asked Bud. "Has he regained consciousness? I heard the initial report, but nothing since then."

Bud nodded. "He came to a little while ago, and then drifted off to sleep. When the doctor was patching me up he told me that Tom had a rather nasty blow to the head, but was ok other than that. He'll be fine. After all, the Swifts are legendary for being hard-headed."

"I think you're coming down with a bit of that yourself, Bud," Tom Sr. said. After all of the stress of the past few days he finally felt able to relax. "I'm surprised you were able to drag my son out

of the *Challenger*. He's never been one to abandon ship, and he really hates losing. I still remember what it was like to lose the *Red Cloud* when the ice caves collapsed. Tom's never had to deal with that before."

Bud agreed. "I was by his side an hour ago when he regained consciousness, and I talked to him for a few minutes. I didn't have the heart to tell him that we would have to leave the *Challenger* behind, though. Someone else will have to break that news to him."

"What's that?" Sandy asked, surprised. "I thought it was salvageable."

"I'm afraid not," Tom Sr. replied. "It's suffered more damage than I first thought. Both the fusion plant and the solar collectors are destroyed, and the robots did quite a job on the interior. It will take weeks of work to make it spaceworthy again, and we don't have the resources with us to fix it or to tow it back home. One day we'll have to make another expedition out here and repair it. Until then it will remain a satellite of Neptune."

"Oh – that reminds me," Bud replied. "I knew I came up here for a reason. The crew has finished moving the *Challenger's* Transmittation to Hangar 4 and they need your help putting it back together."

"I'm on my way," Tom Sr. said. "Are you sure they've moved all the parts? I'd hate to get halfway to Mars only to find out that we're missing a key component and can't beam the translators to the surface."

"That's what they tell me, but only you or Tom would know," Bud replied.

Tom Sr. nodded. "I'll go check, then. If everything is there I'll let you know, Sandy, and you can take us to Mars. I believe our space friends are expecting us to arrive no later than tomorrow afternoon."

Sandy nodded. "I'll get you there on time, Dad. Don't worry." Tom Sr. then walked over to the elevator and took it downstairs, leaving Bud and Sandy alone on the bridge.

Bud sat down beside Sandy and relaxed. "Man, it's been quite

a day,” he said at last. As he settled down into the chair he could feel his body cry out in pain. He had spent a few hours in the infirmary himself, getting his broken ribs x-rayed and cared for.

“And how are you, Bud?” Sandy asked. “I’ve heard you weren’t exactly uninjured yourself.”

“Eh, you know how doctors are,” Bud said flippantly. “They tell me it’ll be weeks before I can start fighting evil robots from outer space again. It’s awful.”

Sandy shot Bud an anxious look. “I just can’t believe you guys. Are you crazy? Do you know how close you came to dying out there? If you had done so much as lost your grip on the gun in the elevator you would have both fallen, and – ”

Bud saw that the stress of the day was finally getting to Sandy, and he tried to calm her down. “We’re fine, Sandy, honest, and we’re going to be on our way home soon. I won’t say that I didn’t have my doubts, but we got through it, and that’s the main thing. It was really brave of you to come out here and rescue us.”

Sandy looked at Bud and tried to smile. “I’m sorry, Bud. I’m just not used to all of this. I really had no idea what it was actually like, being out here, on one of your adventures. Please tell me they’re not all this dangerous.”

“Sometimes they are, but not always,” Bud said. “I remember when the asteroid pirates took over Nestria and we flew the *Challenger* into the antimatter barrier for the first time. Let me tell you, that was tense. But there are a lot of good times too, Sandy. It’s not all bad.”

Sandy sighed. “You do realize that most people go their entire lives without getting their consciousness trapped in an alien machine, right? Has Tom ever considered finding a new hobby? I hear that gardening can be a real blast.”

Bud laughed. “You say that as if your brother deliberately caused all this! I’d watch your back, though, Sandy. You’ve already started taking the first steps into the wild world of Tom Swift. Before you know it you’ll be caught up in your own adventures, and then Tom and I will have to come and rescue you.”

The intercom beeped, interrupting Bud. Sandy switched it on, and Tom Sr.'s voice came through the intercom. "It looks like we have everything we need, Sandy. You can take us to Mars."

"Thanks, Dad. I'll take care of everything. We should be there by morning."

For the next few minutes Sandy worked at the controls, first contacting the alien fleet and then laying in the course for Mars. When everything was set she engaged the repelatron drive, and the ship began moving away from Neptune. It did not take the planet long to disappear from view.

Bud glanced at the radar console and saw that the alien fleet was keeping pace with the *Cosmotron Express*. "Say, you never did tell me what happened when we were trying to escape from the *Challenger*," he said. "Why didn't the space friends take care of the robots for us? I mean, after all, that was the plan!"

"They were kind of busy," Sandy said, as she monitored the ship's systems. When she was satisfied that everything was in order she turned her attention back to Bud. "I'd better start at the beginning. As you know, Uncle Ned and I took this ship to Mars, where we met with the space friends' fleet. We then charted a course for Neptune and set out."

"I'm guessing all their ships are robotic," Bud replied.

Sandy nodded in agreement. "Well, as it turned out, we beat you to Neptune by about a half-hour. As soon as we got close to Neptune everything went nuts. It turned out the Space Legion actually had a fairly tough fleet, and the battle got pretty intense. We mostly tried to stay out of it until the *Challenger* appeared, and it showed up right in the thick of things. That's when the fight got *really* ugly. We began beaming you out as soon as we could, but it didn't take long to start sustaining damage."

"Like your propulsion system and transporter," Bud said.

"Exactly. One the transporter went out, all we could do was hope that the rest of you would be able to find a way off the *Challenger*. The space friends had their hands full, and we were dead in space. I figured Tom would find a way to get you guys off the ship, but when everyone but you and him were beamed

over and then we didn't hear anything else, we – ” and Sandy stopped, as her emotions rose to the surface. “We thought we'd lost you,” she said softly.

“We were just delayed a bit,” Bud said easily. “You know how it goes. Some aliens just don't have any respect for your calendar or to-do list. But man, this time our space friends really had bad timing. It figures that they would remove the robots from the *Challenger* just minutes after we abandoned ship. Oh well. At least we were able to salvage enough parts from it to get this ship going again. It would've been a long walk home.”

After a moment Sandy spoke up. “Somehow I have a feeling it won't be long before you and Tom are out here again. You know he won't rest until he gets his ship back.”

“And somehow I have a feeling that you're going to want to join him on that little expedition,” Bud said. “I just can't believe it. Whatever happened to staying home and knitting? I hear that crocheting is all the rage these days.”

“If you're looking for a sedentary girl that stays at home, Bud, you shouldn't date a Swift,” Sandy retorted. “Just don't make me come and rescue you again. After all, what if I had been the one at the dentist?”

Bud laughed. “Just get us to Mars, Sandy. I'm going to go get some sleep. It's good to be back.”

The following afternoon, the *Cosmotron Express* was in orbit around Mars. Every single person on the ship had gathered onto the spacious bridge, filling it to capacity. Even Tom Swift Jr. was present, sitting comfortably in a chair. He was bruised and had his arm in a sling, but his blue eyes were as sharp as ever, and he had an expression of pure joy on his face.

“Well brand my spacedust, Tom, but that there is a bee-you-teeful sight,” Chow Winkler exclaimed. He was standing in front of the window on the bridge, gazing out at the planet below. The ship was in low orbit around Mars, and everyone could see the beautiful mountains and canyons of the Red Planet. Today the view was simply breathtaking.

“One day it will be even more beautiful,” Tom Jr. replied. “These two translators that we’re about to beam down will give our space friends everything they need to bring Mars to life. Eventually this planet will look just like their original home world.”

“At least, it will if you have anything to say about it,” Bud replied, needling his friend. “I sense another project in your future!”

Tom shrugged. “You could be right. There’s always another invention on the horizon.”

“We’re receiving a transmission from the planet below,” James Nathan announced. He paused a moment as the ship’s electronic brain decoded the message. “It appears that the space friends are ready to receive the translators.”

Tom Jr. smiled. “Beam the translators to the planet, James, and give our space friends our regards.”

James pressed a few buttons on the console. A moment later Sandra Swift spoke up. “We’ve had a successful transmission.”

Everyone cheered. “You did it, Tom!” Bud said, clapping his friend on the back. Tom winced. “Sorry,” Bud replied, grinning.

“I’d have to say this was a joint effort,” Tom Jr. said. “I couldn’t have done it without all of you. This has been an amazing experience.”

“And one that I hope we never, ever go through again,” Tom Sr. said.

“I second that motion,” Ned Newton agreed.

“We’re getting another message from the surface,” James Nathan replied. “Our space friends are asking us to stand by.”

Tom Jr. smiled. Bud looked at him and frowned. “You’re up to something,” Bud said accusingly.

“Let’s just say I have a hunch,” Tom replied.

A few minutes ticked by. “So what’s next on your agenda, Tom?” Ned Newton said at last. “Now that you’ve conquered the ocean floor and the depths of space, what’s left?”

“It’s hard to say,” Tom replied. “There is so much that needs to be done! We’ve only just begun to explore the stars, and there

are still frontiers on our own world that we haven't touched. It's impossible to say where we're going to go next." It would not long, however, until Tom was soon deeply involved in his next great invention, *Tom Swift and his Claytronic Stones*.

James Nathan spoke up. "We're being hailed from the surface, sir. The space friends are requesting permission to come aboard."

Tom Jr. and his father exchanged glances. "This is it!" Tom Jr. said excitedly. "All these years of effort have come down to this moment."

Tom Sr. nodded. "Let's not keep them waiting, Son."

"Tell them that permission is granted," Tom Jr. announced.

James relayed the message to the surface of the planet. Moments later, the bridge was filled with a soft, white light. When the light faded they saw a tall, elderly gentleman standing in the middle of the bridge. The man was easily six and a half feet tall, and had brown eyes and thinning grey hair. He was dressed in a long, brown robe, tied about the middle with a white belt. He scanned the crowd for a moment and then saw Tom Jr. sitting in a chair.

"It's a pleasure to see you again, Tom," he said, as he reached out his hand. "Allow me to extend the warmest thanks to you on behalf of my people."

Tom Jr. struggled to get up out of his chair. Bud helped him to his feet. "We've been honored to know you," Tom Jr. said. "Have we met before?"

"Indeed we have," the man said, smiling. He grasped Tom's hand and shook it firmly. "Don't you remember? When I traveled to your world you made a most elegant metal case for me. I believe I aided you in fighting a mortal enemy – the Brungarians, or something like that."

Tom's eyes widened, and some of the crewmembers gasped. "You mean you're *Exman*?" Tom said.

"I prefer the name Jack, but *Exman* will work," he replied agreeably.

"Hey Tom," Bud said, nudging his friend. "Not to interrupt your historic occasion or anything, but why can you shake his

hand? I didn't think projected light was that solid.”

Jack turned to Bud. “We have not been idle during all those years we spent on Mars, young Barclay. For some time we have known how to leave the translators and retake physical form, much as you yourself did. The problem was that our translator had been damaged over the centuries, and was nearly destroyed in a violent earthquake not long ago. Had you not brought these replacements our race would have perished. Thanks to all of you, however, we have been given a new lease on life. We are in your debt.”

“It was kind of touch and go there for a while,” Bud said. “We were glad to do it and all, but if it's all the same with you I'd rather not tangle with the Space Legion again!”

“They have been dealt with,” Jack told Bud. “Rest assured that they will not trouble you any longer. They will survive, but their ability to trouble others has been forever taken from them. All of you have truly accomplished a great deal in a very small amount of time.”

Jack then turned and addressed the entire crew. “It is my pleasure to invite all of you to our city on the planet below. Please, come and be our honored guests. There is much we would like to show you, and it has been many generations since we last sat down with your people face-to-face. Preparations are now under way for the evening meal, and we would like for you to share it with us.”

Bud smiled. “How can you turn down an offer like that, Tom? You know what they say – it's sure to be a real *out-of-this-world experience!*”

BONUS MATERIAL

DINNER AT TOM'S

TOM Swift Jr. found himself alone in his laboratory late one November evening. Through the window the eighteen-year-old inventor could see that the sun had set and the stars had begun coming out. Although it was warm inside the lab, outside he saw that a fresh layer of snow had fallen, transforming dreary upstate New York into a winter wonderland.

“My work on the kronolator took so long that I missed Fall altogether,” Tom thought wryly. He had returned to Swift Enterprises only a few weeks ago after an extended stay with his space friends on Mars. The previous months had been some of the busiest of his life, as he attempted to break the light barrier and visit an extrasolar planet hundreds of light-years from Earth. During that adventure Tom had lost all track of time and now realized that Thanksgiving was only a few days away.

After making a few final adjustments to a machine on his workbench Tom walked over to his closet and selected a black suit coat. “I think this dark tie ought to go nicely with my navy-blue shirt,” Tom thought to himself. He put on the coat, walked over to a mirror, and inspected his outfit carefully. As he removed a small bit of lint from his sleeve he heard a buzzing sound come from the door.

The young inventor leaned over and glanced at a nearby television screen, which showed his sister Sandra standing outside his lab. She was wearing a long, black dress and was holding a stylish matching purse. Tom reached over to the wall and pressed a button on the intercom. “You can come on in, Sandy. You do have access to my lab, you know.”

“You're not really going to make me dig for my ID card, are

you?” Sandy asked. “I just did my nails, and besides, it's impossible to find anything in this purse. Can't you just open the door?”

Tom sighed and pressed a red button. The massive vault door that guarded the only entrance to his lab gently opened. Sandy quickly stepped through it, and the door shut and locked behind her.

“So how does this look?” Tom asked, turning away from the mirror and toward his sister. “You look great, by the way!”

“Thanks, Tom,” she said. She then stared at Tom's outfit and frowned. “You don't happen to own another tie, do you?”

“What do you mean?” he said, glancing down at his tie. “Is there something wrong with this one? I didn't see any stains on it.”

Sandy shook her head. “No, it's just that you wore that same tie the last time we had dinner at *Gulliver's*. In fact, that's the only tie I've seen you wear in years.”

Tom laughed. “I'm more at home in a striped t-shirt, Sandy. Ties just aren't my thing. Besides, this evening we're not going to *Gulliver's*.”

“We're not?” Sandy asked, confused. “I thought you said we were celebrating your birthday at a fancy restaurant downtown.”

Tom shook his head. “You may have thought you heard the word 'downtown', but that's not the word I used. Yes, we are going out with the family to celebrate my birthday, and yes, it's a classy establishment. But it's not located downtown.”

“Oh,” Sandy said. “Sorry. Then where are we going?”

“Now that's the million-dollar question,” Tom said. “The rest of the family is already there – Dad took Mom, Phyl, and Bud over earlier today. He offered to take you as well, but I wanted to do it personally. You are my sister, you know, and this is something a little unusual.”

“Unusual?” Sandy asked. “What's the name of this place? Have we been there before?”

“Bud was actually the first one to find out about it,” Tom replied. “He told me, and I told Dad. Mom and Phyl didn't know

about it until earlier today, so you're not the only one who isn't up-to-speed.”

Tom walked over to his workbench and gently slid a framed oil painting of Aurum City over to the left, revealing a small green square. He gently placed his right index finger over the square and held it there for a second. The square emitted a soft white light, and then clicked. As Tom returned the painting to its original position a metal plate descended over the lab's only window. The lights in the lab dimmed, and all the security cameras in the room went dead.

An unseen robot suddenly spoke in a quiet monotone. “The room has been secured.”

“What's going on, Tom?” Sandy asked. “This isn't one of your new inventions, is it? Do you know how long it took me to get dressed up for dinner? If you're planning on taking me on some crazy adventure – ”

“This is an invention, yes, but it's not mine,” Tom corrected. “And we really are going out to celebrate my 35th birthday. We just can't get there from here, so we're going to do something that's highly classified. So highly classified, in fact, that officially it does not exist.”

“Now wait a minute, Tom. Doesn't 19 come after 18? How could you possibly be 35?”

Tom sighed. “It's a long story. I built the Flying Lab in 1954 at the age of 18, right?”

“Right,” Sandy said.

“So I was born in 1936,” Tom replied.

“Don't tell me you've forgotten what year you were born!” Sandy chided.

“It doesn't come up very often,” Tom said. “Anyway, this year is 1971, so if you do the math I must be turning 35.”

“1971!” Sandy said, astonished. “I don't remember it ever being 1955.”

“You can blame Victor Appleton II for that,” Tom said wearily. “Didn't you ever wonder how it was possible for all those adventures to happen in one year? I mean, think about it. Doesn't

that seem awfully unlikely?”

“I guess,” Sandy said. “I never really thought about it. But who's this Victor guy?”

“Eh, you might call him a fan of mine. He meant well, but he inadvertently messed up the timestream. I didn't get it all fixed until this morning, and it took me hours to assess the damage. Technically it's 1971.”

“I don't feel any older,” Sandy said.

“I'll give you Victor's address so you can send him a thank-you note,” Tom replied.

“I think we'll stick with you turning 19,” Sandy said at last. “I don't particularly want to be 34 just yet. You haven't actually tried to float this timestream theory by anyone else, have you?”

Tom thought for a moment. “Bud and Dad know about it, but no, I haven't issued any press releases to the general public.”

“Then let's keep it that way.” Sandy looked down at her watch. “Shouldn't we be going? I really don't want to be late.”

“Right!” Tom replied. He walked over to the far wall of his lab and examined it for a few seconds, and then placed his palm firmly on a section of the wall. Sandy could not see anything special about that section of the featureless concrete wall, but after a moment the outline of a doorway began to emerge. After ten seconds a door-sized portion of the wall had simply vanished. Through the hole Sandy could see only blackness.

“Ok, so what am I seeing?” Sandy asked.

“Nothing, yet,” Tom replied. He removed a remote-control from his pocket and entered a series of numbers. A series of notes then sounded from the dark hole in the wall.

“Am I hearing *In the Hall of the Mountain King*?” Sandy asked, perplexed. “I mean, seriously?”

“That was Bud's idea, not mine,” Tom Jr. remarked as he put the remote back in his pocket. “He thought it'd be funny. It just tells us that the machine has received the address and is working on establishing a connection. This will take just a minute.”

“So this is a transporter of some kind?”

“Kind of,” Tom said. “It's like the Transmittaton, only it

doesn't transport us across space or time.”

Sandy frowned. “That pretty much eliminates everything, Tom. So what does it do?”

“You'll see,” he said, his eyes shining. “It'll tell us when it's ready.”

After another minute ticked by, the utter blackness was replaced by a deep, deep blue. A faint light appeared to emanate from small vortexes that swirled in its midst. Out of the void a deep note sounded.

“There we go! It's all set. Are you ready?” Tom asked, smiling.

“I'm not stepping into that thing until I know what's going to happen!” Sandy said firmly.

“It's going to take us to the restaurant,” Tom said soothingly. “You won't feel a thing. Trust me. Just take my hand and let's go.”

Sandy bit her lip nervously, then grabbed Tom's hand. Together the two of them walked through the doorway. The two felt a slight sensation of vertigo, and then it was over. Sandy found herself standing on a stretch of green grass beside a two-lane highway. In front of them was a classy diner, surrounded by old oak trees. The sun was just beginning to set, and a few clouds dotted a dazzling yellow and red sky. A soft wind gently blew Sandy's long blond hair.

“I thought you said that thing didn't transport people across space,” Sandy said.

“It doesn't,” Tom replied. He let go of Sandy's hand and the two started walking toward the diner. “The scientist that developed it calls it the negative zone. It's actually for transporting people between universes.”

Sandy stopped in her tracks. “Between *what*?” she demanded. She suddenly noticed that there were no cars in the parking lot of the diner, although it appeared to be full of customers. “And why is the parking lot empty if this is such a popular place?”

“You can't get here by car,” Tom replied. “Or by plane. This is actually an island between universes. The negative zone is the

only way to get here.”

“Ok,” Sandy said slowly. “But – ”

She was interrupted by a middle-aged gentleman who had just left the diner. He spotted them crossing the parking lot and called out to them. “Tom!” he said, beaming. “You’re Tom Jr., correct?”

Tom walked over to him and shook his hand. “Dr. Hartson Brant! I haven’t seen you in months. How have you been?”

“Very well, I’m pleased to say,” Dr. Brant replied. “Things have quieted down considerably since our run-in with the racing aquadisk. But I hear you’ve been pretty busy lately!”

“The trip to Thanatos was amazing,” Tom replied. “But say, you really should come and see us at Swift Enterprises sometime! You’re welcome whenever you can make it.”

“I’ll be sure to let Rick know,” Dr. Brant replied. “He’s always looking for a bit of excitement! But I know you’ve come here for your birthday, and I don’t want to keep you waiting. It’s nice to meet you at last, Sandy.”

As the gentleman walked off Tom turned to his sister. “He runs a scientific research foundation on a place called Spindrift Island. It’s really quite amazing.”

“What’s that about a racing aquadisk?” Sandy asked. “That sounds like something you would invent.”

“It was invented by a Swift,” Tom admitted. “Just not me. I’m hoping its inventor will be here tonight. I’d like to get his opinion on a few technical issues I’m having with my claytronic stones.”

“And just what is this place?” Sandy asked, as she walked with Tom toward the diner’s entrance.

Tom nodded toward a brass plaque mounted beside the door, which simply read *Tom’s*.

“You have a restaurant named after you?” Sandy asked in amazement.

“Kind of. Come on in! Dad made the reservation weeks ago, so we shouldn’t have to wait on a table.”

Inside the door they were met by a tall, blond woman wearing an attractive green uniform. A classy nametag proclaimed her name to be Nancy.

“Good evening, Tom,” she said brightly. “And this must be your sister Sandra! It’s so nice to meet you at last – Tom has told me so much about you.”

Sandy smiled, a bit uncertainly. “Thanks,” she said at last.

Nancy turned her attention back to Tom. “The rest of the party has already been seated. Right this way, please!”

“Nancy’s actually a detective,” Tom whispered to his sister. “She works here occasionally, when she’s in-between cases. It’s a good way to pick up new clients. Frank and Joe know her better than I do – they’ve actually worked with her before.”

“Who?” Sandy asked.

Tom nodded over to one corner of the restaurant, where two teenagers were seated in a booth, engaged in a lively discussion. One had dark hair and the other had light blond hair. “Frank and Joe Hardy. They’re detectives too, actually. I’ll try to introduce you to them later.”

As the waitress led them to the back of the restaurant Sandy took a moment to look the place over. From the outside it looked deceptively small, but inside she could see that it was very roomy. The entire place was made of a very elegant, deep-colored wood, and the lights were kept dim enough to create a sense of intimacy. Each table was set with fine crystal plates and glasses, and the silverware appeared to be made of genuine silver. Even the napkins were embroidered with an elegant T.

What surprised her the most, however, were the interior decorations. The walls of the restaurant were tactfully decorated with pictures of inventions. Some of them she recognized as belonging to Tom and his father, but others were a complete mystery to her. “What a strange place,” she thought. “Who puts pictures of spectromarine selectors on their wall?”

When they reached the rear of the restaurant Sandy saw that they had been given a private room. A long, mahogany table was positioned in the center of the room, and a crowd of people were milling about, talking. She recognized her father, her mother, Phyl, Chow, Ned Newton, and Bud Barclay, along with several other people she did not recognize.

“Your menus are on the table,” Nancy said, as she ushered them into the room. “Bess will be your waitress this evening. She’ll be with you in a moment.” With that, she departed.

“Sandy!” Bud said, as soon as she entered the room. “I’m glad you could make it. You look terrific!”

“Thanks,” Sandy said. “I just can’t believe you’re actually wearing a suit. The last time we went out for Tom’s birthday – ” and then she stopped. “Come to think of it, you weren’t there, were you?”

“I’m afraid not,” Bud said. “I missed his 18th birthday, and I didn’t know him when he turned 17. But say, let me introduce you to a few people!” He led her over to two strangers that had been talking to her father. To her surprise, both of them had blond hair, and they both looked amazingly like her brother. The older of the two introduced himself first. “I’m Tom Swift,” he said, shaking her hand.

“And I’m Tom Swift as well,” the younger one said. “But since we all answer to the name of Tom you can call him Tom III, and me Tom IV.”

“Tom four?” Sandy asked, as she sat down at her seat.

Tom IV sighed. “It’s a long story, and I won’t get into it now.”

Sandy put her purse down on the table and gave Tom IV a steely gaze. “Young man, I highly suggest you *do* get into it now. A few moments ago I was about to go out to dinner with my family. Now I find myself in some other universe that is apparently filled with clones of my brother.”

“Just a minute,” Tom Jr. said, interrupting. “Where are the other Toms?”

Tom IV spoke up. “Tom V was here earlier, but he got a call and had to go. He said he had to stop a group of terrorists from sabotaging a robotic competition.”

“No, that was last time, ” Tom III said. “I thought he said something about a force shield.”

“That was my adventure, not his,” Tom IV argued. “I’m positive that somebody was trying to sabotage something, and he had to go stop it.”

“As you can see, we really weren't paying too close attention,” Tom III told Tom Jr. “Sorry. But he apologized for missing your birthday and said he would try to make it next time. He left his gift over there in the corner.” He nodded toward a long table next to the door, which was piled high with presents.

“But what about the TSL Swift?” Tom Jr. asked. “He's always here!”

Tom III shrugged. “He didn't RSVP, so I guess he's busy. Last I heard he was working on a time machine.”

“No, I don't think he's built one of those yet,” Tom IV said. “I believe he was building his subocean geotron.”

“If you ask me he's already built a time machine,” Tom Sr. commented. “He keeps going back and forth in the time continuum. I don't know how he keeps his head on straight. Now you've done some time traveling of your own, haven't you, son?”

Sandy interrupted. “*What is going on here?*”

Tom IV spoke up. “I'm sorry, Sandra. I know this all seems a bit weird. I think this affects everybody that way. Even I was shocked when it first happened.”

“You have *no idea*,” Sandy said.

“But I do have a sister named Sandra,” Tom IV replied. “She's kind of like you, actually, and she would so freak out if I brought her here. But I'm getting off target. This all started a while ago when I accidentally developed a way to travel between universes. I called it the negative zone.”

Sandy nodded. “That's what Tom called that weird machine in his lab. He said it transports people between universes.”

“That's exactly right,” Tom IV said. “Only your brother has a very much refined version. You should have seen the first model! Man, but was it awful. I won't go into what happened the first time I tried it. It's sufficient to say that it was a long time before I messed with that technology again.”

Tom IV paused a moment to gather his thoughts, and then continued. “One thing that I did learn during that adventure was that there were other universes out there, complete with other Tom Swifts. In my own universe I am Tom Swift Jr. and work at

Swift Enterprises, just like your brother.”

“Only your plant is located in California,” Tom Swift Jr. replied.

Tom IV nodded. “Personally I like California a lot better – beautiful beaches, lots of sunshine, and no snow whatsoever.”

“I'm with you there!” Bud agreed.

“I think we'll stick with New York,” Tom Sr. replied. “But go on with your tale.”

“Well, one day I got to thinking, and wondered what other Tom Swifts might be out there. People say that space is the final frontier, but it's small potatoes compared to parallel *universes*! So I rebuilt the negative zone and started experimenting. What I discovered was a vast treasure trove of amazing people and places.”

“I think I get it,” Sandy interrupted. “You built this diner as an in-between-universe type place, where you and your friends could get together and meet. And to get here you installed your invention in the other universes you'd found.”

“Exactly,” Tom IV said. “It took a lot of work, but I think it was worth it. I've met some of the most amazing people, and I know I've only started scratching the surface.”

A waitress then entered the room, carrying a small notebook. “Good evening!” she said brightly. “My name is Bess, and I'm going to be your waitress for this evening. What can I get you to drink?”

After she had taken everyone's order she left the room, and the crowd gradually began to take their seats around the table. Tom Sr. sat at the head of the table. Sandy ended up sitting between her brother and Bud, across from Tom III and Tom IV.

“So let me see if I have this straight,” Sandy said slowly, as they looked over their menus. “You're Tom IV and you live in California in an alternate universe. Did you also invent a Flying Lab, and a jetmarine, and a rocket ship, so forth?”

Tom III laughed. “Not hardly! No, his first invention was a flying skateboard.”

“But I thought my brother said that one of you invented a

subocean geotron,” Sandy said.

“That was TSL,” Tom Jr. corrected. “His universe is the closest to mine. Some things are different, but a lot of his main inventions are the same. Tom Swift III and IV come from totally different universes, though.”

“Yeah,” Tom IV said. “My most recent invention was a quantum force shield.”

“I’ve got to get one of those,” Tom Jr. commented. “That would have been so useful when the Space Legion took over the *Challenger*.”

“True, true, but I just don’t think our worlds are ready for inter-universal travel,” Tom IV said. “I mean, really. Can you imagine if word of this place leaked out?”

“I don’t know, Tom. I’m slowly warming to the idea,” Sandy replied. “I mean, my brother just got himself turned into brain energy. After you’ve seen that you’ve seen everything! Now what about you, Tom III? Do you also live in California?”

Tom III shook his head. “Nope. I live in Shopton, but it’s located in New Mexico, of all places – and I don’t even *like* the desert! But I spend most of my time in space anyway, so it doesn’t really matter.”

“He’s the only Tom I’ve found so far that doesn’t really invent,” Tom IV remarked.

“That’s true,” Tom III said. “I mean, I’ve built a few things – like a hyperspatial drive, and my robot Aristotle – but mostly I explore the galaxy and get into lots of trouble.”

“I don’t know how you can stand it,” Tom Jr. said. “I’ve always got to be inventing something.”

Tom Sr. spoke up. “Now that is the truth. I believe you were even inventing something when you were imprisoned on the *Challenger*.”

“Now that’s dedication!” Tom III said. “What are you working on this time?”

“I’m experimenting with programmable matter,” Tom Jr. replied. “It’s a bit tricky to do, but I think it has a lot of promise. We’ll see, though. There are so many problems to work out.”

At that point Bess returned with their drinks. “And what would you like for dinner?” she asked. After taking their orders she left the room.

“I get the feeling you've met here before,” Sandy said. “How long have you guys known about each other?”

“A few months,” Tom Jr. said. “It's been a pretty recent development. Bud was actually the first one to find out about it. He kept trying to tell me, but I was so wrapped up in my work on the kronolator that I didn't pay any attention. But once I returned from Mars I met with Tom IV and we installed the negative zone in my lab.”

Tom IV nodded. “We were going to get together to discuss your brother's recent adventure on Thanatos, but then Bud mentioned he had a birthday coming up. So we figured we'd celebrate that instead, and would put off our discussion of Thanatos until later. By the way,” he said, turning to Tom III, “you don't happen to have a copy of that report, do you?”

“Of course,” Tom III said. “I finished writing it last week.” He reached down to a briefcase that was resting beside his chair and pulled out a stack of documents.

“Ah, I see you've brought the notes!” Tom Sr. said.

“Notes?” Sandy asked. “You mean they get written reports of my brother's adventures?”

Tom Jr. nodded. “And we've got reports of everything they've done. Tom III has spent a lot of time putting them together. They're in my lab – I'll show them to you one day. They make for some excellent reading.”

Sandy grabbed a copy of the report and looked at it. “*Tom Swift and his Extrasolar Planet?*” she asked incredulously.

“You've got to call it something,” Tom III said. “I considered calling it *Tom Swift and his Kronolator* but that just didn't have the same ring to it. Incidentally, Tom, nice job on your faster-than-light drive. You took a completely different approach than I did.”

“Your approach works too,” Tom Jr. said. “We should compare notes sometime, and see how the *Challenger* compares

to the *Exedra*.”

“I thought you'd abandoned your ship around Neptune,” Tom III replied. “Are you going to rescue it?”

“I know the answer to that!” Sandy said. “He's already putting a mission together to go repair it. I bet we'll be back at Neptune by the end of the year.”

“I'm surprised he's waiting that long,” Tom III said. “What's the hold-up?”

“I've been trying to coordinate a joint venture with my space friends,” Tom Jr. explained. “They'd like to come with us and explore the Space Legion's now-abandoned fortress. Plus there are a few logistical hurdles, and I'd like to finish my claytronic stones before going out there. They could come in handy.”

Tom IV shook his head. “Man, but are you lucky! I can't believe you can fly all over the solar system and meet with aliens *on Mars* and nobody bats an eye. Has the government found out yet that you've developed a working interstellar drive?”

“I think Ned sent out a press release,” Tom Jr. said vaguely. “In a meeting last week he said the Swift Construction Company has started building a factory to manufacture kronolators. He thinks they'll be hot sellers, even at the astronomical prices he's charging.”

“I have also been engaged in high-level talks with Washington,” Tom Sr. said. “The government is aware of our recent activities.”

“And they don't mind?” Tom IV said. “Wow! Recently the Hardys and I got mixed up with an alien and my government had a cow. They have a zero-tolerance policy for that kind of thing. It almost got us killed.”

“You're just out of luck,” Tom III said sympathetically. “I meet with aliens all the time.”

“Yeah, but it's different for you,” Tom IV said. “You live in a space-faring society that's used to that sort of thing. Where I come from space flight is still Big News.”

“I've just got to read those reports,” Sandy said. “I'm sorry, but this is way over my head. You've lost me. I'm intrigued, but

I'm lost.”

“You'll get up to speed soon,” Tom Jr. assured her. “It's not as intimidating as it seems.”

“How many people know about this?” Sandy asked.

“It is a top, top, top secret,” Tom Jr. replied. “The only people we've told are the people right here in this room. Even our government doesn't know.”

“I don't intend on telling mine,” Tom IV replied. “They get so upset over things like this.”

“So why tell me?” Sandy asked. “I mean, we could have just gone to *Gulliver's* tonight, and you could have kept this little club all to yourselves. It's pretty unusual for me to get mixed up in things like this.”

Tom IV. smiled. “Because you've begun to have adventures of your own, Sandy! Adventures that qualify you for a seat at *Tom's*. Piloting the *Cosmotron Express* was just the start. In the not-too-distant future you, Phyllis, and Bingo will begin to investigate the last flight of the *Silver Cloud*.”

“Bingo?” Sandy asked. “Is that a person?”

Tom Jr. shrugged. “Don't look at me. He's the one with the time machine.”

“You've got a *time machine*?” Sandy said, startled.

Tom IV shook his head. “It's more of a time trigger. But you don't want to go there, Sandy. At one time in my universe I was actually the grandson of Barton Swift, just like your brother, but then things went bad and I've never been able to put the pieces back together. Time travel is a can of worms you do *not* want to open.”

“TSL is going to open it,” Tom III pointed out. “I don't know how it will play out, but that's what I've heard.”

“I pity him,” Tom IV said. “He'll never be the same.”

Bess returned, carrying a bewildering array of plates. A robot followed behind her, holding the rest of their dinner.

“Aristotle!” Tom III cried out, as he saw his robot carrying the party's dinner. “What are *you* doing here?”

“If Rob is qualified to work here then surely I also possess the

necessary talent,” the robot replied. “I refuse to be outdone by that ignorant biped.”

“Who’s Rob?” Sandy whispered to her brother, as Bess handed them their food.

“A robot that Tom IV built,” Tom Jr. whispered back. “He’s the chef – but just for tonight. Tom thought it’d be a good experience for him.”

“Chow would go *nuts* if you replaced him with a robot,” Sandy said.

“Shhh, he’ll hear you,” her brother cautioned.

“Can I get you anything else?” Bess asked brightly.

“I believe we have everything we need,” Tom Sr. said. Bess and Aristotle then walked out of the room. Before they started eating, however, Bud rose to his feet.

“This meal looks truly amazing, but before we eat I propose a toast to Swifts. May their adventures never end!”

The dinner lasted for hours, as they laughed and talked far into the night. It was an evening that Sandra would never forget – the first of many enchanted evenings at *Tom’s*.