

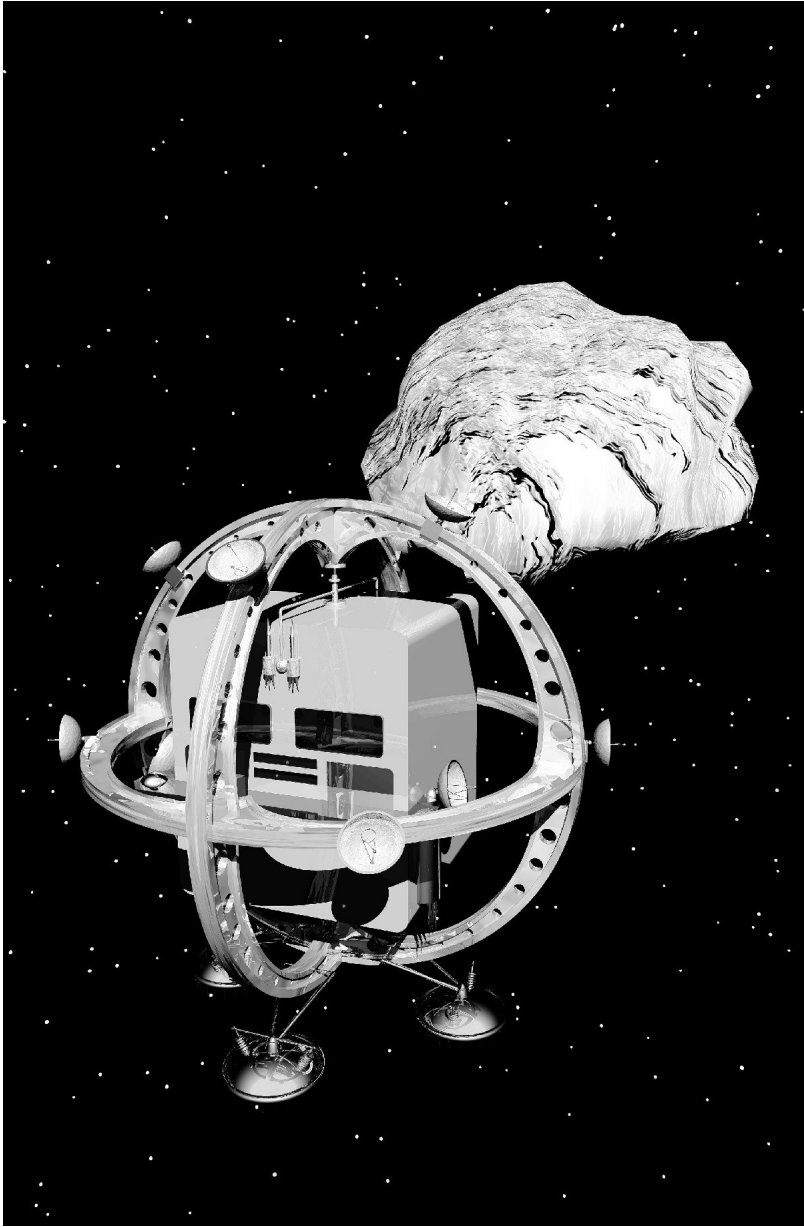
## **TOM SWIFT AND HIS CLAYTRONIC STONES**

Tom Swift Jr. was the world's most famous inventor. From his laboratory at Swift Enterprises in Shopton, New York he turned out the wonders of the modern age – space travel, flying cars, and undersea cities all became possible thanks to his genius. His bold and courageous actions saved the world time and time again from the enemies of freedom and peace. Millions around the globe owed their lives to Tom.

And yet, after all he had done for the world, the young man found himself alone and filled with regret. The love of his life, Irene Goddard, had died years ago – a blow that Tom had never fully recovered from. He longed to somehow go back in time and save her, but his every effort was thwarted. There seemed to be no way for him to make his greatest wish come true.

Then one day, on an expedition to Neptune, he stumbled across his greatest discovery yet. Armed with a new idea Tom was determined to make one final attempt to save Irene. But what unknown dangers would he face, and what price would he ultimately have to pay to get Irene back? Would he be able to save her without destroying the entire world in the process?

Only time would tell...



*Five minutes later the darkness began collapsing, revealing a smooth, featureless blob of green goo (page 62)*

THE NEW TOM SWIFT JR. ADVENTURES

TOM SWIFT  
AND HIS  
CLAYTRONIC STONES

BY VICTOR APPLETON II  
ILLUSTRATED BY JONATHAN COOPER

GROSSET AND DUNLAP  
A NATIONAL GENERAL COMPANY

PUBLISHERS NEW YORK

COPYRIGHT © 1972 BY GROSSET AND DUNLAP, INC.  
ALL RIGHTS RESERVED  
PUBLISHED SIMULTANEOUSLY IN CANADA  
LIBRARY OF CONGRESS CATALOG CARD NUMBER: 74-130340  
ISBN: 0-448-09135-2

PUBLISHED IN THE UNITED STATES OF AMERICA

# Contents

Prologue: The Final Flight.....	9
Chapter 1: The Barclay Group.....	15
Chapter 2: The Time Trigger.....	25
Chapter 3: Return to Neptune.....	31
Chapter 4: Zero-Five.....	41
Chapter 5: Frozen.....	47
Chapter 6: The Chariklo Centaur.....	53
Chapter 7: The Doomsday Device.....	61
Chapter 8: An Unexpected Visitor.....	69
Chapter 9: A Fateful Decision.....	77
Chapter 10: Construction.....	87
Chapter 11: Chain Reaction.....	95
Chapter 12: The Last Hope.....	101
Chapter 13: A Woman Scorned.....	109
Chapter 14: The End of the World.....	119
Chapter 15: Ashes.....	125
Chapter 16: Defeat.....	139
Chapter 17: Homeward Bound.....	145
Chapter 18: A Father-Son Conference.....	159
Chapter 19: A New Tomorrow.....	165



TOM SWIFT AND HIS  
CLAYTRONIC STONES





## PROLOGUE: THE FINAL FLIGHT

IRENE GODDARD glanced down at the instrument panel in front of her. Less than ten minutes had passed since she lifted off from the Brungarian's secret base, carrying a vital electronic component that was needed to shut down the out-of-control Tomasite reactor in New York City. *I've just got to make it there in time*, she thought anxiously. *If I don't, that reactor is going to destroy New York City and trigger a nuclear war. Tensions between the United States and Brungaria are already at an all-time high, and destroying our nation's largest city is an act of war the President can't ignore. If I fail, the world as we know it will end today.*

The red-haired teenager fought to stay focused. She could already feel the creeping effects of the radiation that poured out of the hyperplane's nuclear reactor. At Mach 15 she would reach New York in less than half an hour – but at a cost of her own life. In fact, she wondered if she would even survive the next thirty minutes. She was already feeling nauseated.

*The equipment has been prepared*, she thought. *It should be able to survive the drop. I'd better call Tom's father and let him know that I'm on the way.*

Irene flipped a switch and attempted to contact New York. After a few moments she was able to reach Tony Markos at the Swift nuclear power plant. She talked with him for a moment and then asked to be transferred to Mr. Swift. After a short delay his voice was heard over the radio. “Hello?”

“Tom?” the girl asked. “This is Irene. Can you hear me?”

“There's a lot of static, but I can hear you,” Mr. Swift replied. “Where are you?”

Irene glanced down at her instruments. She was shocked to see how much distance she had already covered. *I guess Mach 15 can get you where you need to go in a hurry!* “I've just left Asia and am over the Pacific Ocean,” she said aloud. “This message is being relayed through California. I wanted to let you know that I'm bringing you the spare parts you need to fix your reactor.”

Irene heard Mr. Swift gasp. She knew that was exactly what he'd wanted to hear. “What kind of spare parts?”

“Xanthus built a duplicate reactor in Brungaria,” Irene explained. “He used it to figure out how to sabotage yours. I have his un sabotaged version of your electronic brain on board a jet and am flying your way. I should be there in less than half an hour.”

“Half an hour! How can you possibly get here so quickly?”

Despite a growing feeling of dizziness, Irene smiled. “Xanthus had a hyperplane that I decided to borrow. Given everything that has happened I didn't think he would mind. After all, I've heard the authorities have him kind of tied up at the moment. He won't be missing it.”

There was a slight pause, and then Mr. Swift spoke. “If you can arrive in the next thirty minutes we may still have a chance of saving the city. I can't promise anything, but it's worth a try. It's the only hope we have.”

“I'll do my best,” Irene replied.

“Are Tom and Bud with you?” Mr. Swift asked.

Irene hesitated. *Now is not the time to explain what I've done,* she thought to herself. *I need to keep him focused on the crisis at hand. I'm sure he'll eventually figure it out but right now we have other problems. Still, he does need to know that his son is safe.* Aloud she said, “They're on another flight. Bud found another nuclear jet in Brungaria that he decided to liberate. They're flying a bit slower than me but they'll get to New York safe and sound.”

She heard Mr. Swift breathe a sigh of relief. “I still can't believe you went to Brungaria. That was a very foolhardy thing to

do, young lady.”

*If only he knew what I was doing now*, she thought to herself. *He's not going to be happy about this.* Irene paused for a slight moment and then spoke up. “Let's save that talk for later, ok? Besides, it was your son's idea. I'm going to go but I'll contact you again when I'm almost there. I'm planning on performing an air drop since there's no runway on the island.”

“We'll have a crew standing by to receive it,” Mr. Swift promised. “I can't thank you enough, Irene. You're giving us hope. We had just about—”

Irene was suddenly pierced by a feeling of intense pain. She felt like she was about to pass out. “Thanks,” Irene said shortly. She hung up.

The young scientist fought to stay conscious. *I can't give up now*, she thought. *I've got one more call to make – and a package to deliver. Hold on, girl! You're almost home.*

It didn't take long for Irene to contact Swift Enterprises. She talked with George Dilling for a moment and told him that she wanted to leave Tom Swift Jr. an audio message. George connected her to a recording device and dropped off the call. Irene then took a deep breath and started talking.

“Hey there Tom,” she began. She coughed and then continued. “Do you remember months ago, when we had dinner by the lake? It was before you ever started the hyperplane project, right after your father perfected Tomasite. You were depressed that evening because the press made much of your father and treated you like a little kid. Do you remember that?”

Irene paused as her head started pounding. She knew radiation sickness was quickly killing her. She forced herself to concentrate on what she was saying. *Tom needs to hear this. If I leave him without saying anything he's going to be consumed with guilt. He needs to know that everything is ok and that I want him to put me in the past and move on with his life. He's got a bright future ahead of him, if only he'll see that.* “I told you that you could prove them all wrong. That you were a genius and had the rare

ability to make your dreams come true. If you wanted to build rockets and explore outer space then you could do it.”

*And you will do it*, she thought. *I just wish I could be there with you when it happens!* She knew she was about to cry so she hurried on. “I still believe that, Tom,” she said, her voice wavering. “I know right now you're really upset. I know you think your life has ended, but it hasn't. I'm sorry I won't be there to share that future with you. I really am. It breaks my heart. But that doesn't mean the future doesn't have to happen. You are still surrounded by people who love you and care a great deal about you. I don't want you to throw away all that talent and spend the rest of your life sitting there, doing nothing.”

Irene glanced down at her control panel. She saw that she had crossed most of the Pacific Ocean and was about to enter American airspace. *Almost there*, she thought. “I love you, Tom. I've enjoyed spending my life with you. Thanks for being there for me. Take care of yourself.”

“And one last thing,” she added. “This is where my story ends. I know you're going to be tempted to somehow fix what happened today, but *don't*. Don't live in the past, consumed with regret over what happened. Look toward the future. You've got a world to make, so go out and make it. Whatever you do, don't make my death the focus of the rest of your life.”

Irene took a deep breath. “Good bye, Tom, and good luck. I love you.”

She closed the connection and passed out.

The teenager awoke with a start. She struggled to open her eyes and glanced down at her position. The girl gasped when she realized that she was now soaring over the United States. *I must have passed out*, she thought to herself. She found it almost impossible to breathe. *I feel so sick*.

The early symptoms of radiation sickness were already taking their toll on her small frame. She felt severe nausea and was having trouble staying conscious. Her thoughts were so erratic that she found it almost impossible to remember how to fly the

jet. *My head is killing me and I'm weak and disoriented. I'm not going to make it.*

Irene looked at the controls in her hands and forced herself to concentrate. With all of her remaining energy she corrected her course and began to cut the jet's speed. *There's no way I can drop the package at Mach 15. I've got to slow way down if the computer is going to have any hope of surviving the drop. But slowing down means taking more time, and we don't have any time to spare.*

After she made the final adjustments to her flight path she activated the timer. The cargo bay doors would open after a set number of minutes, and if she calculated everything perfectly the package would drop right next to the reactor. *I wish I could double-check my figures but I just can't think clearly anymore,* she thought sadly. *But there is one more thing I have to do.*

For the last time she contacted New York. This time Mr. Swift answered the call. "Hello?" She could hear the nervousness in his voice.

"Hey," Irene said, struggling to speak. The very act of talking was almost impossible. She knew she had only a few moments left to live.

"Irene?" Mr. Swift answered, with concern in his voice. "How are you feeling?"

The girl ignored his question. "I'm almost there. I've set up a timed drop. You should be able to track the package on radar after it leaves the plane. It should land near you."

"We'll be watching for it," Mr. Swift replied. She heard him hesitate. "My son called. He wanted to know if there were any problems with your hyperplane."

"So he figured it out." Irene suddenly started coughing for a minute, but finally regained control of her voice. "He's a smart kid. Yeah, the jet has some problems. I think this will be its final flight."

"Where you are going to land?" Mr. Swift asked quietly.

*This jet won't be landing,* she thought to herself. *And I won't be landing either.* She paused and looked at the controls. The

hyperplane was on course and functioning perfectly. Somehow she knew the plane was going to make it and the drop would work. Everything was going to be fine. Tom Swift would save the day and the world would be spared a nuclear holocaust. Life would go on, even though her life was about to end. She had made the right choice.

*I might as well tell him*, she thought. Aloud she said “I won't be conscious that long. Sorry.”

“Can you eject?” Mr. Swift asked. She was about to speak when she suddenly felt a tingly sensation, as if something was pulling at her. A moment later she disappeared, leaving the hyperplane's cockpit empty. Her last thought before vanishing was *Oh, Tom, what have you done?*

## CHAPTER 1: THE BARCLAY GROUP

NINETEEN-YEAR-OLD Tom Swift Jr. sighed in frustration. He gazed at the large glass aquarium in front of him, his eyes fixed on a shapeless mass floating in the center of the tank. Behind the tank was a three-foot-tall device that looked vaguely like a Tesla coil. The thin, cylindrical gadget emitted a soft hum and gently crackled with a faint blue energy. The young inventor dejectedly reached over and switched it off. "It's just not working," he said aloud. "After all this time it's *still* not working!"

"What's not working, skipper?" a cheery voice said behind him. Tom turned his head and saw his friend Bud Barclay step into the laboratory. Bud quickly closed the door and walked over to his friend. "Wow – look at that thing! Have you finally decided to set up that saltwater aquarium Phyl has been bugging you about? I always thought this lab could use a little sprucing up. No offense, pal, but you've never been much of an interior decorator."

Tom smiled in spite of himself. "I'm afraid this setup doesn't have anything to do with fish, pal. This is actually a test chamber for my claytronic stones. At least it was supposed to be. The problem is the stones just aren't doing much of anything."

Bud took another step toward the tank and peered inside it. "Are you talking about that disgusting blob of floating green goo? What happened to it?"

The young inventor sighed. "You're familiar with my claytronic experiments, right?"

Bud shook his head. "Sorry, skipper, I've been pretty distracted lately. I guess I've been so focused on preparing for our

little jaunt to Neptune that I've let my subscription to *Swift Inventions Monthly* lapse.”

“I think Sandy may have had more to do with that than our expedition to rescue the *Challenger*,” Tom teased. “You've been spending a lot of time with her lately.”

“I haven't been going out with her that often,” Bud replied defensively. “Besides, she's quite a girl. You've got to admire the way she traveled all the way out to Neptune just to rescue us from the Space Legion! That took real guts.”

Tom smiled. “I'm happy for you, Bud, I really am. And you're right – my sister really is a fine girl. But anyway, about these stones.” The young inventor reached over to his workbench and picked up a small green cube. “This is what the stones look like in their inert state.”

“So that's what those are! I've seen 'em lying around but didn't really know what they were. At first I thought maybe you'd invented square marbles or something. Aren't you trying to get them to turn themselves into other shapes?”

Tom nodded. “That's the idea! These stones are actually composed of an incredible number of really, *really* tiny machines called 'nanites'. When the nanites are activated by a remote power source the stones are supposed to organize themselves into a specific shape. I call them 'claytronic' stones because they're supposed to be as malleable as clay.”

Bud snapped his fingers. “I remember now! We *have* talked about this. You could have cars that could turn into houses or books that could become repelatrons. You could even have a whole closet of stones that you could turn into whatever gadget you happened to want at the time.”

“It gets even better than that!” Tom replied. “These stones are designed to use the elements around it to create *additional* stones. So in theory you could take a single stone and tell it to build an entire city – all through the magic of replication! This would allow us to colonize the galaxy on an unprecedented scale. It boggles the mind!”

“So what's the problem? How did that green stone become a



shapeless mass?”

Tom sighed. “There are actually a whole host of problems. First of all, the transformation process is extremely slow. It actually took three whole days for a single stone to become that floating blob you see there. Second, the stones do a terrible job of organizing themselves. I was trying to create a vase but you can see what I ended up with! I just don't have a good way of telling each piece what parts should go where. I can do it but it just takes far too long, and if I try to speed up the process I get nothing but garbage.”

Bud nodded. “I can see the challenge! When you've got trillions of soldiers it's hard to give each one his own marching orders. But why is all that floating in a fish tank?”

“The water is actually a carefully-balanced solution of minerals. I was trying to get the stones to draw on the water's nutrients to replicate themselves. That part didn't work very well either. The whole process is just too slow, and all my improvements only make the process that much slower.”

Bud frowned. “Even if you sped it up, skipper, how are you going to keep them supplied with nutrients? I don't recall seeing too many aquariums out there in deep space!”

“Well, eventually the stones will use whatever's around them as fuel. I'm much more concerned about the speed problem – I just don't know how to make the reaction go faster.”

Bud slapped his friend on the back. “I'm sure you'll figure it out, genius boy. Say, that reminds me! The reason I came over was to remind you that in a few minutes you're supposed to meet with the Barclay Group. Your dad had a vague feeling that you were about to miss it.”

Tom looked puzzled. “The Barclay Group? Are they your relatives or something?”

Bud shook his head. “Very funny, Tom. C'mon, you know who these people are! They're that outfit from London that's been using your inventions to help developing nations all over the world. You can't tell me you haven't heard of them – they're one of your biggest customers!”

“Oh, you must mean BG Industries! Yes, I've heard of them. Do you mean to tell me that the B in BG stands for *Barclay*? Are you related to these people?”

Bud shook his head. “Of course not! I don't have any eccentric billionaires in my pool of ancestors – unless you count your dad, I guess, but since Sandy and I aren't married yet I technically can't count the Swifts in my family tree.”

“Hold on there, pal!” Tom exclaimed. “Do you mean to tell me that you're engaged to Sandy? When did that happen? I know I've spent a lot of time in my lab lately, but–”

“Whoa, whoa, slow down!” Bud interrupted. “We are *not* engaged, nor are we about to be. I don't even have an engagement ring. That's all I was trying to say! Besides, I've only known her for a few years, and she's not going anywhere. There's no reason to rush anything.”

Tom paused for a moment as his mind wandered to Irene. *I've still got that engagement ring I made for her*, he thought sadly. *I never thought she would die before I could give it to her*. Aloud he said “It's none of my business, Bud, but it might not be a bad idea if you made your move sooner rather than later. You really don't want to go through what I did.”

“We can talk about that some other time,” Bud replied hastily. The very last thing he wanted to do was bring up Irene Goddard. During the past few weeks Tom had spent many hours brooding, and Bud had a strong feeling that Irene was behind it. “The point is, you have a meeting with these Barclay people in five minutes and your really need to get going.”

“Who scheduled this meeting?” Tom asked. “I don't remember any of this. Are you sure I need to be involved?”

“See, this is why you need your own personal secretary. *You* actually scheduled this meeting three months ago, when you met them at that conference in San Diego.”

A light suddenly went off in Tom's mind. “Good night! You're right, Bud. I had completely forgotten! I've been so wrapped up in things that I've lost track of time. Are you telling me that my meeting with them is *today*?”

“Sure is! And we need to get going *now*. The conference building is on the other side of Swift Enterprises – a four-mile drive from here. You're going to be late!”

Tom nodded, and after grabbing a coat the two of them left the lab and stepped outside. It was mid-February and the weather in upstate New York was very chilly. A light dusting of freshly-fallen snow covered the grounds and a bitter wind blew between the buildings. The two teenagers made a beeline to Bud's silver atomicar, and Tom climbed into the passenger seat as Bud slid behind the wheel. The sleek sportscar was soon headed across the campus toward the newly-renovated convention center.

“How long is this meeting supposed to last?” Tom asked. “I've got an urgent appointment at 8 p.m. that I can't miss.”

“I think this is supposed to be a week-long planning session, but I'm sure they'll let you bail out whenever you need to go. After all, you're Tom Swift! But I didn't realize you had plans for tonight. What's up?”

Tom paused to collect his thoughts. “Ever since I talked to you that day at the Citadel I've been working on a project of my own. It's probably the most ambitious thing I've ever attempted. Do you know what's about to happen?”

“Of course, skipper! It's not like I've had my head in a box or something. We're about to rescue the *Challenger*. The Space Legion did a real number on it, and—”

Tom shook his head. “That's just one piece of the plan. Yes, we're going to rescue the *Challenger*; but that's just because I need it for something else.”

“Oh? What's for?”

“I'm going to mount a rescue expedition, Bud. We're going after Irene.”

Bud's eyes widened. “You can't be serious! She died *years* ago. In fact, her grave is—”

“I'm very serious,” Tom said quietly. “Thanks to the Negative Zone I now have access to time travel technology. When we rescue the *Challenger* I'm going to install the time trigger on it and then go back in time and pull her out of that hyperplane. The

ship's Transmittation should be able to rescue her quite easily.”

“But she died of radiation poisoning! How do you plan on dealing with that?”

“I've already borrowed a Translator from our Space Friends,” Tom explained. “Now that they've been freed from it they don't need it anymore. Do you remember what it did for us on Thanatos? I have no doubt it can do the same thing for her.”

Bud frowned. “But skipper, Tom Swift IV doesn't have a time trigger for you to borrow. He destroyed it because it was too dangerous. In fact, it almost destroyed his entire universe!”

“I know,” Tom admitted. “But at eight o'clock tonight I'm going to pay him a visit and see if I can get him to change his mind. I think if we worked together we could recover the technology.”

Bud deftly navigated his silver atomicar into a parking place and turned it off. “I don't think he wants to recover that technology, Tom. In fact, I'm pretty sure his whole intention was to make sure it was never recovered.”

“I just want to use it one time. Just one time! It'll be a simple trip – we'll go back in time, rescue Irene, and return to the future. What could possibly go wrong?”

Bud winced. “Let's hope we never find out, skipper.”

Three hours later Tom Swift Jr. found his mind wandering. It wasn't because of the conference itself; as it turned out the meeting was quite interesting. A number of important representatives from the Barclay Group were present, including its charismatic leader Edgar “Ed” Gamino. Tom was surprised at how passionate he was about using Swift technologies to change the world. Still, he kept thinking about his upcoming appointment. *I know it will work*, he thought to herself. *I know I can save her! All I need is that time trigger. I've just got to make him see that this isn't the least bit dangerous.*

Tom's father spoke up, interrupting his thoughts. “Let me see if I understand you correctly, Ed. You want to license our technology so you can colonize another planet?”

“Precisely!” Ed boomed. “Now that your amazing son has perfected his kronolator, the possibilities are extraordinary. Extraordinary! It is finally practical to travel to other worlds, to other stars! And I propose that we *do it*. Swift Enterprises is a fine group, sir – a fine group indeed – but it lacks the drive, the ambition, to use the marvels you have created. You do a fine job of development but a poor job of implementation. We at BG Industries want to show you what sort of world your marvels can create. We want to bring civilization into an entirely new era.”

Mr. Swift nodded. “It’s an intriguing idea. Your credentials are impeccable – I’ve followed your progress for years and have been pleased at the way you’ve adapted our line of products. Millions of lives have been improved thanks to the heroic efforts of your company.”

“But we are only getting started!” Ed thundered enthusiastically. “We want to create a model city on a planet orbiting Epsilon Eridani. This fantastic metropolis of the future will implement your technologies to the fullest extent possible. Why, the repelatron alone is an astounding device! Imagine if a whole city was designed around it. It would be a breathtaking advance for mankind. Civilization would never be the same.”

“Which is what you’ve been telling us all this evening,” Mr. Swift continued. “I must admit that the plans you have presented are very well thought-out, although naming it ‘Swiftopolis’ is a perhaps bit over-the-top.”

“We can name it something else, if you’d prefer. I will leave that honor to you. Your modesty is most humbling and sets a true example for us all. Even so, that is a trivial detail that we can discuss later. What we really need to know is whether or not we have your full cooperation. In order to make this a reality we will need your vast technical expertise!”

“And a starship with a kronolator,” Tom Swift Jr. added.

“Right,” Ed agreed. “A *large* ship – something much larger than even your famous *Cosmotron Express*. It will need a cargo capacity great enough to carry everything we might need to construct a mighty city, along with the thousands of lucky people

that will inhabit it.”

Bud spoke up. “Or you could just bring a box of Tom's claytronic stones.”

Ed looked puzzled. “*What* stones? I haven't heard about this! Is this some sort of new invention?”

Tom shot Bud a disapproving look. “It's really nothing,” he began. “It's just something I've been working on. Right now it doesn't work at all.”

Mr. Swift spoke up. “That's actually a good idea, Bud. I realize that there are still some technical problems to address, but claytronics may be precisely what BG Industries needs.”

“What are they?” Ed asked. “Pardon my unspeakable ignorance, but I can't say that I'm familiar with that field.”

“Claytronics is a form of programmable, self-replicating matter,” Tom explained. “If I can get them to work, my stones will have the ability to turn themselves into anything you could want. In theory you could drop a single stone on a planet and it would replicate itself into a fully-functional city.”

Ed's eyes grew wide. “Why, that's remarkable, boy! Truly remarkable! I never dreamed that such a thing was even possible. You astound me!”

“Right now it's *not* possible,” Tom replied. “In fact, at the moment it's a dismal failure.”

“But that's only temporary, I'm sure!” Ed interrupted. “Please keep me informed on the progress of this magical device. Claytronics could change everything! You have done many amazing things, my boy, but this one would top them all. It would truly be the ultimate invention – the greatest triumph of the modern era, built by its greatest inventor!”

Privately Tom felt that nothing workable would ever result from his stones, but he decided to keep his reservations to himself. Aloud he said, “I'll keep you posted. Incidentally, I hate to break this up but it's getting late, and I need to be going. Can we adjourn this meeting and continue in the morning?”

“I think my son has a good point,” Mr. Swift added. “There will be plenty of time to continue this discussion tomorrow. I

know we have the rest of the week to talk about this, but I can already say that BG Industries has my full support. If there is anything that Swift Enterprises can do to help you, Ed, we will do it.”

Ed beamed. “Most gratifying, sir. Most gratifying indeed! We won't let you down.”

As soon as the meeting adjourned Tom Swift Jr. raced back to his laboratory. Tom attempted to talk Bud out of coming with him but his friend wouldn't hear of it. “Nothing doing, skipper! If you're going to hop over to a parallel universe to discuss time travel then I'm coming along too. After all, somebody has to be there to rescue you when things go wrong!”

Tom smiled as he unlocked his laboratory and stepped inside. “Thanks, flyboy.”

The young inventor walked over to his workbench and lifted up a painting of Aurum City, revealing a small green panel concealed behind it. He placed his right index finger on the hidden panel it and held it there for a second as it read his fingerprint. The panel 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 spoke in a quiet monotone. “The room has been secured.”

Bud shivered. “That gives me the creeps, boss. Makes me feel like we're in some sort of top-security vault.”

“That's exactly where we are,” Tom replied. “Can you imagine what would happen if word of the Negative Zone ever got out? We do a lot of sensitive stuff here at the plant, but this is by far the most top-secret of all of our top-secrets. This is so classified that even its classification is classified!”

Bud nodded. “You'll get no argument out of me! Sometimes I wonder if it's even a good idea to have that thing. There's no telling who might come out of it.”

“Or step into it,” Tom added.

The young inventor walked over to the far wall of his lab and examined it for a moment, and then placed his palm firmly on a small, unmarked square. At first nothing happened but after a moment the outline of a doorway emerged on the featureless concrete wall. After ten seconds a door-sized portion of the wall had simply vanished. Through the hole they could see only blackness.

Tom then removed a small device from his workbench and entered a sequence of numbers. A few seconds later the dark hole emitted a series of notes. The utter blackness of the void was then replaced by a deep, deep blue. A faint light shone out of countless small vortexes that swirled in its midst. Out of the void a deep note sounded.

“That's our call,” Tom announced. “The connection has been made. Are you ready?”

“Ready as I'll ever be,” Bud replied. The two of them stepped into the void and vanished.



## CHAPTER 2: THE TIME TRIGGER

THE TRIP THROUGH the vortex took only a moment. When the initial feelings of discomfort had subsided, Tom Swift Jr. and Bud Barclay found themselves standing in a brightly-lit scientific laboratory. The room was filled with futuristic equipment, much of which was unfamiliar to them. One entire wall was taken up by a giant computer, and the rest of the room was littered with robotic components and fragments of half-built machines. Over to one corner was a set of leather furniture, where a blond-haired teenager was engrossed in a book. Tom immediately recognized him as Tom Swift IV, the inventor of the Negative Zone.

Bud was the first to speak. "I'm never going to get used to that. I feel like I lost some vital organs somewhere."

Tom IV put his book down and stood up. "Believe me, guys, it's a whole lot better than it used to be! You should have been there the first time I tried it. Not only did it trash my lab, but the trip nearly killed me. It actually knocked me unconscious."

"I remember reading about that in the files you gave us," Tom remarked. "You ended up in a parallel universe and an evil 'Thomas Swift' took your place here. It was quite an adventure."

"This technology has come a long way since then," Tom IV agreed. "But I'm sure you didn't come here to discuss that. Here – have a seat! What's on your mind?"

Tom and Bud sat down on an overstuffed leather couch, and Tom IV took a seat across from them. "How are Rick and Mandy?" Tom asked. "I'm a little surprised they're not here this evening."

“Oh, they're just fine,” Tom IV replied. “And it's actually morning here, by the way – *four* in the morning, to be precise. I imagine Rick and Mandy are still in bed, like civilized people everywhere.”

Tom winced. “Sorry about that. I keep forgetting about the time difference between our worlds.”

Tom IV nodded. “The really odd thing is that the time difference changes. It's almost like time itself is flowing at different rates in our universes – or maybe it's just a side-effect of the Negative Zone. I've looked into it but haven't found any answers. But what brings you to this corner of the multiverse?”

Tom leaned forward. “I'll get right to the point. I'd like to borrow your time trigger.”

Tom IV nodded. “That's what I thought. I wondered how long it would take for you to ask for it. In fact, I'm kind of surprised you waited this long. I'm sure you must have realized the possibilities the moment you found out about it.”

Tom nodded. “I would have been here sooner but there were some other problems I had to solve first. Traveling back in time would be useless if I didn't have a way to cure Irene of her radiation poisoning. I've finally got that squared away, though, so once I have your time trigger I'll have everything I need.”

“You do realize that I don't actually have a time machine anymore, right? The very last thing I ever did with it was go back in time and stop Dr. Reisenbach from ever inventing it. In this timeline the technology was never developed.”

Bud spoke up. “You know, I've been meaning to ask you about that. If time travel was never developed then how did you find out you'd developed it?”

Tom IV smiled. “One of the things I did with my time trigger was use it to go back in time to get some iridium for my time warp detector. While I was in the distant past I accidentally left behind a series of footprints. By pure bad luck those footprints fossilized and were eventually discovered. As you can imagine, the archaeologist who dug them up was quite surprised!”

Bud laughed. “I'll bet he was! He probably had no idea that

dinosaurs wore sneakers.”

Tom IV nodded and then continued. “Anyway, the paleontologist – I think his name was Dr. DiGanda – asked us to examine the fossils to see if they were genuine. I took one look at them and realized that the tread pattern looked just like the prints made by the SuperSoles shoes I had just purchased the day before. I checked it out and they did match – exactly! It was my size and everything.

“So, of course, we dismissed the fossil it as a ridiculous fraud. But then I started wondering. If it was a fraud then where did that fossil come from? Who would possibly be dumb enough to create fossilized *sneaker* prints? So I decided to do a little investigating of my own.”

Tom's eyes lit up. “You built a device that could look backwards in time!”

Tom IV nodded. “That's exactly what I did. However, my chronoscope worked on a completely different principle from my time trigger. Since the 'scope didn't transport anything into the past – or even interact with the past, for that matter – it didn't damage the fabric of spacetime or put the timeline in jeopardy. It was completely harmless and completely safe.”

“I don't remember hearing about this,” Bud remarked.

“That's because I've never told anyone about it,” Tom IV replied. “After I found out that the fossilized footprint was genuine I kept going and eventually discovered the whole story – including why I convinced Reisenbach to destroy time travel in the first place. I realized that if I let the world know about my chronoscope somebody might find a way to rebuild my time trigger.”

“So that technology isn't lost,” Tom remarked. “It's actually possible to recover it.”

Tom IV nodded reluctantly. “In theory yes, it could be recovered. And I have no doubt that you've got what it takes. But Tom, as much as I'd like to help you here, this is one time when I have to say no. Whatever you do, you *must not build a time machine.*”

Tom shook his head. “Look, I know you're worried, and I can understand why, but I really think the risk is quite small. I only want to use it one time and I'll destroy it after I'm done. Besides, there's no danger of it being stolen by the Black Dragon. No one in my universe is going to steal it and blow up the planet with it.”

“That's true,” Bud agreed. “Since the Black Cobra bought the farm and the Space Legion was defeated, the only opponent you've got left are the hapless Brungarians, who barely have enough intelligence to get out of bed in the morning. Things have actually been kind of quiet lately.”

“The point is that the technology *itself* is a bad idea,” Tom IV said. “Even if you set aside the enormous problems you get when you start messing with timelines, you're still left with the fact that the mere *act* of traveling back in time has the potential to destroy the universe itself! As you well know, time travel tears apart the very structure of spacetime. The Black Dragon used it to cause a resonance cascade, where *space itself* began collapsing – destroying not only this planet, but time as well. The time trigger is the most insanely dangerous machine anybody has ever made and it should *never* be used again. I know how much you miss Irene but you *cannot* justify risking the lives of everyone in the entire universe just so you can have a chance to save the life of one person. It's madness!”

Tom glanced at Bud, who shook his head. “Sorry, skipper, but I'm with him on this one,” his friend said reluctantly. “As I said from the start this just isn't a good idea. There are some places even you shouldn't go.”

Tom sighed. “But look, guys, I can prove that it's safe! We know it's not going to destroy the universe because you have *already* traveled into my past, and yet we're all still here.” Tom removed a photograph from his shirt pocket and tossed it to Tom IV, who examined it curiously. “Where did you get this picture?” Tom IV asked.

“It was taken by a security camera several years ago,” Tom replied. “The picture was snapped on the day that I met Bud – which was also the day before Irene died. You can't tell me that's

not you sitting there in your TANC. That truck of yours is unmistakable! In my universe we don't build monster trucks like that.”

“No, I don't deny it,” Tom IV said slowly. “But I don't understand! The Negative Zone didn't even exist several years ago, and I only made contact with you recently. Besides, I definitely haven't been time-traveling in your universe.”

“Exactly,” Tom replied. “But there's more! I happen to remember that event very well. On that day I was outside waiting on Irene to get something for me when you drove up. You asked me where Bud was and I said I didn't know – I hadn't met Bud yet and had no clue who you were talking about. You then told me that my Dad was waiting to see me. I went up to his office and found him there. I was surprised because *my* Dad was in New York at the time. The person I met in the office let it slip that he was my Dad *from the future*. As best I can tell, you brought me, Bud, my father, and yourself back to the day before Irene died. It *must* have been a rescue attempt. There's just no other explanation.”

Tom IV looked at him, astonished. “Are you telling me that *I* introduced you to Bud?”

Tom nodded. “That's exactly what happened. I'm sure I would have met him anyway, as we needed a hyperplane pilot that day and he was the only one around, but you short-circuited the process. This proves that time travel is safe – after all, you took me back in time and nothing bad happened.”

“There's got to be some other explanation,” Tom IV protested. “There is just no way that I would ever agree to take you back in time. Maybe something else is going on here.”

“But look at the picture!” Tom insisted. “That is clearly you, in my past, sitting in the truck you use to travel through time. I didn't build that monster truck – you did. And there you are, using it. This seems pretty straightforward to me. Logically, this means that time travel is safe.”

Tom IV handed the photograph back to Tom. “You've got me there, Tom. I really can't argue with your evidence. I don't

understand it, but for now I'll accept your interpretation of events. That being said, though, I'm still not going to do it. I'm not going to rebuild my time trigger, or install it on TANC, or go to your universe and rescue Irene. It's far too dangerous.”

“This picture says you will,” Tom replied firmly. “Maybe not today, and maybe not tomorrow, but you *are* going to bring all of us back in time.”

“I don't believe in fate,” Tom IV replied evenly. “I have a choice to make and I'm making it here and now. Time travel very nearly wiped out my entire universe. I'm not going to put yours in danger.”

“What if this was all about Mandy?” Tom asked quietly. “What if *your* girlfriend had died? Would you really resist the temptation to go back and save her? Would you just let it go when you knew you could do something about it?”

“I'm sorry, Tom,” Tom IV said sadly. “I really am. I know how much this means to you and I wish I could help you, but I just can't. My answer is no.”

## CHAPTER 3: RETURN TO NEPTUNE

THE FOLLOWING WEEK was a busy one. To Tom Swift Jr.'s immense relief, the logistics surrounding the *Challenger's* repair were finally completed. Ned Newton at the Swift Construction Company finished manufacturing the ship's replacement parts and shipped them to the spaceport at Fearing Island. The parts were then loaded onto the *Cosmotron Express*, which was scheduled to depart for Neptune the following day. If all went well it would not return for several weeks.

Bud Barclay oversaw the final preparations for departure, which gave Tom a chance to stay in his lab and continue working on his claytronic stones. The night before the expedition left Bud flew back to Shopton. He planned to spend the night with the Swifts and then fly Tom to Fearing Island early the next day.

Late that night Tom met Bud at the company airstrip and offered him a ride home. The two friends were soon speeding down the deserted highway in a silver atomicar. It was almost midnight and the sky above was cloudless and clear. The winter stars shone brilliantly but their beauty was lost on the young inventor. His mind was far away, brooding over the many problems that faced him.

“Hey, thanks for taking care of everything for me,” Tom said at last. “There's been so much going on here at the plant that I just haven't had the time to get away. If you hadn't taken my place at Fearing I don't know what I would have done!”

“No problem, skipper,” Bud replied. “But say, how did today's meeting with the Barclay Group go? Anything good happen?”

Tom shrugged. "It went fine, I guess. Dad has been much more involved with that project than I have. He's been working with them on their design for Astronopolis."

Bud shook his head. "Don't tell me that's what they decided to call the City of the Future! That's a terrible name. Did they fire their marketing department or something?"

"It's better than Swiftopolis," Tom replied, smiling. "Besides, it's ancient Greek for 'star city'. It kind of makes sense."

"I don't know if you realize this, chum, but people don't really speak ancient Greek anymore. Why not just call it 'Star City' and be done with it?"

"I think the Brungarians have already taken that name. It's what they call the place where they train their cosmonauts. Besides, do you have any idea how hard it is to get a committee to approve a name? I'd rather tackle the Black Cobra than a well-entrenched committee any day!"

"I know what you mean! So what's their plan?"

"They've got their work cut out for them,, Bud. The big thing they need right now is a starship. Over the past few days I've put together a rough design for a ship that should meet their needs. When I presented it this morning they seemed happy with it, so I've sent the blueprints off to Ned Newton so he can flesh out the details and begin construction. The ship should be ready in a couple months. While the *Behemoth* is being constructed the Barclay Group is going to assemble all the equipment they need. They seem to be a pretty well-run organization, so I imagine by the time the ship is ready they'll be ready to go."

"What about your claytronic stones?" Bud asked. "Are those going to be ready in time?"

Tom sighed. "They asked me the same question. I wish I could say yes, but that project isn't going very well. The stones are just far too slow. Yesterday I started another small-scale experiment that I think might work, but it won't be finished for another four days. At that rate it would take the rest of time to create anything as large as a city! It's just a mess."

"You'll figure it out," Bud said confidently.



"I'm sure," Tom said absently. "I'm actually much more concerned about saving Irene. I really thought Tom IV would help me. I wasn't expecting him to turn me down – that came as a complete surprise."

"What are you going to do?" Bud asked.

Tom shook his head. "I don't know. For now I guess I'll go get the *Challenger*. Then we'll see what comes up. There's just got to be a way I can save her, Bud. There has to be."

"You know, I'm a little surprised about all this. For the longest time you had moved on. You hadn't even mentioned Irene for ages, and now she's all you can think about! What changed?"

"I found out it might be possible to get her back," Tom replied. "That's what changed. Now it's all I can think about. I'm going to rescue her, Bud, one way or another. I won't rest until I do."

Tom pulled the atomicar into the Swift residence and parked it in the driveway. The two exited the car and walked inside. Tom was soon fast asleep.

The next morning Tom woke up early. After taking a quick shower he went downstairs to the kitchen. He was surprised to find it empty. His mother was not in the kitchen, but Tom could see that she had gotten up before he did and fixed breakfast. Stacks of waffles were sitting on the stove, still warm, and a plate of steaming bacon was on the counter.

As he fixed his plate and sat down to eat his father came downstairs. "Good morning, son," he said cheerfully. Mr. Swift went outside, retrieved the morning newspaper from the doorstep, and then settled down at the kitchen table with a cup of coffee. "Are you and Bud ready to go to Neptune?"

"I think so," Tom replied. "It'll take a while to fix the *Challenger* but at the same time it will be a great learning experience. This is the first time we've ever needed to repair a ship in space before. It's a great opportunity to develop skills that will be priceless in the future."

"I believe you are right, son. I wish I could go with you but

I'm afraid BG Industries needs me here. They've licensed just about everything we've ever built, and the challenge of transferring all that knowledge is quite significant! After all, it's one thing to purchase an atomicar but it's an entirely different matter to manufacture them. Fortunately Ned Newton has been extremely helpful in that regard.”

Tom looked up in surprise. “They're going to be building atomicars?”

Mr. Swift nodded. “They're going to be building everything! After all, once they reach Epsilon Eridani they're going to be a very long way from home. They want their colony to be as independent as possible, so they are looking for ways to manufacture everything they need once they get there. They don't want to have to depend on Earth for supplies.”

“They're going to have a rough time getting started,” Tom remarked. “After all, the planet they're targeting doesn't even have a breathable atmosphere! I'm sure my atmosphere maker can supply one but it's not going to happen overnight. They won't be able to walk on the planet's surface without a spacesuit for a long time – years, at least.”

“It will also take time to build the city and the factories that will support it,” Mr. Swift added. “But at least they don't have to worry about finding raw materials. Your space solartron will be able to supply them with everything they might need.”

“And they can always make a quick trip back to Earth if they've forgotten something,” Tom added. “That star is only ten light-years away. The *Behemoth* should be able to cross that distance in a single day.”

“True, but they're hoping that won't be necessary. Part of the idea behind this is to learn how to build colonies far from home. Ed wants to use this as a dry-run for building settlements in remote corners of the galaxy, far beyond the point where they could return to Earth. This is the first step in a much larger project.”

Their conversation was interrupted when Sandra Swift came into the kitchen. She helped herself to some waffles and sat down

at the table. “You and Bud are leaving today, aren't you?” she asked.

Tom nodded. “Got a big trip ahead of us, sis! We'll probably be gone for at least a month. I've never had to repair a kronolator before.”

“I wish I could go with you,” she said jealously.

Tom smiled. “You're welcome to join us but I'm afraid it's going to be pretty boring! The days of battling the Space Legion are over. This time all we're going to be fighting are fried circuits and damaged wiring. If you're not familiar with a soldering gun then you'll probably be bored to tears.”

“But aren't the Space Friends coming?” Sandy asked.

“They are, but I doubt we'll see them. As soon as we get to Neptune we're going to drop them off and let them do their own thing. They're planning on spending the entire trip scouring the Space Legion's Neptunian base for who-knows-what. You could join them but I don't know how interesting that would be either. Most of them don't speak English.”

His sister sighed. “I guess you're right. Still, at least take me with you the next time you go see Tom Swift IV. I'd really like to get to know Mandy a little better! We never get to see each other.”

Mr. Swift looked up in surprise. “I didn't realize you'd been to see him recently. Did he need something?”

Tom shook his head. “No, Dad. I went to ask him about using his time trigger.”

Mr. Swift frowned. “Isn't time travel dangerous? If I recall—”

“He said no,” Tom finished. “As you said, he felt time travel was too dangerous.”

“I agree,” Mr. Swift replied. “I believe that there are some areas that Man is not intended to touch. Time travel is one of them.”

Bud Barclay strolled into the kitchen. He grabbed a handful of waffles and looked at Tom. “There you are! I hate to break this up but we've really got to get going. If we don't leave we're going to miss our flight to Neptune – and I don't know about you, but I'm not planning on walking.”

Tom stood up. "I'm right behind you!"

"Take care, Tom," his father called out. "Please let us know when you've arrived."

"I will," he promised.

The flight to Fearing Island was uneventful and the launch went off on schedule. Once the *Cosmotron Express* was in space Tom oversaw the operation of the crew while Charles Winkler set up in the ship's galley. After the spaceship was well on its way the Texan cook wandered onto the bridge. "Well, brand my boots, but it's shore good to have a lot of mouths to feed!"

"We're just glad you came, Chow," Tom replied. "And the best part is that if we ever get lost out here we can tell the rescue party to be on the lookout for that shirt of yours. I bet they can see it all the way from Earth!"

Chow beamed. He had a penchant for wearing brightly-colored shirts and this one was no exception. The gaudy red shirt was covered in neon-yellow sequins that glistened in the light. The sequins formed the pattern of an eagle, rendered in a classic Native American design. Tom wondered briefly where he had found such an outlandish shirt, and decided that he really didn't want to know.

Thanks to the spaceship's kronolator it took them less than half an hour to reach Neptune. As soon as they entered orbit they dropped off their Space Friends and started scanning for the *Challenger*. It didn't take them long to find it. "It's just where you thought she would be," Bud remarked.

Tom nodded. "That's orbital mechanics for you! The math works out every time. It looks like she hasn't had much company lately."

The young inventor gave the command to approach the derelict ship, and they were soon within visual range. The *Challenger* was truly a depressing sight. Tom knew the Space Legion had done a lot of damage to his beloved spaceship, but he had forgotten the full extent of the damage. Large portions of the ship's hull were deeply scarred, and there were multiple places

where the hull plating had been vaporized entirely. Few of the ship's repelatron dishes were intact.

The first order of business was to obtain a complete damage report. After the *Cosmotron Express* was maneuvered into position opposite the *Challenger* Tom began giving orders. He led a team over to the derelict and they cataloged all of the systems that needed repair.

“Our first assignment will be to restore hull integrity and the life support systems,” Tom remarked to Bud. “There's just no way we could ever repair the kronolator while wearing a spacesuit. Once life support is restored everything should be much easier.”

“Lead the way, boss!” Bud replied. “Just tell me what to do and I'll get to work.”

It took nine days of intense, tiring work to patch up the ship's battered hull, and it took several more days after that to bring the ship's life support systems back online. Once that arduous task had been completed Tom turned the rest of the repairs over to the crew so he and Bud could focus on the burnt-out kronolator. It took the crew five days to finish repairing communications, navigation, sensors, and propulsion. When they had done all that they could do they returned to the *Cosmotron Express*, leaving Tom, Bud, Chow, and a small support team on the *Challenger*. The *Cosmotron Express* then left Neptune and returned to Earth.

“There's no point in making all those people wait around out here,” Tom pointed out. “After all, the only system left to fix is kronolator and that's really just a two-person job.”

“Or a two-genius job, you mean,” Bud quipped. “I can't even begin to understand how this thing works, and here I am trying to repair it! I feel like a dim-witted baboon that's trying to fix a jet engine with a banana and a couple of leaves.”

Tom laughed. Before he could respond Chow walked into the room, pushing a cart laden with food. The young inventor looked up in surprise. “Wow! Thanks, Chow, I appreciate the service. But you didn't have to do that!”

The balding cook shook his head. “Y'all are quite a sight, you

know that? I don't know how you two keep from starving to death. I fixed dinner three hours ago, Tom! Brand my skillet, but if I didn't come down and feed you y'all would waste clear away to nothing.”

“I guess we lost track of time,” Tom said apologetically. “Sorry about that – and thanks.”

Tom and Bud quickly dug into their three-inch-thick steaks. As they were eating Chow spoke up. “Hey, boss, Donnie gave me a message for you. Said somethin' about seein' a dot on a scope. He thinks there might be someone else out there.”

“Really?” Tom asked. “That's odd. He must have spotted another vessel. I wonder who it could be?”

“Maybe it's our Space Friends,” Bud suggested.

Tom shook his head. “I talked with them just this morning. They haven't left the Space Legion's base yet and aren't planning on leaving anytime soon. That dot must be something else – an asteroid, perhaps, or maybe a piece of space debris. I think I'll go talk to him.”

“Not until you finish eating, pardner,” Chow warned. “Ya gotta eat *sometime*, Tom.”

“I will – I promise.” The Texan gave him a warning look and then left the room. The two finished their meal and hurried up to the bridge, where they found Donnie McGinnis at the helm. Tom asked him what was going on.

“It happened about an hour ago, skipper. I've been trying to keep a close watch on the scope – we're pretty far from home, after all, and there's really no telling what might be out there. Up until today the only vessels I've spotted have been ourselves, our space friends, and the *Cosmotron Express*. But a few minutes ago another ship appeared. It vanished so quickly that I couldn't get a good fix on it, but it seemed pretty small.”

“Was it at the extreme end of our range?” Tom asked.

Donnie shook his head. “Not at all – it was kind of close, actually. But the reading was faint. It was almost like the ship wasn't really there. After a few seconds the dot disappeared and I haven't seen it since.”

Tom frowned. "You know, there might be something wrong with that scope. It didn't work at all when we first boarded, and it's possible that there are a few sensors that need to be replaced. If the sensors are bad it could easily be seeing things that aren't actually there. It could also be detecting debris that's left over from our battle with the Space Legion – there could be a lot of things floating out there. Let me know if it happens again, will you? I'd hate for us to collide with something."

"I will," Donnie promised.

Over the next twenty-four hours Tom and Bud made rapid progress. All of the kronolator's damaged components were finally replaced, and the two teenagers began putting the monstrous machine back together again.

"We should have her operational by the end of the day," Tom said at last.

"It's about time!" Bud remarked. "Let me tell you, skipper, doing a complete tear-down and rebuild of a warp drive is no cakewalk. I don't know how you keep all those tiny wires straight."

"It's all right there in the circuit diagrams! The tricky part is going to be testing it. If something goes wrong – well, *anything* could happen."

"Let's hope it doesn't," Bud replied. "Say, whatever happened to that dot that Donnie saw? Did anything ever come of it?"

Tom shook his head. "I'm not sure what to think. He's seen it a couple more times but it always disappears again. I've run some diagnostics and the scope checks out so I don't think that's the problem. My guess is that we're seeing tiny pieces of space debris that are almost impossible to detect. I'm really not too worried about it."

Bud was about to say something when Tom suddenly held up a hand. "Wait a minute! Do you smell something?"

Bud stopped. "Hey, now that you mention it, I do! It smells kind of like strawberries. I didn't realize we could smell the galley from here."

“We can't,” Tom gasped. He suddenly felt dizzy and nauseated, and the room began swirling around him. Instantly a feeling of panic shot through him. “Bud, I think we're being poisoned! That gas must be—”

He never finished his thought. A moment later they both slumped to the ground, unconscious!



## CHAPTER 4: ZERO-FIVE

TOM SWIFT JR felt himself slowly regaining consciousness. His head was throbbing and he realized he was lying on the floor. He opened his eyes and wearily sat up. Over in the far corner of the room he saw that Bud was beginning to stir.

“What happened?” his friend asked groggily.

A voice behind them thundered to life. “You have been defeated by the mighty nation of Kranjovia! Bow down and tremble, weaklings.”

Tom weakly stood up and turned around. He and his friend were still in the kronolator room, but it was now filled with soldiers wearing the signature brown-and-gold uniform of the Kranjovian Army. In front of them was a proud man whose chest was covered with ribbons and metals.

“Wow,” Tom said, surprised. “Kranjovians! I was expecting the Brungarians. I haven't seen you guys in a long time.”

“The Brungarians must have had a scheduling conflict,” Bud quipped. “Somebody else had to step up and be the evil villain.”

“Silence, you insolent dogs!” the general barked. “I am General Volnas, supreme commander of the mighty starship *Predator*. You are now our prisoner, Swift! And you will do whatever we say, or there will be consequences for you and your pitiful crew. Grievous consequences!”

“Tell you what,” Bud replied. “Since this is your first offense in a long time we'll go easy on you. If you agree to surrender now we won't press charges – we'll just say this was all a big misunderstanding and let you go. But if you insist on being a pain

then we're going to have to get rough with you.”

General Volnas burst out laughing. “Your assistant has lost his mind, Swift! There are thirty powerful Kranjovian soldiers on board this ship and all of them are armed with deadly weapons. You, on the other hand, do not even have a single handgun! In fact, you are so breathtakingly stupid that this ship isn't even armed. Truly, you Americans are as dumb as rocks.”

“Only the weak need guns,” Bud retorted. “C'mon! Surely you guys know your own history, right? Don't you remember what happened when Ivor Bronich went after Tom's atomic earth blaster? Or what about that unfortunate time when you guys tried to steal the the space cache we'd recovered with our subocean geotron? Your soldiers don't stand a chance! Tom Swift is so amazing that he could take on the entire Kranjovian Army with half his brain tied behind his back, just to make it fair.”

“Silence!” the general screamed. “You will learn respect, young moron, or you will soon be dead!”

Bud yawned. “Been there, done that. What else have you got?”

“Bud,” Tom said warningly. He turned to the general. “So what evil villainy are you up to this time? You had better not have harmed my crew, because if you have—”

“Enough!” General Volnas shouted. “It is you who are the villain, young Swift. The Kranjovian Army is appalled by your racism. You have refused to share your kronolator technology with the citizens of our great empire. I have come to teach you manners and liberate this knowledge so that all might enjoy its benefits.”

“You mean you want to steal Tom's invention so you can ruthlessly oppress other people,” Bud replied.

General Volnas smiled. “We prefer to see it as spreading the glory of the Kranjovia way to other, less fortunate souls. There are so many planets that need us to look after them.”

“That explains why so many Kranjovians risk their lives to flee your country,” Bud remarked. “You guys do such a great job of ruling your people that even the threat of death can't dissuade

them from jumping ship.”

As the General prepared to respond Tom interrupted him. “Look, you guys have got it all wrong. I can understand your interest in the kronolator, but as you can see it's not exactly in working order! I've spent *weeks* trying to repair it – that's the whole reason I came out here, as you must know. Surely you can see that this machine is nowhere near functional.”

The general scowled. “But the *Cosmotron Express* left days ago! You would never let her return to Earth while this ship was still helpless. Even you are not that stupid.”

“I didn't say the *Challenger* was stranded,” Tom replied. “We can still return to Earth using its repelatron drive. But the kronolator is ruined. Look at it – it's in pieces all over the floor!”

“Then you will fix it!” General Volnas stared at Tom intently. “I will give you 24 hours to fix this ship, Swift. If you fail then I will shoot your moronic assistant – and if *that* does not persuade you then I'll find other friends of yours to shoot. All of your men on this ship have been captured, and they would make most excellent targets – especially the loud-mouthed fat one from Texas. His shirts are an offense to humanity.”

The general walked to the door, and then turned around to look at Tom. “You have twenty-four hours, Swift. Not a minute more! Do not play games with me. I am not a patient man.”

After finishing his tirade the general and his troops marched out of the room. He left two guards outside the door and stationed another one inside the room. All three of them were heavily armed.

Bud looked at Tom quizzically. “So what now?” he asked in a low voice.

Tom picked up the wiring diagrams for the kronolator and stared at them intently. Several minutes went by. “Tom?” Bud asked. “I hate to interrupt, but we're in a tight spot here. What's our next move? How do we—”

“Hold on,” Tom replied. “Just give me a minute.” He removed a pencil from his pocket and began making changes to the

diagram. Bud watched in silence.

“Go ahead and get started,” Tom said at last. “This is a bit complicated. We’re going to need to work together on this.”

“Sure, genius boy, not a problem. But what am I supposed to do? I missed the part where you told me your master plan.”

Tom gestured toward a power coupling that was partially reassembled. “You can start by putting that back together. None of this is going to work until we’ve got power. Once you finish that, go ahead and put it back on the main unit. I’ll make the final calibrations after the basic work is done. We can proceed from there.”

For the next few hours Bud worked alone while Tom feverishly revised the diagrams. At last he sighed, put away his pencil, and shook his head. “I just don’t know,” he said at last. “This is going to be a bit interesting, chum.”

“In a good way?” Bud asked in a low voice, eyeing the guard loitering near the door.

“I don’t really have all the parts I’d like,” Tom explained. “I wasn’t expecting on running into a hard deadline, and I don’t have the time to add many safety precautions. The ride could get a bit bumpy.”

“You mean we’re going to give General Hotshot what he wants?” Bud asked, surprised. “We’re actually going to fix the kronolator?”

“Something like that,” Tom replied. “Unless you’d rather get shot, that is. I think those guns have real bullets in them.”

“No thanks, skipper. I’m no genius, but I have a feeling that getting shot may be hazardous to my health.”

“Then let’s get this done. He does have the rest of the crew held hostage, you know. A lot of lives are in danger and we don’t have many options. The general wants a working kronolator so I say let’s give him one.”

“If you say so,” Bud said dubiously.

Over the rest of the day the two teenagers worked feverishly on the giant machine, staying up far into the night. Bud was

surprised at the number of wiring changes Tom made. He could tell that the young inventor was not happy but he didn't ask any questions. He had a feeling that even if Tom had been able to speak freely Bud wasn't going to like the answers.

The next morning a fresh guard came to take the place of the one that had watched them through the night. General Volnas accompanied him to see their progress. He was not pleased. "What is this?" he thundered, as he saw partially-built components scattered all over the floor. "Do you take me for a fool, Swift? Or do you simply not understand the gravity of the situation?"

"We're a bit tired," Bud replied, "and we could use a good breakfast. I don't suppose you'd consider letting Chow rustle us up some food, would you?"

"You can eat and sleep after you finish repairing this monstrosity," the general snapped. "In fact, should you fail to complete this task then you will sleep the eternal sleep of death! Your pitiful efforts to stall for time bore me."

"You don't understand," Tom protested. "The kronolator is a very delicate instrument that uses a terrific amount of power to warp time itself. If we do something wrong it could easily kill all of us when it engages. We could end up with a zero-five on our hands."

"I am not interested in your inane babble," General Volnas replied coldly. "You have until this afternoon to finish. Not a moment longer! You will either complete it on time or you will die trying."

With that, the general stormed out of the room, leaving a guard behind.

"What now, skipper?" Bud asked, as soon as the general had left.

The young inventor yawned and rubbed his eyes. "Only one thing to do, fly boy. Hand me that flux capacitor, will you?"

Bud looked around, puzzled. "You mean this?" he asked, picking an odd-shaped bit of circuitry off the ground.

“That'll do,” Tom replied. He quickly snapped it in place and nodded with satisfaction. He then walked over to the control panel and placed his hand on the master switch. After making sure everything was ready he called to the guard. “Hey there! Do you know what a zero-five is?”

The enormous guard shook his head. “I do not care about you or your machine, you stupid American. My only orders are to shoot you if you try to leave.”

“It's a really a fascinating condition,” Tom explained. “You see, sometimes when a ship engages its warp drive it doesn't quite work right. Instead of cleanly entering hyperspace the ship only makes it partway through. Believe it or not that actually happened to the *Arabian Prince* – you can still see its ghost image out past Jupiter! As best I can tell that ship is spread across many dimensions but isn't fully manifested in any of them. Its passengers are forever stuck in time.”

“I care not,” the guard snarled.

Tom shrugged. “All right! Then I'll just go ahead and engage the drive. After all, what could go wrong?”

The guard's eyes grew wide as Tom flipped the switch. He opened his mouth to scream an order but the kronolator instantly surged to life! The machine engaged with a massive jolt of energy, filling the room with a brilliant white light. The guard froze, unable to finish his sentence. He remained stuck in time, locked in the motion of attempting to stop Tom.

## CHAPTER 5: FROZEN

A LOOK OF HORROR appeared on Bud's face as the now-frozen guard vanished! The edges of the room turned black and crumbled away, replaced by utter nothingness. It was as if the entire universe had suddenly shrunk to a tiny sphere not much bigger than the kronolator. Bud jumped back when he saw how close he was to the edge of reality.

Bud turned to Tom. "What just happened? Please tell me you didn't--"

Tom laughed. "Don't worry, Bud. You should know better than that! The *Challenger* doesn't even have a hyperdrive, remember? Tom III may have to worry about a zero-five, but the worst thing that could happen to us is the drive failing to do anything at all. The kronolator works on an entirely different principle. I was just giving the guard something to think about in case my plan failed."

"That's right!" Bud said. "I'd forgotten. So what happened? Why did the universe just disappear?"

"It's still there, flyboy. I'll give you a clue: did you notice that the guard froze just before he disappeared?"

When Bud nodded, Tom continued. "The reason he stopped moving is *not* because time stopped. It's because, *in this small zone*, time is moving at an incredibly rapid pace. I've created a localized area where time is flowing much faster than normal. I thought that would give us a tactical advantage over the Kranjovians."

"I still don't get it," Bud replied. "What have you done to the

kronolator? For a minute there I thought you had completely lost it.”

“It's actually quite simple! You see, my kronolator enables us to travel faster than light by manipulating the flow of time. I've simply tweaked it a bit so that, instead of acting on the entire ship, it's only creating a tiny field that just barely extends to the edges of this room. Inside that field time is flowing much, much faster than it is *outside* the field.”

“Ok,” Bud said slowly. “So it sounds like we're just moving really, really fast. But tell me something. What would happen if I tried to step outside the field?”

“I'm not exactly sure,” Tom confessed. “If half of your body was inside the field and the other half was outside, it's possible that you might get torn apart. I haven't done any experiments so I don't really know. But it's probably best to avoid the edges of the room, just to be safe.”

“And that must be the edge,” Bud said, gesturing toward the region of utter blackness. “Why does it look like that?”

“It's hard to say,” Tom admitted. “We're exploring new territory here. It may be because the light rays from outside the field are having trouble making their way through the boundary between this time zone and that time zone. I'd have to perform some experiments before I could say anything with certainty. It could also be a flaw in the time field itself.”

Bud nodded. “So what do we do now, genius boy?”

“We take advantage of our superior situation!” Tom replied. “From this room I can control pretty much every system on board, including the Transmittaton. Now all we need to do is transport all the Kranjovians to a holding cell. Then we can set the crew free and go home.”

“Can we really do all that from inside the time field?” Bud asked dubiously.

“I think so,” Tom said confidently. “After all, electronics work at the speed of light. Even though time is going quite slowly in the 'real world' we can still send the Transmittaton commands and receive a response fairly quickly. The ship's sensors should tell us



where the Kranjovians are hiding.”

“But what about their guns?” Bud asked. “How are you going to disarm them?”

“That's a little trickier, but it's also possible,” Tom replied. “Do you remember smelling strawberries just before we passed out?”

Bud shook his head. “All I remember is the world going black and waking up to find General Hotshot standing there, saying unkind things about Chow's shirt.”

Tom grinned. “Well, the way the Kranjovians took over the ship was by gassing us with a non-toxic but highly effective potion. I happen to be familiar with that particular formula, and what worked on us will work on them.”

“I like it!” Bud exclaimed. “Give 'em a taste of their own medicine. But why not just gas them first?”

“Because I don't have any of the gas on hand,” Tom replied. “I've got to make some up first, and I just don't think General Volnas will give me a few hours off so I can go outside and set up my solartron. So I'll round 'em up, then suspend them in time while I work on the gas. Once the gas is ready I'll use it, take their weapons, lock them up, and head home.”

“I knew you wouldn't let me down,” Bud said enthusiastically.

As it turned out, the plan took far longer to execute than Tom had anticipated. He had no trouble locking onto the Kranjovians, but the actual transportation process did not happen at lightspeed. It took forty painful minutes to transport a single soldier to the holding cell. Transporting all of the soldiers took many hours. But Tom and Bud persevered, and after what seemed like an eternity they finally cleared the ship and had all of the Kranjovians locked into a single room.

Once the soldiers were safely isolated Tom adjusted the size of the kronolator's field to allow them access to other parts of the ship. He was careful to not extend it far enough to reach the room where the Kranjovians were being held. Tom and Bud then quickly made their way to the room where the crew was

imprisoned.

After setting them free the young scientist explained how he had managed to regain control of the *Challenger*. There was some initial confusion but everyone was glad to see Tom again. “Is there anything we can do to help?” Donnie asked.

“Contact Swift Enterprises and let them know what's going on,” Tom replied. “Since our kronolator is still broken they'll need to send the *Cosmotron Express* back out here to pick up the prisoners. Sending the message will be a little tricky since we're still inside the time delay field, but I'm sure you can manage it. Also, if someone could rustle us up some grub we'd be grateful! I'm hungry enough to eat a rattlesnake.”

“Brand my skillet, but if I ain't plum out o' rattlers,” Chow grumbled. “Figures. But I'll see if I can't get you boys somethin'. We're a bit hungry ourselves. These Kranjovians ain't much for hospitality.”

As the crew returned to their stations Tom and Bud made their way to the young inventor's laboratory. Tom browsed through his stock of chemicals. “Do we really have a solartron on board?” Bud asked.

“We do, but as it turns out I'm not going to be able to use it,” Tom replied. “First, we're orbiting Neptune and the amount of sunlight we get out here is practically zero. It would take a really, *really* long time to produce enough matter to make the knockout gas – especially with time slowed down! We might die of old age before we got done. So I'm switching over to Plan B.”

“Which is?” Bud asked.

“Making a knockout gas with the chemicals I happen to have on hand.”

Bud nodded, and Tom went to work. After about twenty minutes Chow walked into the room, pushing a cart laden with vegetable soup. The cook left the cart there and headed back to the cafeteria to serve the rest of the crew. The boys hungrily ate and then returned to their work.

An hour later Tom stepped back, satisfied. “This should do it!” he exclaimed, holding up a small green pellet.

“How do we know if it will work?” Bud asked.

“We test it, and see,” Tom replied. He handed Bud a communicator and the gas pellet. “Here's the plan. I'll go down to the kronolator while you head off to the holding cell. Once you're in place I'll extend the time field just enough to allow you to open the door. After you've opened the door and tossed in the gas pellet I'll shut off the time field entirely. If the gas *doesn't* work you'll hear a lot of commotion. Just let me know and I'll freeze them again, and we'll switch to a different gas.”

“What if the kronolator fails to re-engage?” Bud asked.

“Then we lock the door and run for our lives,” Tom quipped.

Bud grinned. “Whatever you say, skipper!”

To Tom's immense gratification, the plan worked well. The gas rendered all of the Kranjovians unconscious and Bud was able to confiscate their weapons. After securing the door and stationing a crewmember outside, Tom shut down the time-distortion field and headed up to the bridge. The *Challenger* was soon on its way home.

“I've contacted Swift Enterprises and the *Cosmotron Express* is on the way,” Donnie reported. “We're going to rendezvous with it in about three hours.”

“Outstanding!” Tom replied. “I'll be glad to get the Kranjovians off our hands.”

“By the way,” Donnie continued, “I thought you'd want to know that we found their ship. It looks like they stored it in the shuttlecraft bay after they boarded us. It's still there.”

“I can't believe it!” Bud replied, shaking his head. “They got awfully lucky. What would they have done if we'd had our shuttlecraft in there? The only reason the bay was empty was because our space friends borrowed that shuttle to reach the Space Legion's outpost.”

“They probably would have ejected our shuttlecraft into deep space,” Tom remarked. “What amazes me is that they were actually able to make it all the way out to Neptune! It must have taken them *weeks* to make the trip, if not longer. They were really

dedicated.”

“And soon they'll be dedicated to a federal prison,” Bud quipped. “It couldn't have happened to a nicer group of people. Say, speaking of our space friends, aren't we kind of stranding them out here?”

“Not really,” Tom replied. “They're pretty busy right now and aren't eager to return home. When they're ready to go back to Mars I'll just send the *Cosmotron Express* after them.”

“Sounds good. Say, speaking of that, isn't the kronolator still in pieces? How are *we* going to get home?”

“By using the repelatron drive. It'll take a lot longer but we'll still make it back. Besides, the flight home will give me all the time I need to perfect my claytronic stones. The kronolator is the piece I've been missing!”

“How is that?” Bud asked.

Tom grinned. “The whole problem with my replicating stones is that it takes an enormously long time for them to do anything. But this modified kronolator changes all that! After all, if I can manipulate the flow of time then time is no longer a factor. All sorts of new possibilities open up.” Tom paused for a moment as he considered the possibilities. “There's only one other thing I wish I could get the kronolator to do.”

“What's that?” Bud asked.

“*Reverse* the flow of time,” Tom replied.

## CHAPTER 6: THE CHARIKLO CENTAUR

THE *COSMOTRON EXPRESS* ARRIVED three hours later, and its crew was eager to accept the Kranjovian prisoners and transport them back to Earth. Harlan Ames, the security chief at Swift Enterprises, transferred the soldiers to the other spaceship. “They’ll be taken into custody as soon as we land,” he promised Tom. “The State Department is very interested in questioning them.”

“You’ll never get anything out of us!” General Volnas screamed. “All hail the glorious might of Kranjovia! You will regret this, Tom Swift. I will have my revenge!”

“We’ve heard that tune before,” Bud said, yawning. “Honestly, it’s getting a bit old. You wouldn’t believe how many people promised to destroy us forever, only to then disappear and never be heard from again. Can’t you guys think of anything *different* to threaten? I mean, you could always threaten to dislike us. I might buy that. Or maybe you could threaten to send us hate mail. Try picking a goal that’s more attainable.”

“You have a big mouth, but an empty head,” the general sneered. “The doom of your country is inevitable. We will dance on your graves.”

“You’ve got it backwards,” Harlan replied. “The dictatorship in Kranjovia is highly unstable. Your fearless leader’s policies have caused the Kranjovians to be in a constant state of unrest. Declaring war on the United States really wasn’t the smartest thing to do.”

“The Kranjovians declared war?” Tom asked, surprised.

“A group of Kranjovian soldiers attacked a spaceship of the United States,” Harlan explained. “On top of that, the attack was ordered by the Kranjovian government itself. The President has decided to interpret that as an act of war. Given the facts he really had no other choice.”

“You'll never defeat us!” General Volnas screamed. “Your pitiful forces will be crushed by our superior might!”

“We don't have to defeat you,” Harlan replied. “You're doing that all by yourself! The Kranjovians began rioting in the streets the moment they found out their leaders had declared war on a global superpower that was allied with advanced space aliens. Even your army is in a state of panic! By the end of the day your government will be overthrown and the United States won't have had to fire a single shot.”

“Nice going!” Bud told the general. “That'll *definitely* earn you a spot in the Kranjovian Hall of Fame.”

The general continued to shout incoherent threats as Harlan marched them off to his ship. Bud leaned back in his chair and smiled. “You know, boss, that went pretty well!”

“It really did,” Tom grinned. “That's probably the last we'll see of him! There's no time to rest on our laurels, though. We've got a date with a centaur that I don't want to miss!”

“A *what?*” Bud asked, puzzled. “When did we start dating mythological creatures?”

“You'll see,” Tom said mysteriously.

Tom and Bud spent the next two days working on the claytronic stones. Tom spent his time in the laboratory while Bud dismantled the kronolator and brought its pieces to Tom. The young inventor worked feverishly on his latest idea, often staying up far into the night.

By the end of the second day Bud had finally finished taking apart the kronolator. He brought its last piece into Tom's laboratory and then wearily sank down into an overstuffed chair. Bud glanced around the lab and saw that it was in complete disarray. Electronic components were strewn all over the floor

and a complicated mess of tubes, wires, and circuits covered the workbench. At the far end of the room was a giant aquarium that had been converted into a holding tank for an unidentified green goo.

“So what's this all about, skipper?” Bud asked. “Why did we chop up your greatest invention and scatter its parts all over the floor?”

Tom grinned. “Sorry about that. I'm usually not this messy but there just wasn't anywhere else to put it. The *Challenger* is a pretty big ship but laboratory space is still at a premium.

“In answer to your question, though, this is all about the claytronic stones. The problem with them has always been that the reaction takes far too long. Turning a vat of goo into a bicycle isn't nearly as useful if it takes a week to complete. The Barclay Group wants me to grow entire *cities* with this stuff. Do you have any idea how long that would take?”

“A month of Sundays?” Bud asked.

Tom laughed. “More like a *year* of Sundays. In fact, our Sun might burn out before it finished! But the time distortion field changes everything. If I can control time then it doesn't matter how long something takes. Sure, it'll still take three days for the stones to take on a new shape, but three days inside the field are just a few moments outside the field. To us the reaction appears almost instantaneous.”

“I get it,” Bud replied. “So you're trying to build a portable time dilator! That way the stones can sit inside the field and do their own thing.”

Tom shook his head. “Not really. These are *replicating* stones, remember. What I want is for the stones to produce their *own* time dilators as they expand. Otherwise they'd replicate until they reached the end of the time field and then stop. My work has been focused on turning the time dilator into something that the stones can replicate on their own.”

“Sounds like a plan!” Bud said. “But how does the smoke fit in?”

“What smoke?” Tom asked, puzzled. He turned his head and

saw a column of smoke billowing in one corner of the lab. His eyes widened. “That's not a part of the experiment – that's a *fire!*”

“Then why didn't the fire alarms go off?”

“Oh no!” Tom exclaimed. He watched as the beaker that had been smoldering caught fire. Flames shot up toward the ceiling. A red-hot ember landed on a nearby chair and quickly caught fire. “We took the smoke detectors out when we rebuilt the lab, and they never got replaced! Bud – go pull the fire alarm in the hall while I put this thing out!”

As Bud raced outside the lab Tom searched the room for a fire extinguisher. The flames quickly consumed the leather chair and spread to the bookcase, torching Tom's valuable collection of scientific journals. In the flickering firelight Tom spied an extinguisher mounted on the back wall. He grabbed it, removed the pin, and pulled the trigger. Nothing happened. Tom glanced at the gauge and saw that it had no pressure. A quick examination revealed why – a hole had been punched all the way through the wall of the container.

“Must have been damaged in the battle with the Space Legion,” Tom muttered. He tossed it aside and glanced around the room in panic, as the flames drew nearer to the invention on his workbench. Thick black smoke clouded the room, making it difficult to breathe.

A moment later the ship's main fire alarm went off. Sirens echoed down the corridor and red lights flashed. Bud raced back into the room. “What do we do now, skipper?”

“We get out of here!” Tom shouted. He and Bud ran out of the room. Tom slammed the lab's door behind them and quickly pressed a series of buttons on a nearby panel. As crewmembers began racing toward them they heard a huge sucking sound coming from inside the lab. Tom could hear glass breaking and pieces of equipment smashing into each other.

“What did you do?” Bud shouted over the deafening noise.

“I vented the lab's air into space,” Tom explained. “Fire needs oxygen to burn. With the air vented the fire won't have any oxygen and will go out. I just can't believe I didn't have working



fire-fighting equipment in the lab. That was a terrible oversight.”

“Especially since your father *invented* his own fire-fighting equipment,” Bud needled. “You really should carry some of his fire-fighting pellets with you.”

“I normally do,” Tom replied, sighing. “It's just one of those things I didn't think about when I planned this trip.”

“I guess even geniuses can't think of everything,” Bud replied, grinning.

After Tom was sure the fire had gone out the young inventor repressurized the room and opened the door. He shook his head in dismay when he saw the damage. The left half of the room had been scorched by the blaze, its contents turned into ashes. Expensive scientific instruments had been violently thrown around when the air was evacuated, scattering broken glass and pieces of electronics everywhere. “At least the workbench didn't catch fire,” Tom remarked. “That's something.”

Tom sent the crew to find a working fire-extinguisher and then began cleaning up the lab. By the following afternoon the laboratory was once again usable. It was still obvious there had been a fire, but Tom had cleaned up enough of the debris to allow him to get back to work. The crew was able to locate a box of Mr. Swift's fire-fighting pellets, which Tom gratefully placed into a cabinet on the wall.

“What are you going to do about the burnt furniture?” Bud asked.

“I'll just replace it after we get back to Fearing Island,” Tom replied. “Right now it's not important. The good news is that my stoves are back in working order – and just in time for our date with the centaur!”

Tom left the lab and headed up to the bridge. Bud followed. When they made it to the bridge Tom walked over to Donnie McGinnis, who was at the helm. “We're almost there, skipper,” Donnie reported. “You can already see her on the scope. We should be touching down on Chariklo in less than twenty minutes.”

“The centaur is a *rock*?” Bud asked.

“Exactly,” Tom replied. “As you know, the main asteroid belt lies between Mars and Jupiter. However, there are also a number of asteroids that orbit between Jupiter and Neptune. These asteroids are called *centaurs*. Their orbits are usually unstable. We're headed for a centaur named Chariklo, which is about 160 miles across – a fairly large piece of real-estate, by centaur standards!”

“And it's way out here?” Bud asked.

Tom nodded. “Its orbit actually follows Uranus pretty closely. I thought it would be a great place to test my claytronic stones. We can just set them down on the surface and let them replicate. With luck, they should be able to use the minerals in the asteroid to reproduce themselves.”

Donnie landed the *Challenger* on Chariklo without incident. Tom and Bud put on spacesuits and carried boxes of equipment out to the surface of the asteroid. The rock was a light-gray planetoid with a heavily-cratered surface. Boulders of all sizes were strewn about, with a fine layer of dust covering everything. All around them was the vacuum of space, dark and unforgiving. A few weak stars could be seen. The sun was a small yellow dot, barely noticeable. It provided almost no illumination, which forced them to rely on their suit lights.

“Not much to look at,” Bud remarked. “I can't say this is an inviting place.”

Tom nodded. “It does seem to lack many of the comforts of home. But it'll work just fine for our experiment.”

As the two boys carried the equipment away from the ship Bud noticed how difficult it was to walk. “There's really not much gravity here,” Bud commented.

“It's almost negligible,” Tom agreed. “But our magnetic boots seem to be working. Luckily this asteroid has a high-iron content. We should be fine.”

The two teenagers walked about a tenth of a mile away from the *Challenger*. They set the boxes on the ground and began emptying them. Tom took out his time dilator and began assembling it. When he was ready he set a container of green goo

next to it and stepped back about 100 feet.

“So what's going to happen?” Bud asked, as Tom took a remote control out of his spacesuit pocket.

“For this first experiment I'm not going to try anything complicated,” Tom replied. “All I want to do is see how quickly the stones can replicate themselves. The time dilator has an effective radius of about fifteen feet. If this works, the stones should replicate both themselves and the dilator until they cover a radius of fifty feet.” Tom's eyes glowed with excitement. “We should be able to watch the stones replicate in real-time – right before our very eyes!”

Bud nodded. “Sounds good, genius boy! Let's see what these stones can do.”

Tom pressed a button on the remote. The time dilator glowed to life! A second later the area surrounding the dilator was plunged into darkness.

“Of course,” Tom muttered. “I should have known that would happen! We can't actually see through the dilation field. But the stones should be replicating inside.”

“How will we know if—” Bud stopped when he noticed that the black field was growing! It expanded slowly at first but its pace quickly picked up.

“It's working!” Tom cried enthusiastically. “The stones *have* to be replicating. The time field is expanding!”

He watched eagerly as the radius of darkness expanded to twenty, then thirty, then forty feet. When it hit fifty feet he turned to Bud. “It works! It's even better than I'd hoped.”

Bud nudged Tom. “Isn't it supposed to *stop*?”

Tom looked back at the field and frowned. The black field continued expanding beyond fifty feet. “That's odd,” he remarked. “It's supposed to shut itself off after fifty feet. Oh well – I'll just kill the reaction.”

He pressed a button on the remote. Nothing happened. His eyes suddenly widened. “Bud – the kill signal can't get through the edge of the time field!”

Tom and Bud took a few steps back. The area of complete

darkness continued creeping toward them. It showed no signs of halting!

Bud looked at Tom in horror. “You mean there's no way to stop it?”

“That's exactly what I mean! *Run for your life!*”

The two began sprinting toward the *Challenger*. The black field rapidly expanded behind them. Within moments it was just a few feet away!

## CHAPTER 7: THE DOOMSDAY DEVICE

TOM FRANTICALLY contacted the *Challenger* over his suit radio. “Donnie – transport us off this rock and get us into space immediately!”

As the two teenagers raced across the pitted surface of the asteroid Bud glanced behind them. “It's gaining on us!”

With adrenaline surging through their veins, the two made a mighty dash for the ship. As they neared its entrance they suddenly felt the Transmittaton grab them. A moment later they found themselves standing on the bridge of Tom's spaceship.

Before Bud could even catch his breath Tom yanked off his helmet and was giving orders. “Activate the emergency liftoff procedure!” he commanded. “If that field even touches us...!”

Donnie pressed the override button and slammed the emergency liftoff switch into place. Tom was almost knocked off his feet by the sudden blast of acceleration. As the ship rocketed into space the asteroid slowly disappeared from view.

Bud let out a long, slow sigh of relief. “Whew! That was a close one, Tom. For a minute there I thought you'd run your final experiment.”

“We're not out of it yet,” Tom warned. “The nanites are still out of control. Donnie – bring us around so we can see the planetoid, but keep us at a safe distance.”

Donnie slowly brought the ship around until Chariklo was in view. Everyone gasped. “It's being *eaten*,” someone said aloud. More than a quarter of the rock was already shrouded in complete darkness, and the black cloud was rapidly consuming the rest of

the planetoid.

“That's a pretty accurate description,” Tom said regretfully. “My stones are consuming it at an incredible rate.”

“Isn't there some way we can stop it?” Bud asked. “Can't you hit it with an electromagnetic pulse?”

Tom shook his head. “The pulse would never make it through the time barrier. It would have no effect.”

“What about missiles?” Bud asked. “Can we blow it up?”

Tom looked at him strangely. “This is the *Challenger*, flyboy! It doesn't have missiles. None of our ships do.”

“I bet that Kranjovian crate in the shuttlecraft bay is armed,” Bud pointed out.

Tom nodded. “I'm sure you're right. However, I doubt it would do much good. Even if we did manage to blow up a few nanites there are trillions more to take their place. We could never hit the entire asteroid at once.”

“So what do we do – just sit up here and wait?”

“I'm afraid that's all we *can* do. Our only option is to wait until the stones run out of minerals to consume. At that point the reaction will die and the time field will collapse. We can then hit Chariklo with that electromagnetic pulse you were talking about, just to make sure the time field never re-engages.” He shook his head. “Could you imagine what would have happened if we'd run this experiment on Earth? It would have destroyed the entire planet!”

Bud shivered. “Let's just be glad we tried your doomsday device out here in space. Do you think you can fix the stones so they don't do that again?”

Tom shook his head. “I'm not even going to try. My stones are *incredibly* dangerous. One false move and I could wipe out all life on Earth! I think it's best if I moved on to one of the other ideas in my chest of secrets. This is one invention that should never see the light of day.”

It took less than thirty minutes for the entire asteroid to be consumed by darkness. Five minutes later the darkness began

collapsing, revealing a smooth, featureless blob of green goo. Tom looked at it and sighed. "I'm just glad no one lived there," he commented. "We got lucky – really lucky. This could have turned out so differently."

When the last bit of darkness disappeared Tom gave the command to emit the electromagnetic pulse. The *Challenger* spent the next several hours orbiting the devastated planetoid, bombarding the rock with electromagnetic energy. Tom went over the entire asteroid six times.

"I know this takes a lot of time but I've got to make sure it's completely inert," Tom explained. "I know we're not detecting any radiation but I don't dare take any chances. This stuff is just too dangerous to fool around with."

"So what do we do now?" Bud asked. "Just leave it here?"

"Oh no," Tom replied. "Definitely not! I think the only safe thing to do is push it into an orbit that will make it fall into the Sun. That way we can be *sure* it's destroyed. The nanites are sturdy but they can't survive the intense heat of solar fusion."

Bud nodded. "That makes sense. But how are you going to change the asteroid's orbit? After all, that rock is 160 miles long! Even the *Challenger* can't budge it. Your repelatron aren't *that* strong, no matter what our marketing department says."

The young scientist grinned. "True, but I've got another plan. While this ship can't generate enough force to change that asteroid's orbit, we can *make* something that'll do the trick. All we need are the right ingredients."

Tom gave the order to deploy his space solatron. For the rest of the day the majority of the crew worked in the vacuum of space, deploying the enormous solar array that powered Tom's matter-maker. By the end of the day the giant machine was in place.

"I don't get it," Bud remarked, after they were finally back on board. "I thought you told me there wasn't enough sunlight out here to run your solartron."

Tom nodded. "That's true when we're talking about making large quantities of matter. However, all I want to make are a few

grams of *antimatter*. The solartron should be able to do that in a few hours, even way out here. By the time we get up in the morning I should have all the material I need.”

“A few *grams*?” Bud asked. “What could you possibly hope to do with that? That's not even enough to sneeze at!”

Tom grinned. “Antimatter is pretty potent stuff, Bud. Whenever an atom of antimatter comes into contact with an atom of matter, the two annihilate themselves in a burst of gamma rays. Don't you remember our experience with antimatter in the caves of nuclear fire? A thousand grams of antimatter can produce the same energy as 40 *megatons* of TNT.”

“I get it!” Bud exclaimed. “You're going to build an antimatter bomb and use it to move that giant blob of goo onto a new course. The force of the explosion should shift its orbit.”

“Exactly. The only downside is that it will take *years* for the asteroid to reach the Sun. I haven't crunched the numbers yet, but it doesn't take a mathematician to figure out that a rock moving rather slowly about a *billion* miles from the Sun is going to take a *long* time to cover that distance.”

“But it should be safe,” Bud added. “I mean, it's not like it can cause any further harm.”

“I hope not,” Tom replied sincerely. “Let's hope we never find out.”

After configuring the solartron to produce antimatter Tom went to bed. The next morning he got up, took a shower, and rushed to the solartron. As he was poring over the results Bud walked into the room, carrying a plate of doughnuts.

“How's it look?” Bud asked, as he munched on a chocolate-covered doughnut.

“It looks like the solar energy out here is even weaker than I thought,” Tom admitted. He took a cream-filled doughnut off the plate and began eating it. “I'd really hoped we'd be able to get this finished today, but at this rate I'm going to have to let the solartron run until sometime tomorrow. On the bright side, that will give me the time I need to run some numbers and figure out



how to change its orbit. Orbital mechanics is—”

Tom's train-of-thought was interrupted when Donnie walked into the room. “I hate to bother you, skipper, but your dad just called. He said that he has a meeting with the Barclay Group in an hour and they want to talk to you about a few things.”

Tom sighed. “All right. I guess I can attend. Can you get the telejector conferencing set up in my lab?”

“Sure thing,” he promised.

When he left the room Bud looked at him quizzically. “What's this about a telejector? Do we have one of those on board?”

Tom shook his head. “Not exactly. It was actually Dad's idea — he's the one that did all the development work on it. Basically, I'm going to sit in front of a 3D camera. The video feed will then be beamed back to Earth, and a telejector at Swift Enterprises will create a three-dimensional image of me in the conference room. It will look like I'm there, even though I won't be.”

“Nice!” Bud remarked. “But we're pretty far from Earth, skipper. Even light can't travel from here to Earth very quickly! Isn't there going to be a tremendously long time delay?”

“Ordinarily there would be, but I'm not using light. Since we're so far from home I'm using the same anti-inverse-square-wave principle that my megascope uses. Do you remember how I can use it to scan distant planets in realtime? Well, by using a modification of that beam I can communicate with people on Earth with no delay at all.”

“But if you don't have a projector on board then how will *you* see *them*?”

“Oh, they'll appear on a normal TV screen. I really need to get a telejector installed but I always seem to have more pressing things to worry about.”

“Like rogue centaurs,” Bud quipped.

Tom sighed. “Exactly.”

An hour later Tom sat down in his laboratory and activated the video broadcasting equipment. It took a few moments to establish the connection and receive the remote feed, but

everything was finally set up.

“You look great, Son!” Mr. Swift commented. “This is working even better than I hoped. It's not every day I get to have a meeting with someone in deep space! This opens up a whole new era in communication technology.”

“I'm glad to hear it,” Tom replied. Tom could see his father on the video screen in his lab. “All the credit goes to you, though, Dad. This is your idea.”

Mr. Swift made the introductions. “I'm sure you remember the representatives from BG Industries,” he began.

“It's good to see you again!” Ed Gamino boomed. “I've got to say we're very pleased with the ship you designed for us – very pleased indeed! It's everything we hoped for and more besides. I'm sure the *Behemoth* will have no trouble bringing the finest minds on Earth to Epsilon Eridani. No trouble at all!”

“I'm glad you are pleased with her,” Tom replied. “I take it the construction is still on-schedule?”

“Absolutely,” Ned Newton said. “It will be delivered on-time.”

“Oh, hi there,” Tom remarked. “I didn't see you sitting there. How have things been?”

“No problems to report,” Ned replied.

“That's remarkable!” Tom quipped. “That's *got* to be a first.”

“What's that?” Ed asked.

“Oh, nothing,” Tom said quickly. “Was there something in particular that you wanted to talk to me about?”

“What?” Ed asked. “Oh, yes! Right! Of course there is! I want to talk to you about your claytronic stones, my boy!” Ed eagerly rubbed his hands together. “The stones of destiny. Indeed, the stones of greatness! I must hear about them. I must have them! Have you perfected them? When can we see a demonstration? How soon can we get a shipment of them?”

“I'm afraid I've had to cancel that project,” Tom said regretfully.

“Cancel!” Ed exclaimed, astonished. “What's this? I've never heard of such a thing! Did they not work?”

“Oh no. They worked. In fact, they worked all too well! The problem is I couldn't make them *stop* working.”

“I don't understand,” Ed replied. “What's wrong with that?”

“Did something go wrong?” Mr. Swift asked.

Tom nodded. “Yesterday I ran a full-scale experiment of the stones. They worked, all right – in fact, they were able to replicate themselves with astonishing speed.”

“Then they're a success!” Ed exclaimed.

“I'm afraid not,” Tom said. “The problem is that the stone did not *stop* replicating. I had no way to turn them off. They kept reproducing themselves until they consumed the entire asteroid I was experimenting with.”

“Oh my,” Mr. Swift gasped. “Tom, that's terrible! Why, if you had tried that experiment here on Earth—”

Tom nodded. “Exactly. The stones are just far too dangerous. If I had tried my little test in Shopton we wouldn't be having this conversation right now. The stones would have turned the entire surface of the planet into a sea of green nanites. *Nothing* would be left.”

“But surely it's not that bad,” Ed commented. “You just need a better way to control them. I admit there are risks but think of the enormous possibilities! Claytronics represents the greatest scientific advance that mankind has ever seen. I'm sure you could design a failsafe of some sort – some way to prevent them from spreading out-of-control. After all, you are Tom Swift!”

“It's too risky,” Tom argued. “All it would take is a single mistake to destroy everything. I don't want to be the person that wiped out all mankind.”

“But what if we only used it on uninhabited worlds? That way no life would be endangered.”

“You would still have to transport the goo to those worlds,” Tom pointed out. “Besides, do we really want to destroy yet another piece of space real-estate? And what if this technology fell into the wrong hands? Or what if someone got careless with it? I'm sorry, but my answer is no and that's final.”

Ed paused for a moment. He was clearly greatly disturbed. “I

understand,” he said at last. “That’s responsible of you – very responsible indeed. I commend you for thinking of humanity. Perhaps we can revisit this later after the situation has changed.”

“Changed?” Tom asked. “In what way?”

“We’ll take care of it,” Ed replied evasively. “Don’t worry. We’ve got everything under control.”

“Dad?” Tom said.

“The project is going smoothly,” Mr. Swift confirmed. “Still, it would be nice to have you back. When do you think you can return to Shopton?”

Tom thought for a moment. “At top acceleration I think I could get home in nine days,” he said thoughtfully.

“We’ll be ready,” Ed promised.

As Tom closed the connection and left his laboratory he stopped to think. *Ready? Ready for what? How are you planning on changing the situation, Ed? I know you want the stones, but it’s just too risky. What could you possibly do that would convince me to change my mind?*

## CHAPTER 8: AN UNEXPECTED VISITOR

BY THE FOLLOWING MORNING Tom's solartron had produced enough antimatter to move the Chariklo planetoid. After triple-checking his calculations Tom loaded the antimatter into three magnetic bottles, which he securely fastened onto repelatron donkeys.

“For safety reasons I don't want anyone to actually set foot on that giant glob of nanites,” Tom explained. “We'll use remote-control to guide our repelatron-powered workhorses into place. Once they're in position we'll detonate them.”

The positioning went without incident. From the bridge of the *Challenger* Tom personally guided each of the three craft into position. Once he confirmed that all three were in place he watched the countdown clock. At the precise moment the computer sent a signal to each of the three magnetic bottles that caused their magnetic fields to collapse.

Immediately there was a blinding explosion! Giant clumps of inert nanites were flung into space. As quickly as the light appeared, however, it dissipated.

“It's weird, not hearing any noise,” Bud commented. “I know sound can't travel through a vacuum but I was still half-expecting a giant roar. You don't see silent explosions very often.”

“The physics of space are a little different from what we're used to,” Tom admitted. He turned back to his control panel, and over the next few minutes he monitored the course of the asteroid. At last he was satisfied.

“That should do it,” Tom replied. “We may have to come back

and make a course correction at some point, but I think we've about nailed it.”

“How long will it take to hit the Sun?” Bud asked.

“About fourteen years.”

Bud whistled. “Good thing we're not in a hurry!”

Tom shook his head. “It's the best I can do for now. I still consider that rock to be a threat – as long as it's in the Solar System we're running a risk. It may be a small risk, but even a small risk of total annihilation is unacceptable.”

“It's certainly something you don't want to mess around with,” Bud agreed.

Tom gave the order to proceed at maximum acceleration toward Earth. After all the arrangements had been made he turned the bridge over to Donnie and headed down to his laboratory.

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

“The first order of business is to destroy all of my notes on the claytronic stones,” Tom replied. “I don't want anyone getting their hands on my blueprints and attempting to build them. Of course, all of my early research is back in Shopton and I won't be able to destroy that until I get home. But those notes don't include the time dilator that makes the stones practical so they're only a minimal threat.”

“That time dilator is quite an invention,” Bud remarked. “Even if the stones turned out to be a disaster, the time dilator is still pretty amazing. Isn't there something else you could use it for?”

“That's exactly what I'm wondering, flyboy. I know that I can use it to speed time up and slow it down. The question is, can I use it to *reverse* time as well?”

“Isn't that dangerous, though?” Bud asked.

Tom sighed. “We've been over this before, Bud. I believe both of us have already traveled back in time, and – as you can see – nothing bad happened. After all, somebody transported both Tom Swift IV and my father into the past on the fateful day I first met you. That means someone had access to a working, viable time machine. I thought for sure Tom IV had built it but I couldn't

persuade him to help me. But perhaps I don't need to – maybe *I* invented the time machine! The secret could be right here in the blueprint for my kronolator.”

“If you say so,” Bud replied dubiously. “I'm still not sure I buy that whole 'I have to travel back in time because I've already traveled back in time' argument, but then you're the genius here. Is there anything I can do to grease the wheels of progress?”

Tom smiled. “Not right now. I'm afraid this where I have to get knee-deep in some complex mathematics. I'll let you know when I surface for air.”

“You do that,” Bud replied.

However, Bud did not hear from Tom for the rest of the week. Chow entered the inventor's laboratory three times a day to bring the him his meals but Tom hardly touched him. “I ain't never seen him like that before,” Chow told Bud privately. “Why, he's as irritable as a steer caught in an electric fence! It ain't like him.”

“Maybe things aren't going well,” Bud suggested.

“I'll say they ain't! Brand my biscuits, but somethin's got the better of that boy and he don't like it one bit. I think maybe he's bit off more than he kin chew.”

Bud shook his head. “Well, at least we're only two days away from Earth. Tomorrow evening we should land at Fearing Island and I can fly him home. Maybe he's just been in space too long. Even geniuses need occasional bits of sunlight and fresh air.”

“Mebbe so,” Chow admitted.

When another day passed without hearing word from Tom, Bud finally made his way down to his laboratory. He walked in and took a seat at the workbench beside the young inventor. “Sorry to intrude, but I thought it might be a good idea if I interrupted. We'll be home in a couple hours and your Mom might appreciate it if you didn't look like something Brutus found buried in the woods.”

Tom stopped writing, rubbed his eyes, and looked at Bud. “It's no use,” he said at last. He put his red pencil in his pocket and

shoved the papers in front of him aside. Bud saw that Tom was surrounded by giant stacks of paper, all of which were covered with complex mathematical formulas. Over to Tom's right was a large wastebasket that was overflowing with discarded blueprints and scraps.

"I see you've been burning the midnight oil," Bud remarked. "Maybe if you take a break it will come to you."

"You don't understand!" Tom protested. "You just don't get it. It can't be done! I'm telling you it *can't be done*. There is just no way to use the kronolator to reverse time. It doesn't work that way."

Bud started to say something but Tom silenced him. "I have proved it *conclusively*, Bud. Time travel just does not work that way. In fact, from what I can tell, time travel does not work *at all*. You can use gravity to slow time and even stop time, but you *cannot* make time run backwards."

"But Tom IV did it," Bud blurted out, before he could stop himself.

"Exactly!" Tom cried out. "How did he do it, Bud? How did he do it? If I didn't know that it had already been done I would be prepared to swear that it is completely impossible. I would give anything to know how he did it. Anything! The secret to time travel completely eludes me. This is one thing I just don't understand. I really don't."

"Maybe it's for the best," Bud offered. "This might be your chance to move on to other things."

"But I've got to save her!" Tom cried out. "I've *got* to. I can't let her down. Irene died because of *me* – because of a mistake that *I* made. That hyperplane she flew to New York was *my* design. I've got to bring her back – I've just *got* to. No matter how hard it is. No matter what it costs. This is something I just have to do."

"I hate to be blunt, but death is usually fatal. Even *you* can't do anything about that. You can't raise the dead."

"But what if there *is* something I can do?" Tom asked hysterically. "What if the answer is right here and I just can't see it? I can't give up, Bud. I can't let this one go! Tom IV was able to



do it. Why can't I?"

"Look, Tom – you're not going to solve this problem in the next five minutes. You really need to go take a shower and get cleaned up. We still have to land the *Challenger* and make our way back to Shopton, you know. Give it a rest – this problem isn't going to go anywhere."

Tom sighed. "I guess not," he replied.

The *Challenger* touched down on Fearing Island at eighty-three that evening. After the crew disembarked Tom instructed the base personnel to fix the fire damage in the ship's laboratory. Tom and Bud then boarded a private jet, and Bud flew Tom back to Shopton. Several hours later Bud landed the plane at the Swift Enterprises airstrip. Bud then drove the exhausted young scientist home to his parent's house. After getting Tom inside the house and saying goodbye to the Swift family he left.

The next morning Tom Swift Jr. got up, tired but feeling much better than he had the day before. He showered, ate breakfast, and drove to Swift Enterprises. Even though it was a Saturday and few people would be in the office, he still wanted to go in and destroy his claytronic research. He knew it was unlikely to be stolen but he didn't want to take any chances.

When he arrived at the plant he went to his office and tried to catch up on everything that had happened during his absence. Miss Trent was not in, but she had left a lot of papers on his desk. Once he had gone through the stack of paperwork he made his way to his laboratory.

*It is good to be back,* he thought to himself. *And it's nice to have the Challenger back where it belongs. At least that part of the trip was a success.*

Tom gathered his files on the claytronic stone project and began going through them to make sure that none of them were missing. When he was almost satisfied that he hadn't misplaced anything he was startled by a deep musical note that reverberated through his laboratory. Tom instantly recognized it as the sound that signaled an arrival through the Negative Zone.

*That's odd*, Tom thought to himself. *I wasn't expecting anyone today! I wonder if something's wrong?* The young inventor ran over to the painting of Aurum City, slid it to one side, and pressed his finger on a small green panel that was hidden behind it. A moment later the panel emitted a soft white light and made a clicking noise, and the laboratory went into lockdown mode. All security cameras were disabled and a metal plate descended over the window. The lights dimmed and a robot voice announced that the room had been secured.

Only seconds after doing this a teenage boy appeared in the middle of the lab. He had short blond hair and was wearing khaki shorts and a blue t-shirt. Tom looked at him in surprise. “Tom IV! I wasn't expecting a visit from you today.”

“I wasn't expecting a visit from you either,” Tom IV shot back. He was clearly upset. “Look. I know how much you miss Irene and everything, but breaking into my lab and stealing my time-travel research is going *way* too far. Did you really think I wouldn't notice? I mean, really?”

Tom looked at him in surprise. “Breaking into your lab! I haven't been in your lab for months – not since that night I asked for the plans to your time trigger. I haven't even been on *Earth* for months. I just got back late last night from a trip to rescue the *Challenger*.”

“Are you serious?” Tom IV asked. “Then who broke into my laboratory?”

“I have no idea,” Tom replied. “The Black Dragon, maybe? Isn't he always giving you trouble?”

Tom IV shook his head. “I'm positive that it was someone from this universe, and you are by *far* the most likely suspect. The signal is easy to track. It's unmistakable – and you've got both the ability and the motive.”

Tom looked at him, puzzled. “I guess it's *possible* that someone broke into *this* lab while I was away and activated the Negative Zone, but it seems really unlikely. Are you quite sure that the transfer signal actually came from this very room?”

Tom IV paused for a moment. “Actually, no. I didn't think to

check that. I just saw that the signal came from this universe and so I assumed the intruder was you. After all, no one else here has a negative zone, right?"

"As far as I know," Tom replied. "We certainly haven't *given* the plans to it to anyone else. It's our most closely-held secret."

"And we all know how good we Swifts are at keeping secrets out of enemy hands," Tom IV remarked wryly. He removed a small device from his pocket and activated its screen. The teenager began scrolling through pages of data. After a few moments he spoke up. "It looks like you're right, Tom. I owe you an apology. The signal did *not* come from this lab. It apparently originated from a factory in Nebraska."

Tom was puzzled. "Nebraska? Are you sure? Let me look at that." He took the device from Tom IV and studied it. "Why, I know that place! The Barclay Group has a giant research center there. In fact, that's where they've been preparing for their interstellar expedition!"

"So you know these people?" Tom IV asked.

"I certainly do, and I can tell you that we certainly didn't *give* them your technology. It looks like I need to pay them a visit. What did you say they stole?"

"The plans for my time trigger," Tom IV said. "But how did they even know it existed? How did they know that *I* existed?"

"I think it's time we found out," Tom replied grimly.



## CHAPTER 9: A FATEFUL DECISION

“DO YOU WANT ME to go with you to confront him?” Tom Swift IV asked.

Tom Swift Jr. slowly shook his head. “It's a tempting thought, but I have a feeling it's best if the entire world didn't find out about the multiverse. We don't know how many people at BG Industries know about the Negative Zone and there's no telling who we might run into on our way there. No, I'll handle this and will let you know what I discover.”

“How soon can you talk to him?” Tom IV asked.

“Probably not sooner than Monday. I'm sure he's out of the office on weekends. I'll call him, though, and set up a private meeting for Monday morning. This should be a very *short* discussion!”

Two days later Tom Swift Jr. found himself standing in front of a giant glass building that rested deep in the heart of Nebraska. Tom had to admit it was a very classy research center. The landscaping around the structure was artfully done, with lush green trees, flowers, and bushes dotting the landscape. The structure reminded Tom of an oasis in the desert.

Bud had volunteered to go with him but Tom told him he could handle it. This surprised Bud, but Tom explained this was probably all a misunderstanding. “I don't think Mr. Gamino actually means any harm – he probably just got a little carried away. I don't want it to look like we're threatening him. I just want to have a private one-on-one conversation and get to the

bottom of what's going on.”

“If you say so, boss,” Bud replied reluctantly.

Privately Tom was glad that Bud had agreed to stay behind. Tom had a hunch he knew what Ed was up to, and he didn't want to get anyone else involved. *They just don't understand*, he thought. *They're blind to the immense possibilities! All they can see is the danger. This is something I need to do on my own.*

Tom stepped into the building's magnificent lobby. The spacious room was dotted with modern chairs and furniture. On the walls hung rows of paintings of random colors and designs that Tom thought must be examples of modern art. *There are some things I'll just never understand*, he thought wryly.

The young inventor walked up to the receptionist. Before he could say anything she spoke. “Why good morning, Mr. Swift! Ed Gamino is expecting you. Just take the elevator to the left – he's on the fourth floor, down the hall, first door on the right.”

Tom looked surprised. “Don't I need a visitor's badge or something?”

The secretary shook her head. “You're always welcome here, Mr. Swift. Feel free to make yourself at home.”

Tom thanked her and made his way up to Ed's office. To his surprise he had no secretary. As soon as he opened the door he found himself in a spacious, modern office, filled with all sorts of gadgets and machinery. *I had no idea Ed was an inventor*, Tom thought. *But I guess that makes sense. He does run BG Industries, after all!*

“Why there you are!” Ed boomed. When Tom entered the office he had been standing over a computer terminal, but as soon as he saw the young scientist he rushed over and eagerly shook his hand. “Please, have a seat – sit anywhere! I'm so glad you could come. I've been expecting you for days.”

Tom took a seat in front of Ed's enormous desk. “You've been expecting me?”

“Of course! You're no dummy, Tom. No dummy at all! I'm sure you've discovered by now what I've done and have come to ask for an explanation. No one can put one over on you, that's for

sure! Your track record is most impressive. Why, you single-handedly brought the entire nation of Kranjovia to its knees!”

Tom was astonished. “So you *knew* we would catch you? Then why did you do it?”

Ed smiled. “Why, we did it for you, young man! I decided to help you out – to take the one step I knew you would never take. I did it for the good of all mankind. But tell me – just to satisfy an old man's curiosity – how did you find out we'd built a Negative Zone?”

“Tom Swift IV came and paid me a visit,” Tom explained. “He told me someone had broken into his lab and stole some things. With a little research we discovered that the intruder came from this building. It turns out the spacial disturbance made by the Negative Zone is very easy to track. You weren't hard to find.”

“I *do* wish you had brought Tom IV,” Ed replied wistfully. “I really do! I would have loved to have met him. And to think that there are *even more* Tom Swifts out there! Possibly an infinite number! It's amazing. And people don't even know it!”

“*You're* not supposed to know it either,” Tom pointed out. “How did you even find out about it?”

“Why, you told us! When we asked for scientific assistance your father gave us everything you had. The blueprints for the Negative Zone were mixed in with a whole stack of other designs.”

Tom sighed. “I *knew* I should have been more closely involved with the knowledge transfer. Ed, you weren't supposed to get those files. That was our most closely-held secret! At least, it was supposed to be.”

Ed nodded. “I can certainly understand why! But once I saw it I knew I had to try building one. I just couldn't resist. I assure you no one else in this whole company knows about it. I'm the only one! And I built the Negative Zone device right here in my office – all by myself! My, but it was a tricky bit of work. Worth it, though! It's not every day you get to visit another universe.”

Tom was astonished. “You built it *yourself*?”

“Of course! I'm an inventor too, you know. Someone had to

design the machines that this company makes! I didn't do them all, of course, but I'm not bad – not as good as you, though! You and your father are my heroes – always have been, always will be. We can't all be like you, but we can all do our part!”

“Then why did you do it?” Tom asked. “Why did you break into his lab and steal his time trigger plans?”

“I didn't steal anything at first, you know,” Ed began. “I built the Zone just to satisfy my own curiosity – I wasn't going to touch anything. I made quite a few trips without doing a bit of harm! But then I saw how reluctant you were to perfect your magnificent claytronic stones. I understood, of course, but I thought you were misguided. I have the utmost confidence in you! All you needed was a push – the right motivation. And I know what you want more than anything else – the one problem you've never been able to solve.”

“Time travel,” Tom replied quietly.

Ed nodded. “Exactly. Time travel. You just can't do it. I think you *could* do it if you weren't so emotionally invested in the outcome; your heart is clouding your mind. But that's neither here nor there. The point is you can't solve that problem. But Tom IV did! And you just need his plans. So I took them! I've got them right here. *I* can't make any sense out of them, and I'm not going to try, but I bet they make a lot of sense to you. All I ask is that you perfect your claytronic stones and I'll hand them over to you. I'll give you all of them – I won't even keep a copy for myself. You can rescue Irene and all will be well.”

“But the stones are so dangerous,” Tom protested. “I destroyed an entire *planetoid*.”

“It was your first attempt! First attempts always go wrong – look at your own history! You can fix the problem, my boy. Look. If it makes you feel any better, we won't use the stones here on Earth. We'll only use them one time – on a completely uninhabited planet, to build our city in the stars. You can even be there to supervise it! You can add some kind of failsafe so it doesn't happen again.”

When Ed saw that Tom was still reluctant the energetic man



continued. "I'm not a monster, Tom. I just want to help. And in return for fixing your stones – for making them safe for humanity – I'll give you the plans you need to save Irene. What do you say?"

"Let me think about it," Tom said at last. "This is too much to process all at once. I need to figure this out."

"Of course, of course," Ed replied, beaming. "Just let me know. I'll be right here. Feel free to drop in anytime. That's why I don't have a secretary – I don't want to discourage visitors."

Tom got up to leave and then he stopped. "Oh. I almost forgot! I'm afraid you're going to have to destroy your copy of the Zone. We can't–"

"I understand completely," Ed replied. "I expected that! I've had my fun and I'm done. I'll destroy it as soon as you leave. Don't even worry about it."

"Thanks," Tom said. He shook Ed's hand and left.

\* \* \* \* \*

When he got to the parking lot he pulled out a communicator and contacted Laurence Grinsby, the Transmittaton chief, who was stationed on his outpost in space. "Hey, Laurence!"

"Hey there Tom!" Laurence replied. "How did the meeting go?"

"It went...well," Tom said at last. "Hey, I need you to do me a favor. Instead of transporting me back to my office, can you send me directly to these coordinates?" Tom gave him a set of figures.

"Can do, chief," Laurence replied. A moment later Tom felt the Transmittaton grab him. There was a flash of light, and when the light faded he found himself standing at the top of a small, grassy hill. Off in the distance he could see Lake Carlopa. It was an overcast day, with a hint of rain in the future. Gusts of wind rattled the trees.

Tom walked to the top of the hill. At its crest was a small, private graveyard, dedicated to the Goddard family. Tom opened the wrought-iron gate and walked inside. In the back of the

cemetery he found the small gravestone that marked Irene's final resting place. He knew she wasn't actually buried there. No remains were ever recovered from the hyperplane, but given that it hit the ocean at several times the speed of sound that wasn't much of a surprise. But Tom still came here from time to time when he wanted to feel close to Irene again. He missed her tremendously – sometimes more than he could bear.

Tom knelt down beside her tombstone and used his finger to trace over her name. He thought about the last time he had seen her alive, back in Brungaria. He thought about the message she had left for him moments before she was killed in the crash. “I never got to say goodbye,” he whispered.

There were a lot of things he never got to do. He never got to give her the engagement ring he made for her. For months he'd pictured the look she'd have on her face when he finally surprised her with it and asked her to marry him. Now he would never get that chance. They were supposed to have a future together – they were going to create a new tomorrow for civilization. *She should have been there when I built my rocket ship, Tom thought. When I discovered Atlantis. When I set foot on the Moon. When I met the Space Friends. She should have been a part of all of that – but she wasn't there because of me. Because of a mistake I made that cost her her life. I put her in that grave. I took her future from her.*

Tom looked at the tombstone with a tremendous feeling of regret. *But I can fix this! I can bring her back. I can still give her that ring. We can still have a future together. I've got to try – I've just got to. She deserves that. No matter what anyone else thinks, this is something I have to do.*

The young inventor stood up and looked over the lake. Dark clouds rolled overhead, threatening to rain but not yet raining. All sorts of emotions filled Tom – elation, regret, concern, trepidation. But he knew what he was going to do. The decision was made.

Tom took out his communicator and contacted Lawrence once more. “I need you to do me another favor. Can you transport me back to BG Industries?”

“Can do,” Lawrence replied.

\* \* \* \* \*

An hour later Tom materialized inside his laboratory at Swift Enterprises. Bud Barclay was waiting there, along with Tom's father. “So how did it go?” his father asked.

“It went very well,” Tom replied. “It was all a big misunderstanding, really. It turns out Ed got the plans for the Negative Zone from *you*.”

Mr. Swift winced. “I had a feeling that was the case. I'm sorry about that, Tom. I take full responsibility. I'll make sure that it never happens again.”

Tom nodded. “It's ok. The only reason Ed built it was to satisfy his own curiosity. He really didn't mean any harm. When I confronted him he promised he'd destroy it immediately. Honestly, Dad, I trust him – I'm sure he'll keep his word.”

“But what about the time trigger?” Bud asked. “Stealing those plans is not exactly an above-board move! We can't let Ed decide to experiment with time travel. He could put the whole universe in jeopardy!”

“Bud's right,” Mr. Swift agreed. “We don't dare let *anyone* build a time trigger, no matter what their intentions. That technology is just too dangerous.”

Tom's mind raced. “Ed didn't know anything about the time trigger,” he said at last. “He confessed to building the Negative Zone and using it to travel between universes, but he didn't steal anything. I suspect the thief is someone else entirely – perhaps an enemy Tom IV has dealt with in the past.”

“Are you sure?” Mr. Swift said doubtfully.

“You know, that makes sense,” Bud replied. “I mean, what are the chances that Ed could have even *found* those blueprints? None of us have any idea where they're stored, and I bet Tom IV has all kinds of ultra-modern equipment guarding them. You'd need a high-class inventive mind to get past all of that. Ed is just not that type of person.”

“That's true,” Mr. Swift replied thoughtfully. “I hadn't considered that. I guess you're right.”

He stood up. “I'm sorry for causing this mess, Tom. When you see Tom IV will you please extend my sincerest apologies?”

“Of course,” Tom replied. “I'm sure he'll understand. In fact, he probably already has plans in motion to make sure this never happens again.”

“Is there anything else?” Mr Swift asked.

Tom nodded. “There is one other thing. Ed has convinced me to take another look at my claytronic technology.”

His father looked at him in surprise. “Really? I thought you had decided that technology was far too dangerous!”

“It has dangers, but it has promise as well,” Tom explained. “I believe I can build in sufficient safeguards to prevent another disaster like the one that happened on Chariklo. Besides, Ed has promised to only use the stones one time, on an uninhabited planet – and I can be there to supervise it. I think if the stones are properly managed the risk is quite minimal. It would certainly be a tremendous help to the project.”

Mr. Swift nodded. “If you think the risk is worth taking then I'll support you, Son.”

“Thanks, Dad,” Tom replied.

\* \* \* \* \*

“So Ed *didn't* steal the plans,” Tom IV said slowly. “I guess that makes sense – it would take a mind like yours to get through all of my security. A paper-pusher in an office certainly couldn't do it!”

“We're really sorry about all of this,” Tom added. “My dad is deeply embarrassed. We're going to take steps to make sure it never happens again.”

Tom IV nodded. “I understand. I've lost secrets myself before – we all have, I guess. We Swifts are just *terrible* when it comes to security. The good news is I've come up with a technological solution. I'm going to put an encryption key on our Zones. Before

you can come over here your Zone will have to send me an encrypted signal – a signal that only I know how to produce. If anyone else builds a Zone they won't be able to reach mine because they won't have the key.”

“That sounds like a great solution,” Tom agreed. “I'm assuming you're not going to give us the plans for generating that signal!”

Tom IV smiled. “You know what Ben Franklin always used to say! 'Three can keep a secret, if two of them are dead.'”

Tom laughed. He stood up to go. “Is there anything else?”

Tom IV shook his head. “No, that's all. Thanks for getting to the bottom of this. I'm sorry I didn't trust you – I should have known you'd never try to steal my plans. I'm also glad Ed was so agreeable about destroying the Negative Zone. The only thing that really bothers me are the missing time trigger plans. If Ed didn't steal them then someone else did – and I need to find out who was responsible. Time travel is just too dangerous to mess with.”

“Good luck on your search,” Tom replied.



## CHAPTER 10: CONSTRUCTION

THE FOLLOWING MORNING Bud Barclay found Tom Swift Jr. in his laboratory. He was surprised to find that the room was filled with wooden crates. The young inventor was busily packing up his equipment.

“What's going on, genius boy?” Bud asked. “Have you decided to leave this place and move the company to New Mexico or something?”

Tom grinned. “Do you really think I'd leave home and move us to the desert? No, I'm just packing a few things up so I can resume work on my claytronic stones. The stones are too dangerous to develop on Earth so I'm temporarily moving my lab to the *Challenger*. That way I can do all of my experimenting in space, far away from civilization.”

Bud looked puzzled. “But I thought your spaceship already had a lab! Didn't we just spend *weeks* in it developing those very same stones?”

“It does, but it's not as fully equipped as this one. That's one reason why it took us weeks to accomplish anything. With the equipment I've got here I should be able to progress much faster.”

“Makes sense,” Bud nodded. “So what's the plan? Do you have a way to keep the stones from destroying the planet?”

“I think so,” Tom said, as he finished packing up his workbench. The young inventor nailed the crate shut and labeled it, and then he and Bud carried it across the room and placed it on top of the others. “There are really two major hurdles. First, I need to find a way to get a signal through the time barrier. There's

got to be a way to do it – after all, we were able to send electrical signals through without any problems! I have a hunch that there's some sort of flaw in the time dilator that's throwing up interference. Once I get that fixed I should be able to control the nanites or stop them altogether.”

“But wasn't the bigger problem the way that the nanites replicated themselves endlessly?”

Tom nodded. “Yes, it was, but in a way they were doing exactly what I told them to do. You see, I commanded the stones to replicate until they covered an area of so many square feet. The problem is that each individual nanite cluster tried to carry out that order! They didn't understand that the order was for the group *as a whole*, and not for each individual unit. I need to add some way for them to communicate with each other so they can better understand what has already been done.”

“Sounds good to me,” Bud said approvingly. “And if anything goes wrong you can just send a kill signal. I like it! So how soon can we begin?”

Tom shook his head. “I'm afraid there's no *we* this time, Bud. The experiment is just too dangerous! I don't want my stones to put anyone else's life in danger. This is something I need to do alone.”

“Which is exactly why you need your trusted friend and companion,” Bud countered. “This experiment is *too* dangerous to do by yourself. You need someone to keep you out of trouble! Besides, if you were up on the *Challenger* all alone you'd forget to eat and wouldn't last a week. Trust me, skipper – you need a partner.”

“I guess you're right,” Tom said at last. “I appreciate it, Bud. I don't know what I'd do without you.”

“Hey, that's what I'm here for,” his friend replied, grinning. “Oh, I almost forgot! Phyl wants to talk to you – I think she wants to go out on a date or something. You've got to admit you've been neglecting her recently.”

Tom nodded ruefully. “I guess it's been a while since we've been out, hasn't it? I've just been so busy lately. First there was



the *Challenger*, and now this. I feel terrible about it but I just honestly haven't had the time.”

“There's always this afternoon,” Bud pointed out.

Tom shook his head. “I'd love to but I really need to get my stones finished as soon as possible. Ned is going to deliver the *Behemoth* soon and I promised Ed I'd have the stones ready by the time the colonists left Earth. Can you talk to her and get a rain check for me? I promise the four of us will all go out as soon as we're back.”

“Don't worry about a thing, Tom – I'll take care of it,” Bud promised.

\* \* \* \* \*

By the end of the day the two teenagers had packed up the entire laboratory, transported the crates to the airstrip, and flown them to Fearing Island. The next day they loaded the equipment onto the *Challenger*.

“I wish I'd had time to repair the kronolator before we left,” Tom remarked, as Bud piloted the spaceship off the island and into Earth orbit. “I know we won't need it on this jaunt but it'd still be a nice thing to have.”

“We can always do that when we get back to Earth,” Bud pointed out. “I'll call Ned this afternoon and ask him to build us one. They take a long time to build, but once they're built they don't take long to install. If Ned can have it ready by the time we return home I can install it while you're off giving your stones to BG Industries.”

“You could install the kronolator without me?” Tom asked incredulously.

“I helped you install the first one, and we spent days trying to repair it,” Bud pointed out. “Besides, I'm sure I could borrow a team from Ned. He's been building these units commercially, you know. They're huge sellers! You've kicked off a real space race, Tom – I've never seen anything like it.”

Tom nodded. “You have a good point. Come to think of it,

though, don't ask Ned to build a kronolator. I've got a much better idea!”

“Oh? What is it?”

“Wait and see,” Tom replied mysteriously.

For the next two weeks Tom labored day and night in his orbital laboratory. Getting the stones to communicate with each other proved to be fairly simple, but finding a way to make the time barrier transparent to radiation was not. It took him a week before he realized the problem was minute impurities in the time induction matrix.

“The flaw is in our manufacturing process,” Tom explained to Bud. “The way we're fabricating these matrices is just too crude. I had to make 34 of them before I got one that passed the quality tests! There's got to be a better way to create these but I just don't see it.”

“Maybe Ned Newton could help with that,” Bud suggested. “After all, manufacturing is his specialty. One of his men may have an idea that could clear the whole problem up.”

“You're probably right. I'll talk to him after we wrap up our work here – although I don't intend for us to ever put these stones into production.”

“You don't?” Bud asked, surprised.

Tom shook his head. “Even with the safeguards they're still pretty dangerous. After we use them to build the new colony for BG Industries I intend to lock the plans away. This is one thing that we just can't risk mass-producing. You saw what happened to that asteroid, Bud. I don't want that to happen to Earth.”

“I guess not,” Bud agreed.

“Of course, we're still not quite done yet. There's one more feature we've got to add before we can call it a day and go home.”

Bud frowned thoughtfully. “Hmmm. You can communicate with the stones and you can keep them from replicating endlessly. What else am I missing?”

Tom grinned. “Oh, just the ability to have the stones form other shapes. I suspect that's a feature BG Industries might be

interested in.”

“Of course!” Bud exclaimed. “Man, that sounds tricky.”

“It's really not,” Tom replied. “I can already use the Transmittaton to create objects directly from energy streams. We can feed it a pattern and produce almost anything we want. All I have to do is adapt that technology to these stones. Essentially, the stones will reproduce patterns by using themselves as building blocks.”

“So why not just use the Transmittaton?” Bud asked. “It sounds like it'd be a lot easier!”

Tom grinned. “It takes a *whole lot* of energy to produce mass, flyboy! There's no way we could just beam an entire city into existence – or even a house, for that matter! The key advantage to these stones is that they're able to use their surroundings as raw materials. That enables them to reproduce themselves to the point where we can build pretty much anything, of any size. It's a giant leap over what the Transmittaton is capable of doing.”

“It sounds like you've thought of everything,” Bud said approvingly.

“I certainly hope so,” Tom replied.

\* \* \* \* \*

Three days later Tom announced that they were ready for the big test. The two teenagers had already performed a number of small-scale experiments to make sure that Tom's changes were working. Now, though, the young inventor was ready to test everything.

“My goal is to feed the stones a blueprint and watch them make it,” Tom explained, as Bud piloted the ship to an unnamed near-Earth asteroid. “If they can do that without creating a chain reaction then I'll be satisfied.”

When the *Challenger* reached the asteroid Bud looked at it, puzzled. The rock was only about two hundred feet long. “That looks kind of small to me, skipper! I don't think we can land there.”

Tom laughed. “No, definitely not! We don't need to land, though – we'll just use one of our repelatron donkeys to transport a single stone down there. The asteroid should have more than enough material to replicate what I want. Besides, if something goes wrong we won't have destroyed a large piece of real-estate – and we'll have something that we can easily push into the sun.”

“Good thinking,” Bud said approvingly. “So what are we going to be manufacturing?”

“Why, a kronolator, of course!”

Bud snapped his fingers. “Wow! Why didn't I think of that?”

Tom grinned and deployed the repelatron donkey. Using remote control he maneuvered the donkey to the asteroid and deposited the stone onto its surface. The stone was a solid green block that measured two feet on each side. After securing the translucent stone to the asteroid's surface Tom moved the donkey some distance away into space.

Tom then looked at his friend. “Are you ready for this?”

“You bet!” Bud replied enthusiastically. “This is going to work, Tom. I can feel it!”

Tom gingerly pressed a button on the *Challenger's* control panel. The stones immediately started to change color! As they turned dark green a distortion pattern appeared around them, looking almost like a heat wave. The stones remained visible, however. After a short delay they began absorbing material from the asteroid and replicated rapidly.

“It's working!” Tom cried enthusiastically. “I can still see them! If I'm right this should only take a few minutes.”

Tom was proven correct! The boys watched, fascinated, as the stones took shape. After producing a giant mass of nanites the tiny micromachines began forming a kronolator. It took only a few minutes for the machine to become recognizable. Within twenty minutes the entire process was complete. An entire kronolator was now sitting on the surface of the asteroid!

The two teenagers cheered. “You did it, Tom!”

Tom was immensely pleased. “That will work, Bud. It's even

better than I'd hoped. Now let's go get that kronolator and head home. I have an appointment with BG Industries!"

\* \* \* \* \*

That evening Tom found himself standing in the private office of Ed Gamino. Ed was immensely pleased. "This is fantastic, Tom – truly fantastic!" he exclaimed, as he browsed through the technical blueprints that Tom had given him.

"It's all there and it works," Tom replied proudly. "I haven't tried it on anything as large as a city, but as long as we're careful and build the colony in smaller sections we should be all right. When the *Behemoth* makes it to Epsilon Eridani I'll come out and handle the city's construction."

Ed beamed. "I appreciate it, Tom. I really do. This is everything I had hoped for! You won't regret this."

Tom nodded. "All I ask is that you don't try building the stones yourself. The time matrices are extremely difficult to manufacture, and the tiniest flaw can lead to a runaway chain reaction. I'm giving you the blueprints so you can see what I've done but I want you to promise me that you will never, ever use them. I will personally bring the stones for your colony."

"You have my word," Ed promised. "I'll file these away and leave them alone. And now it's time for me to fulfill my part of the bargain!"

Ed got out of his chair, walked over to a secure filing cabinet, and unlocked the top drawer. He rifled through it for a moment and then pulled out a blue folder labeled "Time Trigger". Ed handed Tom the entire folder. "Here you are, just as I promised! This is everything I got from Tom IV's laboratory – my only copy. It is all yours, my boy. I only hope that you're able to get it to work. I couldn't understand a word of it, myself!"

Tom glanced through the folder. His pulse quickened as he realized that the documents were genuine! As he glanced over the hand-written equations his mind began to race. *This is it!* Tom thought excitedly. *This is exactly what I needed! I can't believe it.*

*I'm finally holding the missing key to time travel!*

“Now those aren't actual blueprints,” Ed warned. “I think those are the research notes that Tom IV used to design his own time trigger. As far as I could tell Tom IV didn't keep any blueprints. That's all I was able to find.”

“This is all I need,” Tom assured him. “This will work fine.”

“Wonderful! Wonderful. Remember, be sure to bring Irene here after you rescue her! I want to meet her.”

“I'll do that,” Tom promised. “And thanks.”

“No, thank *you*. This is a day that will change the course of history forever! Mankind will never forget what you've done today, Tom – never.”

## CHAPTER 11: CHAIN REACTION

LATE THE NEXT AFTERNOON Tom Swift Jr. entered his private laboratory in Shopton, New York. He and his friend Bud Barclay had spent the entire morning unpacking crates and getting his lab back into shape. Once everything was set up Bud flew back to Fearing Island to manage the installation of the new kronolator. Bud promised to be back in a week.

“Don't forget about Phyl,” Bud had said, as he left the lab. “I think she's been feeling a bit neglected lately.”

“I won't,” Tom promised. But all thoughts of his girlfriend vanished as soon as he glanced at the research Ed had given him. It didn't take him long to realize that he would need more than a week to perfect the time trigger.

*I need to buy more time, Tom thought to himself. So let's see what I can do.*

The young inventor walked over to his workbench and flipped a switch on a small, silver device. The boxlike contraption emitted a deep hum. A few seconds later a distortion pattern appeared around the edges of Tom's laboratory. Tom smiled. *That should do it, he thought, as he tweaked the settings on the time dilator. Time now passes three times faster inside the field than it does outside. That will give me three whole weeks to perfect my time machine!*

Tom had already moved a triphibian atomicar into his laboratory. Instead of a convertible, however, he had chosen a semi with a large trailer. The young inventor looked at the machine with great satisfaction. *It's large and bulky, but since I'm*

*taking a lot of equipment with me I need all the space I can get. I'd planned on taking the Challenger, but since Bud's off repairing it this is the best I can do. I've got to get this done before Bud gets back – it's just better that way. When I return safely with Irene they'll see that I was right.*

The young scientist spent the rest of the day installing equipment in the back of the semi. First he installed the translator, which he had borrowed months ago from his space friends on Mars. Next he took his laboratory's Transmittaton and installed that as well. *That will enable me to transport Irene out of the hyperplane right before it crashes, and then cure her of her radiation poisoning, Tom thought approvingly. Now all I need is a functional time machine!*

Tom soon found out that working 72-hour days was too strenuous, even for him. Since meals were now 15 hours apart he started keeping food in his laboratory and napping at regular intervals. The workload was enormous but Tom kept at it. He was determined to finish his time trigger before Bud returned to Shopton. *I can't let anyone interfere – not even Bud, he thought. I know they mean well but they just don't understand. Time travel may be dangerous but I have everything under control. I'll go back in time, rescue Irene, and come home. Nothing bad will happen.*

At first Tom was greatly encouraged by the information on the plans. As Ed had pointed out, they were not the blueprints to a working time trigger. Instead they were the original research notes that had been put together by Dr. Reisenbach. Tom knew that Tom IV had based his time trigger on those very same notes, and in theory Tom Swift Jr. could do the same thing. *I never thought of doing it this way, Tom thought as he studied the papers. No wonder I wasn't able to find a solution! I wasn't even approaching the problem correctly. This is exactly what I needed.*

Tom quickly sketched out a device based on the ideas suggested in the paper. However, he immediately ran into problems. Hours went by as Tom stared at the notes, puzzled.



“I just don't get it,” he finally said aloud. “This doesn't make sense! It's as if parts of it are missing, but I clearly have all of the notes. There's no gap in the equations or the logic, but it's just *wrong*. What's going on here?”

A day went by, and then another, and another. Tom found himself feeling increasingly frustrated as one experimental device after another failed to produce any results. He soon realized that he was going to run out of time and still not have a working time trigger. The young inventor became even more discouraged when he glanced at his calendar and realized that there were only two days left before Bud was scheduled to return.

*I've got to get out of here and clear my head, Tom decided. Maybe a change of scenery will help. I'm sure the solution is there; I just need to step back so I can see it.*

Tom locked up his laboratory and left.

A few hours later Bud Barclay unlocked the door to his laboratory and walked inside. “Hey there, Tom – guess what! I got done early, and on top of that I managed to land us four tickets to the game tonight. What's say we—”

Bud stopped in his tracks, amazed. “Hey Tom, what's an eighteen-wheeler doing in your lab? Is this some new invention I don't know about?” Bud looked around for his friend but a quick search revealed that Tom was not in his lab.

*Must have stepped out for a minute, Bud thought to himself. Hmmm. I wonder what he's been up to?* Bud spied a stack of papers on the workbench and casually walked over to them. When he saw then name Reisenbach on the top one he gasped. He nervously picked them up and started going through them.

“Hey – these are the papers that were stolen from Tom IV's office!” he said aloud. “What gives?” Bud then glanced at the semi again and his eyes widened. He walked around to the rear of the vehicle and peeked inside the cavernous trailer. When he saw the Transmittaton and the translator inside he gasped. *Tom's building a time machine! But how did he get these plans? Where did they come from? What's going on here?*

Bud stood there a minute, thinking. "This is too much for me," he said at last. "Something's just not right here. I need help."

The young pilot walked over to the picture of Aurum City and slid it to one side. He then pressed his finger against the green panel that was hidden behind it. There was a clicking sound, and the laboratory went into secure mode. Bud then grabbed a communicator and contacted Tom IV. Over the radio he explained what he had just found. A moment later the young scientist came out of the Negative Zone and appeared in Tom's lab.

Tom IV became furious when he saw the documents in Bud's hand. He grabbed them from the young pilot and examined them closely. "These are the missing plans, all right!" he said grimly. He glanced at the semi. "And it looks like Tom has been putting them to use! I *knew* he was the thief. I just knew it! I never bought that line about Ed."

"So that *is* a time machine," Bud said. "I kind of thought it might be. Can you tell if it's finished?"

Tom IV made a quick examination of the machine. "Nope, it's not. Tom's still missing a few very important pieces, but I'm afraid he's pretty close. The worst part is that I can tell he understands the basic principle – which means means he can now finish his machine *without* these plans! It's probably too late to stop him." Tom IV clenched his fists. "I should have known right from the start he was behind all this! The little thief got exactly what he wanted."

"So you think Tom stole them?"

"Are you kidding?" Tom IV asked. "Seriously? Of course he did! Tom's the one that wanted the plans and he's the one that knew they existed. He broke into my lab, stole them, and then pinned the whole thing on that Ed guy. It was a setup right from the start!"

"I don't know," Bud said dubiously. "That doesn't sound like Tom."

"This job has his fingerprints all over it," Tom IV insisted. "I mean, look at that semi! Look at these plans! You caught him red-handed. What further proof do you want?"

"I guess," Bud said reluctantly. "It's just hard to believe he'd do something like that."

"Hasn't he told you that he would do anything to get Irene back?" Tom IV asked angrily. "What part of *anything* do you not understand? What we need to do now is find him and tell him that his big time-travel adventure is stopping right here and right now. Where is he?"

"I don't know," Bud said. "I haven't seen him in a week. But I think I know someone who can give us some answers."

Bud contacted the outpost in space and asked Grinsby to transport the two of them up to the station. A moment later they appeared in the outpost's observatory. The spacious room was filled with ultramodern equipment, including a giant megascope space prober. Tom Swift Sr. was standing beside the megascope, examining a globular cluster that was displayed on a terminal beside it. On the wall behind them was a giant glass window. Outside they could see the Earth, resting peacefully in space.

Mr. Swift turned around in surprise when he heard them materialize. He was even more surprised when he saw who had accompanied Bud. "Why, Tom! What brings you here?"

Tom IV quickly glanced around the room. "Are we alone? It is safe to talk?"

"For the moment," the elderly inventor replied. "I've been up here the past few days doing some deep-space studies for a conference next month in Berlin. As far as I know I'm the only one in this part of the station."

Tom IV nodded. After asking Bud to lock the door he showed Mr. Swift the plans that the pilot had discovered in Tom's laboratory. Mr. Swift's face fell when he saw them.

"This is all starting to make sense now," the elderly inventor replied. "I was wondering why Tom decided to revisit his claytronic stones after the immense disaster they had caused on the centaur. I have a hunch that Ed is your culprit."

"But he's a paper-pusher!" Tom IV protested. "It would take a brilliant mind to get past my security."

"Ed *has* a brilliant mind," Mr. Swift replied. "Last week I

went to BG Industries to formally hand over the *Behemoth*. While I was there Ed gave me a tour of his office. He's actually a very accomplished inventor.”

“I didn't know that,” Bud exclaimed, amazed.

“Neither did I,” Mr. Swift replied. “Ed must have realized that Tom would need some very strong motivation before he would even consider finishing his claytronic stones. He probably made Tom a deal – if Tom would finish the stones then he would give Tom the plans for your time device. In fact, he probably went to your universe for the sole purpose of getting them for Tom.”

“So *that's* why Tom finished the stones,” Bud said. “What a mess!”

“I think we have a much bigger mess on our hands,” Tom IV said, interrupting. “What's *that*?”

Mr. Swift and Bud turned their attention out the window behind them. A black shadow was rapidly spreading across North America, swallowing it up in utter darkness.

Bud paled. “I've seen that before – it's a nanite chain reaction! Tom's stones must have gotten lose and are destroying the planet!”

## CHAPTER 12: THE LAST HOPE

TOM SWIFT IV looked at Bud Barclay, puzzled. “Nanites? Is this some new invention?”

Mr. Swift quickly explained to Tom IV about Tom's latest invention, the claytronic stones. “But I was positive my son had added safeguards!”

“He did,” Bud affirmed. “I was there – I saw it myself! Tom found a way to keep his stones from replicating, and it worked great. Besides, his stones don't create a black field anymore. I think the stones below must have come from somewhere else.”

“Ed Gamino,” Mr. Swift said suddenly. “They must have come from Ed!”

Bud nodded. “That's got to be it. A few days ago Tom gave him the plans and warned him to never use them. I remember Tom telling me that if the stones weren't made right they could fail and cause a chain reaction. Tom told me that Ed had promised to keep the blueprints only for reference purposes. However, knowing Ed...”

“...he probably didn't,” Mr. Swift finished, aghast. He watched as his home world was swallowed up by the creeping black cloud. Already North and South America were covered and the cloud was rapidly spreading across Europe. “This is horrible,” he whispered. All of the life had been drained out of him. Complete and utter panic clutched his heart. “There were billions of people down there. Billions. This can't be happening.”

“Isn't there some way to stop it?” Tom IV asked quietly.

Bud shook his head. “Only Tom would know how to do that,

and nobody knows where he is. As far as I know he's still down there somewhere.”

“I'm sorry,” Tom IV said quietly. They could do nothing but watch as the whole world was consumed by shadow.

It took several hours for the entire planet to be consumed. Mr. Swift could not bear to watch; he sat down and held his head in his hands. Bud and Tom IV watched helplessly, unable to tear their gaze away from the awful sight. An hour later the black time field finally collapsed, revealing a solid mass of green nanites. The Earth was gone.

When it was finally over Mr. Swift looked up and out the window. The last time he had felt this afraid was the day Xanthus had sabotaged his Tomasite reactor. That day he was consumed by the fear that his invention might destroy New York City and, in so doing, lead to a nuclear war that would destroy civilization. This was much worse. Even in his worst nightmares he had never imaged seeing anything like this.

“My family was down there,” Mr. Swift said at last. He felt like he had aged twenty years. “My son. My daughter. My darling Mary. All my friends – all those people – all gone. They're gone, Bud. All of them. How could this happen? How could this be happening?”

“Isn't there something we can do?” Bud asked. “I mean, there are always options, right? Isn't there some way we can fix this – some way we can undo the nanites, or put it back?”

“I doubt it,” Tom IV said. “I'm sorry, but I just don't see how this could be reversed. I don't think the nanite reaction can be made to work backwards.”

Mr. Swift was about to collapse, but Tom IV's pessimistic statement triggered a thought in his mind. He suddenly saw a tiny glimmer of hope. With an immense effort he pushed everything else out of his mind and clung to that hope with all his might. “Maybe there's another way,” he said quietly. “You've traveled back in time before, haven't you?”

Tom IV nodded reluctantly. “I see where this is going.

Ordinarily I'd say it's far too dangerous, but given what just happened I guess we can't make the situation any worse." He paused a moment to put his thoughts together. "Let's head back to my universe. I'll try to put something together."

"But what about Tom?" Bud asked.

Mr. Swift sighed. "If he had survived I think he would have come to the station by now. The only other places where humans are still alive are Nestria and our colony on Bartonian. It wouldn't have taken Tom long to find us here."

Bud nodded. "I guess you're right. I just can't believe he's gone. But how are we going to get to Tom IV's universe? Wasn't the Negative Zone down there in Shopton?"

Tom IV pulled out a communicator from his pocket. "We don't need to use your Zone, Bud. I can just use mine. This device allows me to send a signal back home. My Zone will then open a doorway between our universes."

"Of course!" Bud replied. "I knew that. How else could you hope to get home when you traveled to other places?"

"Exactly." He turned to Mr. Swift. "You don't happen to have any spare spaceships lying around, do you?"

Mr. Swift shook his head. "There are a few Titan-class rockets docked at this station but they're fairly old. I'm afraid the *Challenger* and the *Cosmotron Express* were both at Fearing Island."

"That's what I thought," Tom IV replied. "In that case we're going to have to make a quick stop on our way back. I need to find someone who has a starship I can borrow."

"Hold on," Mr. Swift said. "Before we go let me speak to the men on this station. I need to let them know what's going on. They need to know that there's still hope left. We may yet be able to fix all of this."

"I wouldn't go that far," Tom IV cautioned. "It's a pretty desperate chance. First of all, I don't know if I can build another time trigger or not. But even if I can, we still don't know how time travel actually works. What if you can't change the past – what if changing the past just splits off an alternate reality? We

could end up with two timelines – one where the Earth *was* destroyed and one where it wasn't. We might not be able to undo this.”

“But we're going to try,” Mr. Swift said firmly. “Come what may, we are going to try. I am not going to give this up without a fight.”

\* \* \* \* \*

“Explain this to me one more time,” Tom III said slowly. “You want to borrow the *Exedra* to do *what?*”

The entire group was in Tom III's private laboratory in Shopton, New Mexico. Mr. Swift, Bud Barclay, and Tom IV were there, along with Tom III, the robot Aristotle, Anita Thorwald, and Ben Walking Eagle.

“It's quite simple, Tom,” the robot Aristotle explained. “They wish to travel back in time to save Tom Swift Sr.'s homeworld. To do this they require a spaceship that is large, powerful, and fast. Your vessel fits the bill perfectly! I am surprised you are having difficult grasping this.”

“It's the whole time-travel thing that gets me,” Tom III said.

Tom IV nodded. “Yeah, it's a lot to wrap your head around. Fortunately we're going to keep this expedition simple. All we're going to do is go back in time a couple weeks and stop BG Industries from using the stones. I'm not anticipating any problems.”

“You Toms never do,” Anita Thorwald complained. “Unexpected things always happen, especially when you're dealing with the hair-raising things we get mixed up with! You can always count on something *awful* going wrong.”

“Like the time we went to Kwortu'um to look for a plague cure,” Ben remarked. “But we don't have a choice! Their whole world was destroyed. You know if that had happened to us we'd be asking the same favor.”

“Do you need us to come with you?” Tom III asked.

“If you don't mind,” Tom IV replied. “None of us know the



first thing about flying the *Exedra*. Faster-than-light starships don't even exist in my universe! If the three of you could fill in as the crew I'll supply the time machine."

"What about us?" Bud asked.

"You can deal with that Ed character after we finally get to him," Tom IV replied.

"And I will deal with my son," Mr. Swift replied quietly. "When we find him. He has a lot to answer for."

\* \* \* \* \*

It took Tom IV several weeks to build his time trigger. During that time the gang camped out at the Swift Enterprises facility in southern California.

"This is so different from Shopton," Bud commented, as he started out the window of Tom IV's laboratory. Modern cars drove by, carrying teenagers headed for the ocean, and Bud could see palm trees in the distance. "Everything seems more *modern*. And faster. I really wish I could try out the beaches."

"That's probably not a good idea," Mr. Swift warned. "We don't want anyone asking questions about where we came from."

"It's probably already too late for that," Anita replied.

"Not really," Tom IV said. "I mean, sure, Harlan Ames knows you're here, but he's kept tight wraps on this place. I don't think even my sister Mandy knows about you guys! If she did you can bet she'd be down here in a heartbeat."

"I'd love to meet her," Ben Walking Eagle replied. "I've heard a lot about her."

"We can do that later," Tom III said. "We've got our work cut out for us."

"Do you think there will be much danger?" Anita asked.

"Probably not," Tom IV said. "I mean, yes, there's always danger when you travel through time. But all we're going to be doing is going back a few weeks! I'm not going into the prehistoric past like I did last time. A short jump should be pretty simple."

“Do we know where to go?” Bud asked. “I saw the black cloud but I didn't happen to notice where it started.”

“BG Industries has a facility in Nebraska,” Mr. Swift remarked. “That's where Ed's office is located. I would be willing to wager that the nanites came from there.”

“We can do even better than that,” Tom IV said. “I just happen to have a chronoscope, which I can use to look back through time. When we get to your universe I'll use it to pinpoint the source of the problem. That way we can make sure we don't arrive at the wrong place *or* the wrong time. I'd like to get everything done in a single jump.”

“That should do it!” Bud replied.

\* \* \* \* \*

The *Exedra* had been parked in a geostationary orbit, with its cloak activated so the governments of Earth wouldn't detect it. Under Tom IV's guidance Tom III and his friends installed the finished time trigger on the ultramodern starship.

“Do we want to test it before we begin?” Bud asked.

“That would be most unwise,” Aristotle replied. “According to my calculations, each use of the device increases the risk of a catastrophic failure that could destroy spacetime itself. It would be far wiser to only use it once. Indeed, it would be wisest to never use it at all, but given the circumstances the danger is acceptable.”

“If you say so,” Anita replied. “Have you done *any* testing on this, Tom?”

Tom IV nodded. “I've done a few small tests on a molecular level. I'm pretty sure I got it right.”

“But this is still new territory, right?” Anita persisted. “I mean, even when you used it to fight Von Doom, or whatever his name was, you still didn't transport an entire *spaceship*. You just used your TANC.”

“It was the Black Dragon, and yes, that is correct,” Tom IV replied. “This is something new. But I think it will work.”

“Hey, now that you mention it, why *aren't* you using your TANC?” Bud asked.

Tom nodded. “Good question! First, we are going to be bringing the TANC – it's a handy excursion vehicle. I don't really want to land the *Exedra* on Earth so we'll use it if we have to get to the surface. However, the reason we need a starship is because this model of the time trigger is very different from the last one. One of the reasons the original one did so much damage to spacetime was because it was a very crude device – it was like using a sledgehammer to open a window. The *Exedra* has a fusion reactor that produces incredible amounts of energy. I can use that energy to make the trip smoother and less destructive. It greatly increases our odds of success.”

“But you've never actually tried it before,” Anita repeated. “You're just 'pretty sure'.”

“You don't have to come,” Tom IV countered. “I'd be glad to drop you off in your own universe before we leave.”

Anita shook her head. “Nothing doing! I'll come. I just have a bad feeling about all of this.”

Aristotle spoke up. “I am sorry to intrude, but the calibrations are complete. We can depart on your command.”

Tom IV turned to Tom III. “Are you ready?”

He nodded. “My ship is ready to go.”

“I'm ready as well,” Mr. Swift replied.

“Then let's go,” Tom IV said. “First stop – Tom Swift Jr.'s universe!”

Tom III pressed a button on the ship's control panel and the *Exedra* vanished.



## CHAPTER 13: A WOMAN SCORNE

WHEN TOM SWIFT JR. returned to his laboratory he was surprised to see Phyllis Newton waiting on him. Phyl was sitting impatiently on a chair right outside his door. The teenage girl was wearing a long, yellow dress and clutched a matching purse. Tom could tell by the look in her eyes that she was extremely angry.

“Where have you been?” she demanded. “Do you know how long I've been waiting for you?”

Tom was taken aback. “I'm sorry – nobody told me you were going to be coming by the lab today! I honestly had no idea. I just stepped out for a few minutes to get a bit of fresh air, and—”

“What do you mean, *today*? I've been waiting on you since last week! You promised you'd get back with me as soon as you returned from space. Remember? You promised!”

Tom winced. “I'm sorry. You're right. It's just that there's been a lot of things going on. You see—”

“There are always a lot of things going on,” Phyl complained. “You seem to have plenty of time to go to Neptune but somehow you can never find time for me.”

“You're absolutely right,” Tom agreed. “I have been treating you terribly. I'm going to make some time for you right here and right now. Come with me.”

The young inventor unlocked the door to his laboratory and invited Phyl inside. Still fuming, Phyl entered the room and Tom closed the door behind him. She was surprised to see a semi in the middle of his lab but she said nothing. Her mind was elsewhere.

As soon as the door closed Tom walked over to his

workbench and activated the time dilator. *I hate doing this, but I really don't have time for her right now*, he thought to himself. *At least the time dilator will hurry this up. I just wish she hadn't picked this exact moment to come over! I've got so much to do before Bud gets back.*

“What's that?” Phyl asked, pointing to the time dilator.

“It's, um, a bit complicated. It's kind of hard to explain.”

“I'm not the village idiot,” Phyl snapped. “You don't need to patronize me. If you can explain it to Bud then you can explain it to me.”

Tom was surprised at her sharp attitude. “Are you ok? I haven't seen you like this before. What's bothering you?”

“You really don't know? After everything you've done to me, you honestly have no idea why I'm upset?”

*What is she talking about?* Tom thought. As he tried to listen to the angry girl in front of him, out of the corner of his eye he suddenly noticed that some papers were missing from his workbench. He turned his head and saw that all his Dr. Reisenbach's notes on the time trigger were gone. “No!” Tom cried out. He ran over and began a hasty search for the missing notes. His heart sank as he realized they were gone.

“You're not even listening to me!” Phyl shouted. The girl was purple with rage.

“I'm sorry,” Tom apologized. He had never seen Phyl so angry before, but the loss of his notes had distracted him. “I'm so sorry about this. I'm afraid that right now just isn't a good time. I think someone's been in my lab and stolen my notes.”

Phyl's anger boiled over. “I don't care, Tom. I really don't. I hope they've stolen everything you've got! What I care about is that we are *finished*. Do you hear me? Finished! I've had it up to here with you and I'm not going to take it any more. There are plenty of other guys out there – guys that will actually *pay attention* to me.”

That stopped Tom in his tracks. “What? What do you mean, we're finished?”

“Don't give me that,” Phyl shot back. “You figure it out,

'genius boy!' The only time you'll ever go out with me is when Sandy and I twist your arm. I'm tired of it! I'm tired of playing second fiddle to a girl who's been dead for years. I'm not doing it anymore. It's over! I should never have gotten mixed up with you in the first place."

"Are you talking about Irene?" Tom asked, puzzled.

"Of course I mean Irene! She's all you've been able to think about for years. Why, I bet that stupid truck over there even has something to do with her! Everything you do does. Go ahead – tell me I'm wrong, Tom. Tell me those missing notes of yours have nothing to do with Irene."

Tom felt acutely miserable. His plans had been stolen and his girlfriend was having a complete meltdown. He was at a total loss. *I don't know what to say*, Tom thought, as Phyl stared at him.

"Well?" she demanded.

"Hold on," Tom said suddenly. "Do you hear something?"

Phyl stopped. "Of course I hear something! I've heard that growling sound for the past five minutes. Isn't that normal?"

Tom shook his head. Ice-cold fear shot through his veins as he realized what the sound meant. He walked over to the window and looked outside. What he saw confirmed his worst fears. A cloud of utter darkness was racing toward the laboratory at blinding speed!

When Phyl saw the look of utter terror on his face she walked over and glanced outside. "What's that?" she asked.

"Doomsday," Tom replied, barely able to speak. A feeling of total panic overwhelmed him as he realized he was seconds away from death. He had never felt so afraid and helpless in all his life. "It's the end of the world."

A moment later the cloud engulfed them. To his surprise the laboratory remained unharmed. The rest of the building, however, melted away into complete oblivion. A moment later the power went out, plunging the room into darkness.

Despite the horrific nature of what had just happened Tom felt immensely relieved. He had watched Death itself come for him, only to pass by and leave him unharmed. Tom paused a moment

to refocus his mind and then reached over to his workbench and felt around for a flashlight. After he found it he turned it on and scanned the room. The entire laboratory appeared to be intact, but there was nothing but blackness beyond.

“What just happened?” Phyl asked, her voice quivering. “Is this another one of your experiments?”

Tom said nothing. He knew exactly what had happened but he didn't know how to tell Phyl. The magnitude of the event overwhelmed him, but he was not without hope. He knew the whole planet had just been destroyed but he firmly believed he could fix the problem. *All I have to do is finish my time machine, he thought. Then I can go back and stop this from happening. This is bad, but it's not permanent. I can fix this.*

“Well?” Phyl said. “Say something, Tom. Talk to me.”

“The world's been destroyed,” Tom said at last. “It's gone. Everything is gone.”

Phyl felt herself start to panic. “That doesn't make any sense. How could the world be gone? What did you do?”

Wearily, Tom told her about the nanites. “Ed must have disregarded my warning and created a batch of them anyway. It looks like they got out of hand and consumed everything. In a few minutes there will be nothing left anywhere on Earth.”

Phyl's eyes widened in horror. “Can't you do something about it? Isn't there some way to stop it?”

Tom shook his head. “I built a kill switch into the nanites, but Ed must have made a mistake when he manufacturing them. I knew he would – that's why I told him to not make them in the first place! The batch that he made can't be turned off.”

“If you knew this was going to happen then why did you give them to him?” Phyl screamed. “Why did you give him something that could destroy the whole world? What got into you?”

“I didn't mean for this to happen!” Tom protested. “All I wanted to do is go back in time and save—” and then he stopped, realizing what he was about to tell Phyl.

Phyl finished his sentence for him. “And save Irene, you mean. Is that what all this is about? You were willing to risk the



safety of all life on Earth just so you could save your girlfriend? And I can't even get you to go out on a date with me!"

"I'm sorry," Tom replied, utterly crushed. "I never wanted to hurt anyone. I just thought I could save her. If Ed had listened to me none of this would have happened."

"If you hadn't been obsessed with Irene none of this would have happened!" Phyl shot back. "The world would still be out there today if you had just moved on with your life – if you had actually loved *me*, instead of treating me like some dumb obligation. I never meant anything to you!"

"That's not true," Tom protested.

"If Irene had wanted to go out with you last week, would you have put her off?" Phyl demanded. "Would you have given her a rain check and gone to Neptune instead? Would you, Tom?"

"I'm sorry," Tom repeated. He felt acutely unhappy. "It just all went wrong. This wasn't part of the plan."

There was silence for a while. Phyl eventually spoke up. "Hey Tom – if the whole world has been destroyed then why aren't we dead?"

"The time dilator is protecting us," Tom explained. He told her about his invention and how it could manipulate the flow of time. "The nanites can't pass through the edge of the field. Fortunately it has its own power supply, so it didn't turn off when the electricity was cut off. Otherwise we wouldn't be here."

"If that field protects us, then can't you use it to protect everyone else?"

Tom shook his head. "That dilator was only designed to protect this lab. Even if I did extend its range it's already too late to protect Shopton – the damage has already been done. Plus, we'd be instantly consumed by nanites if I tried to shut down the field and move it somewhere else."

"Wonderful," Phyl replied. "So we're the last two people left on Earth?"

"Well, there's also the outpost in space, Nestria, and Bartonian. They won't have been effected by the nanites. But that's all."

"So what are you going to do now?"

“I'm going to fix this,” Tom replied coolly. “It's not too late for all of this to be reversed. All I have to do is go back in time and stop this from happening. It's all up to me now.”

“What do you mean, it's all up to you?” Phyl demanded. “You've never time-traveled before! You have no idea what you're doing. If you went back in time you'd just make things even worse. Why can't Tom IV do it? I mean, he's traveled back in time before, right? Isn't he much more qualified to do this than you?”

“I don't have a way to reach him anymore,” Tom explained. “After the recent break-in Tom IV put a lock on his Negative Zone. In order to open it I'd need to be able to reproduce his electronic key. That's something I can't do – Tom IV kept that knowledge to himself.”

“But your Zone still exists,” Phyl replied. “Why, it's right over there! You don't have to reproduce anything.”

Tom shook his head. “That was just where the tunnel manifested itself. The actual machinery that generates the Zone itself is huge – it was buried underground outside the lab. It's gone.”

“So I guess it really is up to you,” Phyl said.

Tom got back to work on his time machine. At first he was concerned about the loss of his notes but after a few hours he realized that not having them was actually a blessing in disguise. Since he didn't have them available anymore his brain was forced to resolve the problem. Over time he realized where he had gone wrong.

The first problem was finding a way to restore power to his laboratory. He ultimately decided to tap into the atomic power capsules that powered the atomicar. The energy he needed to finish building the time trigger was negligible compared to the power they could produce. After running a few cables and building an interface he was able to restore electricity to his lab.

“How long do I have to stay here in this room?” Phyl asked. “I want to get as far away from you as possible.”

“I'm afraid you have to stay until the cloud collapses,” Tom

replied, ignoring the insult. “When the blackness goes away it should be safe to turn off the field. In theory, anyway.”

“I’m certainly not going to stay in here with you,” Phyl replied pointedly. “As soon as that cloud disappears I’m going to transport up to the outpost. Or maybe I’ll go to Nestria. I don’t care where I go, as long as it’s away from you.”

Tom nodded but said nothing.

It took hours for the black cloud to dissipate, but eventually the darkness cleared. Phyl shivered when she saw what was left of the world. One of the laboratory walls had been outside the field and was now gone, revealing the frightening outside world. There was nothing left but a flat blue sky and an endless sea of green nanites.

“It’s horrible,” Phyl said. “Are you sure it’s safe to turn off the time dilator?”

“No, I’m not. I didn’t manufacture those nanites and I don’t know what other flaws they might have. It’s possible that when I shut down the time field they might re-energize and consume this lab. I just don’t know.”

“Can I be transported through the time field?” Phyl asked.

“I’m afraid not. The time difference creates too much distortion.”

“Then I guess I’ll stay here,” she replied grumpily. “At least for now.”

It took two more days for Tom to finish his time trigger. He was now glad that he had been storing food in his lab. *At least we’re not hungry*, he thought.

“So what are you going to do now?” Phyl asked. Her mood had not improved with time.

“What do you mean?” Tom asked. “I’m going to go back in time and stop Ed from creating the nanites, of course.”

Phyl shook her head. “No you’re not! I’m not a fool, Tom. You’re going to go back in time and save Irene. You might stop on the way to the future and talk to Ed, but that’s not your highest priority.”

“Traveling into the past is very dangerous,” Tom protested. “Making two jumps backwards is far more hazardous than just making one. It makes much more sense to get Irene first.”

“And what about jumping into the future?” Phyl asked. “Isn't that equally dangerous?”

“Oh, no – that's the easy part. I can just use my time dilator to adjust the speed of time. Getting back home won't be a problem.”

“I still don't think you should save her,” Phyl said flatly.

“Why not?” Tom asked, surprised.

Phyl shook her head. “You're just not thinking anymore, are you? Don't you realize that you're the only person that can fix this planet? If you go back to save Irene and something goes wrong then the whole world is doomed!”

“It's not like that,” Tom protested. “I have a plan. Nothing will go wrong.”

“You had a plan about the nanites, too, and look what happened! Your 'plan' led to the extinction of all life on Earth. Stop fooling around, Tom, and get serious! Save the world. Don't put it in jeopardy *again* just to save someone who's been dead for years. It's a stupid thing to do.”

“I haven't come this far to give up now,” Tom replied evenly. “I can do this.”

“No you can't,” Phyl replied.

Tom looked at her awkwardly. “I guess I'll be going, then.”

Phyl shook her head. “You're a fool, Tom. I just hope you can save the world. How long do you think it will take?”

“It should be instantaneous. As soon as I disappear the world should go back to the way it was. If it doesn't, then—”

“Then you've failed, and there's no hope,” Phyl finished. She glared at him, and then sighed. “It's no use – you just aren't going to listen to me. Tell me this, then. What will happen to me when you change the past? I mean, I remember the world being destroyed, but you're going change it so that event never happened. Does that mean I'll remember something different? Will we have never even had this conversation?”

“I don't know,” Tom confessed. “I've never done this before. I

guess we'll find out.”

“You 'guess we'll find out'?” Phyl asked, astonished. “What kind of answer is that? You mean you don't know?”

“Of course not,” Tom replied defensively. “I've never done this before. As I said, things *should* go back to normal. That's my theory.”

“Well, what if your theory is wrong?” Phyl demanded. “What if nothing changes and I end up stuck here forever, alone in an empty lab? What if changing the past doesn't affect this timeline at all, but just creates a new one instead and leaves the old one intact? Have you not thought this through?”

“That's just a theory,” Tom replied. “No one really knows.”

Phyl sighed. “Go, then. Do whatever you're going to do. I guess it doesn't really matter anyway. I'll wait as long as I can and then I'll turn off the time field and contact the outpost in space. Maybe I'll survive.”

“It'll be fine,” Tom assured her. Phyl turned away and ignored him. Tom looked at Phyl, hoping she would say something encouraging, but she paid him no attention. He sighed, got into the cab of the semi, and activated the time trigger. The machine disappeared in a flash of purple light.



## CHAPTER 14: THE END OF THE WORLD

TOM SWIFT JR. HAD CONFIGURED HIS time machine so it would appear in New York City about six hours before Irene arrived in the hyperplane. *That will give me plenty of time to get set up and allow for a margin of error in my calculations*, he thought. *After all, if I cut things too close and the trigger turns out to be imprecise then I might miss her arrival entirely.*

The activation of the trigger gave Tom an abrupt case of nausea. As soon as the trigger energized the laboratory disappeared. Reality seemed to disappear with it, replaced by chaotic patterns of dark violet and black. The young inventor was surprised when the atomicar was immediately buffeted by turbulence. Tom fought to keep the semi from turning over. As he traveled further back in time the ride grew increasingly violent.

*I don't remember time travel being described like this!* Tom thought with concern. He watched as the semi slowly drew closer to its target date. *I don't remember the trip taking this long either. What's going on?*

When the indicator on the dashboard finally hit zero the purple lights vanished and reality returned. For a brief moment Tom had a gorgeous panoramic view of New York City. He could even see his father's reactor in the distance – a sure sign that he had arrived at the correct moment in history.

Then, without warning, time itself seemed to snap. There was a huge flash of light. *Oh no*, Tom thought with a surge of panic. *The time trigger is breaking down! It's about to-*

The last thing Tom heard was a breaking noise, as if someone

had violently shattered an entire carton of light bulbs. Then the time trigger erupted, engulfing the semi in a titanic explosion of atomic proportions.

\* \* \* \* \*

A few miles away, Tom Swift's father had just been rescued from Xanthus by his security detail. Mr. Swift told them the events surrounding Xanthus' plot. Frank Herschell, head of security, told him that they found out what was going on when the Navy had tipped them off that there was a Brungarian in their midst.

"The *Navy* called?" Mr. Swift asked. "How did they know?"

"Apparently your son tipped them off," Frank replied. "They want to speak with you immediately."

Mr. Swift nodded. *I bet they do*, he thought grimly. *If Xanthus is telling the truth then we have a huge problem on our hands! If this reactor goes critical and destroys New York City then that will be the end of the world. The United States will interpret that as an act of war and will retaliate.*

As Mr. Swift walked out the door Xanthus called after him. "You cannot escape! There is nothing you can do to save them."

The elderly inventor opened his mouth to reply when he suddenly heard a tremendous explosion. The ground shook beneath them.

"What was that?" Mr. Swift asked, looking at Xanthus.

"I do not know," Xanthus replied.

"Make sure he doesn't get away!" Mr. Swift ordered. As the security detail hauled him off Tom raced outside the building. When he made it outside he stopped dead in his tracks. Most of New York City was simply gone. It was difficult to see through the dense smoke, but the proud city that had once stood there was destroyed. Little remained but broken buildings, rubble, and dust.

"NO!" Mr. Swift cried out. He screamed and dropped to his knees in anguish.

Moments later other people rushed out of the building behind



him. They were dumbfounded when they saw what had happened. A few began screaming; others sobbed uncontrollably. Ned grabbed Mr. Swift and helped him to his feet.

“What happened?” Ned asked.

“It must be Xanthus,” Mr. Swift replied weakly. “I guess he was afraid his ploy at the reactor wouldn't work so he stashed an actual atomic bomb in the city. It must have been rigged to go off if he was captured.”

Ned looked at the city, aghast. “There were *people* there,” he whispered. “Millions of innocent people. Why did he do it? Why, Tom?”

“They're just the tip of the iceberg,” Mr. Swift replied. He was shaking uncontrollably and knew he was on the verge of a mental breakdown. He fought to keep his mind from tearing itself apart. “This is the end of the world, Ned! Once Washington realizes what happened they'll deploy their atomic bombs against Brungaria and her allies. My son has already told the Navy that the Brungarians are behind this, so there will be no question as to who was responsible. For their part, I'm sure the Brungarians have already launched their remaining weaponry at us and our allies. By the time this day is over there won't be anything left of the civilized world.”

“Will there be a world at all?” Ned asked.

Mr. Swift found it difficult to concentrate. His whole life was flashing before him. He knew that all the people he loved were about to die and there was nothing he could do to save them. His initial sorrow was overwhelmed by terror at what he knew was going to happen next.

“It depends,” Mr. Swift said when he could finally speak. “Under normal circumstances the lingering radiation would be deadly but it would fade with time. The half-lives of the elements used in a nuclear bomb are fairly short. After a few weeks much of the residual radiation would have faded away. The people would be dead, of course, but the planet would survive. Life would go on.”

Mr. Swift paused. “However, both sides have been

experimenting with cobalt bombs. The whole purpose of such an awful weapon is to cover an area with radioactivity and make it uninhabitable. It's the final blow – not only would the targeted nation be destroyed, but no one could ever live there again. The radiation from such a weapon is intense and lingers for many years. By the time it decayed into harmlessness there would be nothing left.”

“But surely no one would build such a thing,” Ned replied, aghast. “They're just theoretical, right?”

“I don't know,” Mr. Swift replied. “I have no idea what people in power have been doing. I pray you're right. I pray no one would be that foolish and short-sighted. Otherwise life itself ends today.”

\* \* \* \* \*

Less than twenty minutes later the Air Force leaped into action. A fleet of American bombers were loaded with nuclear weapons and quickly launched into the stratosphere. They left their bases in Europe and flew at top speed toward Brungaria. The Brungarians were caught completely by surprise. The first wave was devastating and laid waste to most of their country. By the time the Brungarians realized they were under attack they had nothing left to defend themselves with. The second wave of bombers destroyed what little had survived.

Since their nation was in ruins the Brungarians ordered their foreign bases to deploy against the United States. The Americans knew they were coming but the United States was a large country with extensive borders. There was no way they could protect everything, and on top of that they were fighting an enemy that was enraged and had nothing to lose.

By the end of the day there was nothing left of the United States, Brungaria, or their allies. Third-world nations and outlying islands were left untouched, but it was only a matter of time before the giant clouds of radiation drifted onto their territories.

Mr. Swift and Ned Newton died when the Tomasite reactor

went critical, destroying what little had survived of New York City. Tom Swift Jr., Bud Barclay, and Irene were killed when American bombers destroyed Brungaria, taking out the hidden base with one of many nuclear weapons. The rest of Mr. Swift's family – and millions of others – lost their lives in the nuclear war.

As it turned out neither side used cobalt weapons, but the damage was done. The few remaining survivors fought each other for what little food and water remained, further reducing their numbers. The world erupted into anarchy and chaos. A planet that had been on the verge of space travel now found itself brought back to the stone age, unable to even feed its population. Night had fallen upon mankind and things would never be the same.



## CHAPTER 15: ASHES

THE *EXEDRA* TOOK ONLY A moment to travel through the Negative Zone. As soon as the starship dropped into normal space Aristotle maneuvered it into a stable orbit around Earth.

“Looks like we made it!” Tom Swift IV said triumphantly. “Ok, guys, it’ll take just a moment to calibrate the jump. We’ll be ready to travel back in time in just a second.” The young inventor walked over to a computer keyboard, sat down, and began typing.

Bud looked at the forward viewscreen and frowned. “Hey, wait a minute! Are you sure we’re at the right place? That doesn’t look right at all!”

“What do you mean?” Tom Swift III asked. He glanced at the screen. “That looks like Earth to me – large land masses, a couple oceans. What’s the problem?”

Mr. Swift stared at the screen intently. “Bud’s right, Tom. We are definitely in the wrong place. Our planet no longer has oceans or continents; there’s nothing left but nanites. The whole planet was destroyed.”

Tom Swift IV turned around to see what was going on. He frowned. “Oh, wow. Sorry, guys – that’s definitely *not* the same planet we left. I must have accidentally jumped us into the wrong universe. Just hold on a minute, please, and I’ll get this fixed.” Tom IV walked over to another computer console and worked while everyone else stood around and watched. At last he frowned. “I don’t understand! This doesn’t make any sense. According to this computer we’re in the right place.”

“That seems highly unlikely,” Mr. Swift commented. “But we

can easily test that hypothesis. Aristotle, can you contact the outpost in space?"

"I cannot," the robot replied a second later. "I am afraid this planet has no orbital space station. Indeed, it has no orbital satellites at all."

"None?" Mr. Swift asked. "But there are countless satellites in orbit! The nanites are not airborne particles. The satellites were left unaffected."

"I'm telling you this is the right place," Tom IV insisted. "Something must have happened to them."

"What about Nestria?" Bud asked.

"Excellent point," Mr. Swift replied. "Can you locate it?"

The robot shook his head. "It appears to be missing as well."

Bud looked at Tom IV, confused. "So the satellites are gone, the sky wheel is gone, Nestria is gone, and the planet is no longer overrun with nanites. How could we possibly be in the right place?"

Tom IV snapped his fingers. "I've got an idea! Give me a minute." The young inventor ran back to his time terminal and worked at it furiously. At last he nodded with satisfaction. "All right, gang! I know what happened. It turns out this really is the right place – the Zone hasn't malfunctioned on us. The problem is that someone changed the timeline while we were gone."

Several people gasped. "Good night!" Bud exclaimed. "What sort of change could cause all that? And who could have traveled back in time, anyway?"

"My son," Mr. Swift said suddenly. "It must have been him. Somehow Tom survived the nanite flood and then went back in time to stop it. Only something went wrong."

"It doesn't look that bad to me," Anita commented. "I mean, the nanites are gone, right? It looks like people live there. Are you sure he didn't fix things?"

Aristotle spoke up. "I am afraid the planet's looks are deceiving. The *Exedra's* sensors tell me that much of its surface is emitting low levels of radiation, and there are no major population centers. It would appear that the world was destroyed

in some sort of global nuclear exchange.”

Anita was shocked. “That’s horrible!”

Mr. Swift looked at the planet and shook his head. “It must have happened at least several years ago. The war somehow prevented mankind from developing space flight. Nestria is not there because in this timeline we never made contact with the Space Friends. That should help us pinpoint the exact date that time changed.”

Tom III turned to Tom IV. “You’ve got a chronoscope, right? Can you look back in time and see how it happened?”

“Maybe,” Tom IV said cautiously. “Whenever a time trigger is activated it leaves a trail that the chronoscope can follow. In this case it’s a little tricky to do, though, because of the way things turned out.”

“What do you mean?” Tom III asked.

“Well, somebody went back and changed the timeline. However, in the altered timeline no time-travel attempt was made. That means we can’t look for a *recent* time-trigger event and then work backwards. Instead, I have to scan the distant past for time-travel activity. That’s a lot harder to do.”

“But we can use logic to narrow things down,” Mr. Swift pointed out. “If my son is responsible for this, he most likely went back to the moment just before Irene died. Given how high international tensions were that day it’s possible he did something that triggered a nuclear war.”

“You could be right,” Tom IV said. “Do you have any idea where he would have gone?”

“There are two possibilities,” Mr. Swift said. “He may have gone to the Tomasite plant in California to stop Irene from going to Brungaria. The other option is my reactor in New York City; he may have gone there to rescue her from the hyperplane just before it crashed. There are other options, of course, but I believe those are by far the most likely.”

“I’ll check into both of them,” Tom IV replied.

“Wait just a minute,” Bud said suddenly. “Don’t we already know that he went to the Tomasite plant? After all, I met you guys

there several years ago.”

“What do you mean?” Mr. Swift asked, puzzled.

“Oh, I remember now,” Tom IV replied. “I'd completely forgotten about that. You're talking about that photograph Tom Jr. showed me a few months ago.”

Bud quickly explained to Mr. Swift how he and Tom Swift Jr. had met a future version of him years ago, just before they left with Irene to Brungaria. Mr. Swift was astonished. “I had no idea that had happened. Are you quite sure?”

“Positive,” Bud replied. “Besides, Tom had photographic proof. He actually had a picture of the TANC, taken years before we met Tom IV. There's no question that you and Tom IV went back in time to the Tomasite plant and lectured your son on the dangers of time travel.”

“Now wait just a minute,” Anita said. “That only happened because Mr. Swift mistook the past-Tom for the future-Tom, right?”

“I guess,” Bud replied.

“But he's not going to make that mistake this time,” Anita argued. “Now that he knows the danger he's going to be much more careful. So things aren't going to play out that way this time.”

“Just hold on, everyone,” Tom IV said, interrupting the conversation. “Let me find Tom and see what he's done. Then we can have an extended discussion on metaphysics.”

Mr. Swift nodded. “You're right. Find out what my son did. Then we'll plot a course of action.”

\* \* \* \* \*

Even with the search criteria narrowed it still took Tom IV an hour to trace events through time. When he finally had everything figured out he turned around to face the group.

“Here's what happened. First of all, Mr. Swift was right – Tom Jr. did go back in time. He appeared over New York City just a few hours before the reactor went critical. However—”



Tom IV suddenly stopped. He looked acutely uncomfortable. “Look. You have to understand that I told him to never build a time machine. Bud was there – he knows what I said! And on top of that, Tom did *not* get the plans through me. I didn't even know he had them until it was too late to stop him from using them.”

“No one's blaming you,” Anita replied.

“What are you getting at?” Mr. Swift asked.

Tom IV sighed. “I will admit I had a copy of Dr. Reisenbach's notes in my office. I knew better than to do that, but I really hated to destroy them. His theories on time were unlike anything I've ever seen before. I was hoping to sanitize his paper and then release it to the scientific community. It had the potential to revolutionize the field of physics.”

“Ok,” Tom III said. “So?”

“So the point is, I, um, well, I modified the document a bit. In order to protect the secret of time travel I changed a few equations in a way that would be impossible to spot. That way anyone who found the documents would eventually conclude they were worthless and throw them out.”

Mr. Swift stared at Tom IV intently. “So you're saying my son used blueprints that had been tampered with?”

“Yes, but they were tampered with in such a way that any trigger built from them should have failed *entirely*,” Tom IV said defensively. “Somehow Tom found a way around the problems I created. I don't know how he did it, but he got it to work well enough to take him back in time. However, the time trigger wasn't stable. Instead of cleanly transporting himself into the past it just collapsed.”

“What effect did that have?” Mr. Swift asked.

Tom IV paused for a moment. “It destroyed New York City.”

“What?” Mr. Swift gasped. “How is that possible?”

“Hey, there's a lot of energy involved in time travel! I've told everyone repeatedly that time travel is not safe and can do horrible things. It could have been a lot worse! The collapse could have caused reality itself to unravel, which might ultimately have led to the destruction of the entire universe.”

“That was a distinct possibility,” Aristotle confirmed.

“Now hold on,” Anita said. “Aren't *we* about to travel back in time? And you're saying that could destroy *everything*?”

“Not in our case,” Tom IV hasten to add. “My time trigger actually works. I wouldn't recommend using it very often but it will work this once.”

“A nuclear war,” Mr. Swift said softly. “That's horrifying.” He gazed at the ruined planet, lost in his thoughts. “Washington must have thought the Brungarians were responsible so they retaliated. In the end everyone died. That was exactly what I was afraid might happen that day. In fact, had Irene not sacrificed her life to deliver me the spare parts I needed that's what *would* have happened. My son has undone the very thing Irene sacrificed her life to prevent.”

“Let's not forget Tom IV's role in all this,” Anita pointed out. “He's the one that poisoned the plans.”

“You can't blame this on him,” Ben Walking Eagle protested. “He told Tom not to use them! This is all his fault.”

“We can discuss who's to blame blame later,” Mr. Swift said firmly, ending the discussion. “Right now we need to find a way to fix this problem. Are there any ideas?”

“Now hold on,” Bud protested. “I don't understand this at all. What about our meeting at the Tomasite plant?”

“I don't think that's going to happen now,” Tom IV replied. “After all, there's no reason for us to go to California.”

“Then who did we meet that day?” Bud asked.

Everyone looked at Tom IV, who shrugged. “Don't look at me, people! I don't have any answers. All along I've told everyone to never, ever get mixed up with time travel. The only thing I know is that it should never, ever be done. Ever.”

“I have a guess,” Mr. Swift replied. “At one point there must have been a version of the timeline in which you and Tom were not introduced by Tom IV. Instead, you met because Tom needed a pilot and you were the only one available. After Irene died, however, Tom went back in time to save her. Something must have gone wrong and Tom IV took Bud and myself back in time

to fix the problem.”

“Just like now,” Anita replied.

Mr. Swift nodded. “Quite so. Only, for whatever reason, Tom went to the Tomasite reactor instead of California. Whatever happened that day changed the timeline but did not result in saving Irene. When Tom finally met Tom IV he once again attempted time travel. This time, however, things were different. My son already had knowledge of time travel and of Tom IV. Somehow that changed the way events played out and led us to the situation we have today.”

“That's crazy,” Anita replied.

Bud shook his head. “I just don't get it. You're saying that we're not going to go to California because some other past version of us already went?”

“I am,” Mr. Swift said.

“That's quite a mess you've got going on,” Tom III remarked. “It sounds like even if we do fix the past, this whole time-travel business could continue on forever. Last time you guys went to California – and who knows, maybe we went with you. This time it's New York. I wonder what will happen on the next iteration?”

“That's *not* going to happen,” Tom IV said firmly. “This is where it all ends. I am not going to keep this loop up for the rest of eternity.”

“You could have said that last time,” Anita pointed out.

“Enough,” Mr. Swift interrupted. “What's done is done. The question we're now faced with is this: what do we do now?”

Everyone looked at Tom IV, who shifted uncomfortably in his seat. “I know, I know. All this time travel stuff is my invention. Let me think. Well, there may be way we can undo this. If we can stabilize Tom Jr.'s re-entry into the past we should be able to prevent the explosion that altered the timeline. Then the nuclear war will have never happened and things will go back to normal. All we'll then have to do is prevent the nanite flood, which should be as easy as taking the blueprints from Ed and beating some sense into him.”

“Can we do all that without going back in time?” Anita asked.

"I'm afraid not," Tom IV replied. "I think I can extend the time trigger's effective radius enough to encompass Tom Jr.'s machine and use it to stabilize his entry. However, we're going to have to be at that precise moment in time to do that."

"Now wait a minute," Anita protested. "Before we were just going to go back a couple weeks to have a one-on-one meeting with a single person. Now we're talking about a much bigger expedition. I don't like this."

"It's either that or go home," Tom III said, sighing. "Tom's right – we don't have a lot of options. Either we fix this new problem that Tom Jr. created or we leave the world knee-deep in ashes."

Everyone looked at Mr. Swift. For a while he said nothing. "What are the risks?" he asked.

"Minimal," Tom IV said. "We shouldn't have any problems traveling back in time. It will be painless."

"What about this whole 'extend the time field' thing?" Anita asked. "Have you done that before?"

"Not exactly," Tom IV admitted. "I mean, I understand the theory behind it. I think the math works out. But – well, anything could happen, I guess."

Mr. Swift nodded. "Thank you, Tom. Given those facts, these are my observations. If we try this and fail, the explosion will still happen and history will once again get to this point. In that case we will have done no further harm. However, if we try this and succeed then history will revert to the timeline where nanites destroyed the planet. If we can then stop the nanites from being created then the problem will have truly been solved. Given that, I believe the attempt is worth the risk."

"I agree," Tom III said, after a moment's hesitation.

"I'm in too," Tom IV said. "It'll take a moment for me to crunch the numbers. I'll get right on it" He turned back to the keyboard and started typing.

"Hey – what about my vote?" Anita asked.

Ben Walking Eagle smiled. "Well, if you don't want to come—"

“-I can be dropped off at home,” Anita finished. “I know. No thanks.”

Bud Barclay suddenly spoke up. “Hold on. Wait just a minute! Why do we still exist?”

“What do you mean?” Mr. Swift asked.

“Well, the whole planet was destroyed in a nuclear war, right? Don't you think we probably died in it? So, if we died in the past, why are we still alive?”

“You're from a different timeline altogether,” Tom III pointed out. “Maybe that's why.”

“But wouldn't that just make the problem worse?” Ben Walking Eagle asked. “When the timeline shifted why didn't they vanish with it?”

“They were in a different universe at the time,” Tom III replied. “Maybe the law of causality doesn't apply when you start traveling through the multiverse.”

“What does that mean?” Bud asked, puzzled. “I'm sorry, guys, but not all of us majored in temporal mechanics. I was more of a football guy when I was in high school.”

Mr. Swift smiled. “What they mean, Bud, is that we will probably never know why we're here. However, we are here, and that is a tremendous stroke of luck. It gives us a chance to make a difference.”

Bud nodded. “I'll accept that. But there is one other thing. What are we going to do about Irene? I mean, I know she's not the reason we're going back in time, but since we'll be there anyway shouldn't we try to rescue her?”

Mr. Swift nodded. “That is an excellent point. Aristotle, does this ship have the ability to rescue a person from a plane that is moving at supersonic speeds?”

“It does,” the robot replied. “If you so desired I could extract Irene Goddard from the hyperplane moments before it crashes. I assume you would want me to act in a way that preserves the integrity of the original timeline.”

“I think that would be wise,” Mr. Swift said. “I don't want to risk causing even more problems.”

“But what about her radiation sickness?” Bud asked. “I mean, in this timeline aren't the translators still on Thanatos?”

“That will not be a problem,” Aristotle replied. “We have the ability to treat her on-board.”

Mr. Swift was surprised. “You can treat advanced cases of radiation sickness?”

Ben Walking Eagle nodded. “A while back we went to a crazy planet called Kwortu'um. While we were there we got a special molecule that can cure pretty much anything. It's astonishing – it's completely revolutionized the field of medicine.”

“It's astonishing we survived going there,” Anita replied. “Those people are insane.”

“I don't know if you'd call them *people*, exactly,” Ben commented. “They certainly weren't human.”

“All I know is we are *never* going back there,” Anita said firmly. “It's not a happy place.”

“I'll second that motion,” Tom III said, grinning.

Twenty minutes later Tom IV spoke up. “I think I'm done here! Aristotle, can you double-check these numbers?”

It took the machine only a moment to double-check Tom IV's mathematical equations. “Most impressive! Your calculations appear to be correct. You even took into account the planet's motion through space.”

“He did what?” Bud asked.

“Three years ago the planet was in a different place than it is now,” Tom IV explained. “As time goes on the Earth moves around the Sun, the Sun moves around the galaxy, and even the galaxy itself moves through space. When you jump back in time you've got to take all of that into account or you'll end up out in space somewhere, thousands of miles from where you want to be.”

“I never thought of that,” Bud remarked. “I'm glad you've got all the math worked out.”

“Thanks,” Tom IV said. “Let's hope reality agrees with my numbers.” He turned to Tom III. “I'm going to set the time trigger

to drop us out about three hours before Tom Jr. arrives.”

Tom III nodded with satisfaction. “That should give me plenty of time to get the *Exedra* into position over New York City. I'll make sure the ship's cloaking field is activated so no one will even know we're there.”

After making sure everyone was ready Tom IV activated the time trigger. The viewscreen went black. There was a slight sense of nausea, but other than that there was no way to tell that the ship was traveling through time.

“What happened to the screen?” Anita asked.

“Right now there's nothing out there for the ship's sensors to detect,” Tom IV explained. “We're not really in normal space anymore. You might say we're *between* spaces.”

A moment later the feeling of nausea stopped and the viewscreen came back to life. This time it showed a lush, green planet.

“Aristotle?” Tom IV asked.

“We appear to be exactly where you predicted,” the robot replied. “I detect no anomalies.”

Tom III nodded. He carefully maneuvered the *Exedra* out of orbit and toward the thriving metropolis of New York City. After forty-five minutes the starship was in position.

“Now we wait,” Mr. Swift said.

Time passed. Mr. Swift stared quietly at the viewscreen, thinking about the events that had happened that day. Bud saw the intent look on his face and walked over to talk to him.

“It's weird, thinking that Irene is still alive right now,” Bud said.

Mr. Swift nodded. “It gives me chills to think that in a few hours she'll be on board this ship. I'm not sure what to say to her.”

“I bet she'll be quite surprised to see us!”

“Probably, but even so, it will be more awkward for us than it will be for her. She doesn't know that she's been dead for years. For her it's only been a short time since she last saw you.”

“I wonder what her parents will think,” Bud said.

Mr. Swift shook his head. “Losing a child is perhaps the most terrible thing that a parent can go through. I think the Goddards will be delighted to have her back, but I don't know. It's hard to predict what sort of psychological impact this will have on them. It will certainly be an unexpected shock.”

He sighed and looked at the viewscreen again. “Too much has happened recently, Bud. I feel like I'm numb to what's going on. Both of us watched our planet destroyed, and then we came back to find it had been destroyed again. This is going to take a long time to sort out.”

“I think we'll fix it,” Bud said confidently. “Things will be back to normal soon.”

Mr. Swift shook his head. “Things will never be back to normal. Whatever we do here will change the future forever. Whether we're able to save Irene or not, your life – and my son's life – will never be the same again.”

“But in a good way, right?” Bud asked.

“I don't know,” Mr. Swift replied, sighing.

\* \* \* \* \*

“I don't get you guys,” Anita complained. “I mean, here we are, traveling back in time! Where's the excitement?”

“We'll get excited later,” Tom IV said. “After we're safely home.”

“But this is still an amazing occasion! I mean, think about it. How many people get to travel back in time?”

Ben Walking Eagle shrugged. “Sure, but this is happening in someone else's universe. To me it's more like visiting a new planet. It'd be different if we were back in New Mexico. We don't even know the people here.”

“Quiet, please,” Tom IV said. “Tom Jr. will arrive in less than a minute.”

There was silence on the bridge. Tom IV pressed some buttons on the keyboard and confirmed his settings for the ninth time. He then sat quietly, nervously, watching the screen.



“Here it comes,” he whispered to himself. “Five...four...three...two...*NOW!*”

The whole ship shook. Tom IV felt an intense feeling of nausea. There was a brilliant flash of light, and something collided violently with the *Exedra*. A horrible grinding noise echoed through the ship. A moment later the feeling of nausea faded away and the grinding noise stopped. The power flickered briefly but remained online.

Mr. Swift looked at the viewscreen. “Well, New York City is still there and I see no signs of an explosion. Does that mean—”

A siren suddenly went off! Red lights began flashing.

“What's going on?” Tom III asked. He dashed to the controls frantically.

“A fire has broken out on deck two,” Aristotle reported.

Tom IV gasped. “That's where all the time-travel equipment is stored!”

A muffled *boom* was heard in the rear of the ship. The deck shuddered.

“What was that?” Anita asked.

“I think our ride home just went up in smoke,” Tom IV replied. “If the time trigger's been destroyed we'll have no way to get back to the future!”



## CHAPTER 16: DEFEAT

TOM SWIFT JR HAD CONFIGURED HIS time machine so it would appear in New York City about six hours before Irene arrived in the hyperplane. *That will give me plenty of time to get set up and allow for a margin of error in my calculations*, he thought. *After all, if I cut things too close and the trigger turns out to be imprecise then I might miss her arrival entirely.*

At first the jump into time travel gave Tom an abrupt case of nausea. After a few moments, however, the feeling subsided. He watched, fascinated, as shifting patterns of purple and blue flashed outside the window. *I wonder if those patterns have a meaning*, Tom thought. The atomicar was occasionally buffeted by turbulence but overall the ride was quite smooth.

When the indicator on the dashboard finally hit zero the purple lights vanished and reality returned. For a brief moment Tom had a gorgeous panoramic view of New York City. He could even see his father's reactor in the distance – a sure sign that he had arrived at the correct moment in history.

Then, without warning, the semi violently struck something! There was a sickening crunching noise, followed by the sound of metal grinding against metal. Tom watched in horror as the semi's trailer was ripped off and thrown across the sky. Its shattered remains plunged into the bay below and sank out of sight.

Tom had no time to dwell on this, however. A host of warning lights flashed on the dashboard and the atomicar rapidly lost altitude. The young inventor desperately tried to gun the repelatrions but they appeared to be inoperable. Tom was on the

verge of panic. *The power's gone!* As the semi fell out of the sky he desperately worked at the controls, attempting to channel whatever energy was left to any repelatron that might still be working.

With barely a thousand feet to spare one of the repelatrons weakly came to life. Tom gunned it. The descent slowed but did not stop. Tom quickly looked around for a safe place to crash and saw a vacant lot by a beach on the coast. He tried to aim the atomicar for that lot and then braced himself.

The semi plunged into the ground, scattering sand and bits of broken metal everywhere. Tom was nearly yanked from his seat as the semi skidded down the beach, tumbling once or twice before finally coming to rest on its side.

When the moving finally stopped Tom remained still for a moment, trying to catch his breath. It took him a while to regain his senses. He then unbuckled his seatbelt, climbed up the seat, threw open the door, and walked outside.

The semi was a mess. The damage was so great that the vehicle was almost unrecognizable. *At least I survived*, Tom thought. *That's something to be thankful for. There's no telling what might have happened to the timeline if I'd been killed. Let's see if there's anything here that I can salvage.*

Tom spent the next half-hour doing a thorough examination of the ruined semi. As he expected, the atomicar was no longer drivable. However, two of the vehicle's four atomic power capsules were still functioning and Tom was able to reconnect them to the main power distributor. Once he had power back online he was able to jury-rig his time dilator. *At least I can get back to the future now*, he thought.

With a little effort he was able to salvage several of the repelatron dishes. *It's not pretty but I'll be able to move the vehicle. The question is, where do I go?*

It was at that point that Tom remembered what had happened to the trailer. His heart sank. The trailer contained all the equipment he needed to rescue Irene; without it he was helpless. Even the time trigger was stored there. There was no way he

could build a Transmittaton in the few hours he had left, and even if he could, the science of the alien translator was beyond him.

*I don't understand, Tom thought helplessly. What went wrong? What could I possibly have collided with? There was nothing up there in the sky – nothing! How could I smash into an object that wasn't even there? All my precious equipment is now at the bottom of the bay. There's no way I could salvage it, and even if I could it wouldn't be worth salvaging. What am I going to do now?*

For a long time Tom did nothing. He sat on the beach and stared out to sea. To his left he could see his father's power plant. He knew that if he waited long enough he would see the hyperplane streak overhead and crash into the ocean. *I can't watch her die, Tom thought. I can't go through that again. It's just not fair! Irene is alive right now and I can't get to her. I can't even see her!*

Tom's anger eventually faded, replaced by deep sorrow and regret – a grief beyond words. He found himself unable to move – unable to do anything. He just sat on the beach beside his ruined semi and waited for the inevitable.

He wasn't sure how much time passed. His grief was so great that time no longer seemed to have a meaning. When it finally happened he almost missed it. Out of the corner of his eye he saw something streak across the sky at an unbelievable pace. It soared off to the horizon and then came down to meet the ocean, which it struck with unbelievable force. There was a giant plume of water and smoke, and then it was all over.

The first time Irene died Tom had only heard about it after the fact. This time he was able to watch it himself. It was a horrible feeling – the worst feeling in the world. He had spent years longing for the day he could rescue the woman he loved, and when that day finally came all he could do was watch her die again. Tom felt an overwhelming rush of sorrow. He finally broke down and cried, and for a long time he did nothing else.

When the sun began to set Tom pulled himself together and stood up. *I guess I'd better be getting home*, he thought. All of the life had been drained out of him. He didn't care about anything anymore and he wasn't sure if he would ever care about anything again. His world had just come to an end. All he really wanted to do was lay down and die.

As he climbed in the ruined cab he sighed. *I guess I'd better go talk to Ed. Otherwise I won't have a world to go home to.*

He reached over to activate the time dilator and then stopped himself. "What am I doing?" he said aloud. "I can't timeshift here! People would definitely notice that something strange was going on. I've got to find a place that's a lot more secluded than this beach."

Tom gunned the repelatrons and the ruined cab gingerly rose off the beach and righted itself. He then drove the cab out to sea and descended deep into the ocean, using the repelatrons to create a bubble of air around him. When he had reached what he felt was a safe depth he configured the time dilator.

*I'm going to do this right*, Tom thought to himself. *I don't have a time machine anymore so I can't go back if I miss my mark. The best thing to do is to re-enter history just before I would have given Ed the plans for my claytronic stones. That way I can make sure he never gets them in the first place. I don't dare let those blueprints anywhere near his office.*

He set the coordinates and pressed the button. The time dilator activated, and a moment later it turned itself off. It seemed like only a second had passed.

*Let's see if that thing still works*, Tom thought. He activated the repelatrons and rose out of the ocean. The first thing he noticed was that his father's Tomasite reactor was gone. He flew the ruined semi onto the beach, took out his pencil radio, and attempted to contact the outpost in space.

Laurence Grinsby answered. "Hey there, skipper! What's up?"

"I need you to do me a favor," Tom said. "Can you transport me to Ed Gamino's office?"

"Can do!" the Transmittaton chief answered cheerfully. "It

sounds like you got your claytronic stones working!”

“You bet I did,” Tom replied evenly. “And it's time to tell Ed all about it.”

The young inventor felt the Transmittaton tugging at him. There was a flash of light, and a moment later he materialized inside Ed's office. The large man looked up at him in surprise. “Why Tom!” he exclaimed. “I see you're not a man to waste time. Transport yourself right here – that's the ticket! I like your style.”

Tom marched over to the desk and looked at Ed in the eye. “I will never give you the plans for my claytronic stones. *Never!* I will die before I see that information fall into your hands, you monster.”

Ed was completely taken aback. He was shocked at the genuine anger that radiated from Tom. “Why Tom! What's happened? Did something go wrong?”

“Go *wrong*? I'll say it went wrong! I gave those plans to you in good faith, Ed, after you promised to never use them. And do you know what you did? You used them to destroy the entire world! Every single last person on Earth died because you were too stupid to leave them alone!”

“What are you talking about?” Ed replied, gasping. “I don't have the plans for your stones – you haven't even given them to me yet! What are you talking about?”

“But I *did* give them to you,” Tom shouted. “On this very night I gave them to you, and in return you gave me the plans for the time trigger. It was the worst mistake I ever made! Billions of people died because of what I did. Do you know what it's like to watch your whole world be destroyed?”

Ed stared at Tom, open-mouthed. He didn't know what to say. “But if the whole world was destroyed, then – oh – you must be from the future. I guess you already have the time trigger plans, then.”

“If I didn't,” Tom growled through gritted teeth, “you, and the rest of the world, would be dead by this time next week. And I am not going to let that happen again.”

Tom grabbed an ashtray off the desk and walked over to the

filing cabinet that was behind Ed. He used the ashtray to bash the lock off of the top drawer, then yanked the drawer open and grabbed the blue folder labeled "Time Trigger". Without looking at its contents he snatched a lighter off the desk, set the folder on fire, and tossed the flaming folder into the trashcan. Ed watched, shocked, as the plans burned to ashes.

"I guess that's that, then," Ed replied weakly. "But at least you can travel through time now. Have you rescued Irene yet?"

Tom stared at Ed, and then looked away. He tossed the ashtray and the lighter back on his desk. "Time travel doesn't work that way," he said at last. "I wasn't able to rescue her. The only thing we accomplished here was the destruction of all life on earth. At least I can prevent that."

"Well, thanks for stopping by," Ed said weakly. "It's always a pleasure to do business with you."

The young inventor turned to look at Ed. "You haven't seen the last of me. I'm going to be back later this week to see if you actually destroyed the Negative Zone or not. If I find out that you haven't, not only will I destroy it myself but I will personally see to it that you are placed in more trouble than you will ever be able to get out of. I have contacts in high places that can make sure you never see daylight again."

"There's no reason to threaten anyone," Ed replied hastily. "Don't give it another thought. I'm not a dangerous man."

"That's exactly the kind of thinking that destroyed the whole world," Tom snarled. He stormed out of the office and slammed the door behind him, leaving a badly shaken man in his wake.



## CHAPTER 17: HOMEWARD BOUND

AS SIRENS BLARED, TOM SWIFT IV raced toward the second deck of the *Exedra*. Tom Swift Sr. and Bud Barclay followed close behind him. By the time they reached the room that held the time-travel equipment, however, the excitement was over. The starship's automatic fire-detection systems had already put out the blaze, burying sensitive electronic equipment in mounds of chemical foam.

“This is terrible!” Tom IV said glumly.

“Tom III really does need better fire-fighting equipment,” Mr. Swift agreed. “Back at the plant we've developed some pellets that do a much better job of putting out fires.”

“Or you could just evacuate all the air out of the room,” Bud pointed out. “I've seen Tom do that several times. It's a whole lot cleaner than this mess.”

“Who cares?” Tom IV replied. He yanked a blackened circuit board out of a charred computer and held it up. “Do you see this? This control board was burnt to a cinder! By the time that foam shorted everything out it was already too late. How are we going to get back home without the time trigger?”

“There are actually several ways to do it,” Mr. Swift replied thoughtfully. “Traveling into the future is much easier than traveling into the past. In fact, all of us are constantly traveling into the future. It's a very difficult thing to avoid.”

“You're hilarious,” Tom IV grumbled. “You're not really suggesting that we just wait around for a couple years, are you? That's crazy!”

“What about the time dilator?” Bud asked. “I’ve seen Tom alter time with that.”

“I’m afraid we don’t have one of those on board,” Mr Swift replied. “Fortunately, however, we don’t need anything quite that exotic. Doesn’t the *Exedra* have a lightspeed drive?”

“I think so,” Tom IV said. “Oh, I get it! You’re thinking we should just travel at the speed of light for a while, in some sort of loop that would take us back to Earth. Since we’d be traveling at the speed of light time would stop for us but would continue to flow for everyone else.”

“Exactly. It should be quite simple. I imagine Aristotle could perform the necessary calculations and ensure we arrive back at Earth in time to prevent the impending nanite flood.”

“I guess you’re right,” Tom IV said. “I’m sorry I lost it. I just got upset when I saw all this equipment destroyed. It wasn’t easy to build, you know.”

“But it *did* have to be destroyed,” Mr. Swift said firmly. “If we’ve learned anything at all today it’s that time travel should be avoided at all costs.”

“Agreed,” Tom IV said reluctantly.

The trio returned to the bridge and told everyone the news. Tom III informed them that the *Exedra* had suffered a hull breach but its primary systems were still operational. “We’ve been able to route around the damage and seal off the affected areas. What I don’t understand is what could have hit us.”

“What do the on-board cameras show?” Mr. Swift asked.

Tom III pressed a series of buttons on a keyboard. In a few moments the videoscreen had loaded the recording. At first they saw nothing of significance. Then there was a brief flash of light and a large semi appeared right next to the *Exedra*, moving at high speed. It collided violently with the starship, tearing both vehicles apart. A moment later a piece of debris soared toward the camera and the screen abruptly went black.

“That’s all we’ve got,” Tom III announced.

“What in the world was a semi doing at 30,000 feet?” Anita asked.

“That was my son, flying one of our triphibian atomicars,” Mr. Swift said. “We should have known this would happen. The *Exedra* had to be extremely close to Tom in order to surround him with our time field. As it turned out, we got too close and collided.”

“That was a *car*?” Ben Walking Eagle replied doubtfully. “It looked more like an eighteen-wheeler to me.”

“The atomicars come in many models, including a line that is dedicated to freight transport,” Mr. Swift explained. “Tom must have borrowed one of the larger units so he could carry equipment with him.”

“You make flying trucks in your world?” Anita asked. “Why would you ever do such a thing?”

“They're quite useful in Africa,” Mr. Swift explained. “In our world many places do not have roads, or if they do they're little more than dirt paths. Technology like that is especially useful in developing countries.”

“But what happened to Tom?” Bud asked. “Is he still out there somewhere? Where did the semi go after it hit us?”

Tom III worked at the controls of the ship for a moment. “I'm detecting faint traces of temporal distortion at the bottom of the bay,” he said quietly. He used the *Exedra's* scanners to zoom in on the location. The water obscured the picture but they could still make out the twisted remains of a semi trailer, partly buried in ocean sediment. “The signal is rapidly fading, by the way. I think Tom's time trigger is shorting out.”

“I don't see the cab anywhere,” Bud said.

“It's hard to see anything in that picture,” Anita remarked.

There was silence for a few moments and then Mr. Swift spoke up. “I hesitate to suggest this but I think we should call off the search. If we continue probing around and asking questions we risk changing the timeline, and it's hard to know what consequences that might have. If my son is alive he will find a way home – he's a Swift, after all.”

“You're probably right,” Tom IV said. “Besides, we don't really know a whole lot about how time travel works. Right now

there could be *two* Tom Swift Jr.'s alive. What happens if past-TSJ survives while future-TSJ dies? I mean, at some point past-TSJ is going to become future-TSJ, and if he then decides *not* to travel back in time—”

“We can debate causality another day,” Mr. Swift said, cutting him off. “Right now we have more pressing matters to attend to. I believe Irene will be arriving shortly. Are we ready to take her on board?”

\* \* \* \* \*

Irene Goddard awoke with a start inside the nuclear hyperplane. She struggled to open her eyes and glanced down at her position. The girl gasped when she realized that her plane was now soaring over the United States. *I must have passed out*, she thought to herself. The girl struggled to breathe. *I feel so sick*.

It had not been long since she took off from Brungaria, but the radiation output from the poorly-shielded reactor was so high that she was already feeling the effects of radiation sickness. The girl felt severe nausea and was having trouble staying conscious. Her thoughts were erratic and she found it almost impossible to focus on flying the plane. *My head is killing me. I feel so weak and disoriented*.

With what little energy remained Irene corrected her course, cut her speed, and put the plane on autopilot. The cargo bay doors would automatically open at the correct time, delivering the plane's much-needed cargo to the Tomasite reactor. She then contacted New York City for the last time. Mr. Swift answered the call. “Hello?” he said.

“Hey,” Irene said, struggling to speak. The very act of talking was almost impossible. She knew she had only a few moments left to live.

“Irene?” Mr. Swift said, with concern in his voice. “How are you feeling?”

The girl ignored his question. “I'm almost there. I've set up a timed drop. You should be able to track the package on radar after

it leaves the plane. It should land near you.”

“We'll be watching for it,” Mr. Swift replied. She heard him hesitate. “My son called. He wanted to know if there were any problems with your hyperplane.”

Irene smiled despite her pain. “So he figured it out.” She suddenly started coughing for a minute, but finally regained control of her voice. “He's a smart kid. Yeah, the jet has some problems. I think this will be its final flight.”

“Where you are going to land?” Mr. Swift asked quietly.

“I won't be conscious that long,” she said quietly. “Sorry.”

“Can you eject?” Mr. Swift asked.

She was about to speak when she suddenly felt a tingly sensation, as if something was pulling at her. As everything went black she thought *Oh, Tom, what have you done?*

After a period of time Irene felt herself slowly regaining consciousness. Her eyes fluttered open. Above her was a white ceiling that had no visible lights. The room appeared to be lit from some unseen source. *Interesting*, she thought.

“There you are,” a female voice said. “I was wondering how long it'd take the Kwortese molecule to do its work! You're responding very well to treatment.”

The girl sat up and saw that she was lying on an uncomfortable hospital bed. The room was filled with medical equipment, much of which she had never seen before. Sitting beside her was a teenage girl with pale skin and thick red hair. It was obvious that the girl knew Irene.

“Where am I?” Irene asked.

“In sickbay,” the girl replied. “I'm Anita Thorwald, by the way, and it's quite an honor to meet you! I've heard so much about you over the years.”

The teenage girl was taken aback. “I'm so sorry, but I'm afraid I don't know who you are. Have we met?”

Anita laughed. “Oh no! Not until just now, anyway. We're from two very different places.”

As Irene became fully awake she was surprised to find that

she felt much better. The nausea and headache had disappeared completely and she could think clearly again. “What just happened? How did I get here?”

“First, let me assure you that everything worked out just fine,” Anita replied. “Tom Swift used the computer you provided to shut down that reactor of his. Xanthus was taken into custody and the global nuclear war was prevented.”

“What about Tom?” Irene asked. “Did he make it back?”

“He did. He and Bud Barclay became the best of friends and went on to have many adventures. He became perhaps the most famous inventor of all time, but I'll let him tell you all about that.”

*Tom had 'many adventures'? Just how long have I been out?* Aloud she asked “Where is he?”

Anita sighed. “We don't really know. It's a long story, actually.”

At that moment the door opened and Mr. Swift walked into the room, followed by Bud Barclay. As soon as Bud saw Irene he broke into a huge grin. “Wow, you made it! Way to go! I just knew you'd pull through. Look at you!”

“Hey,” Irene replied, smiling. “It's good to see you too! I'm glad you made it out of Brungaria in one piece. I knew you would, though – you're a crack pilot, after all. I just hope Tom didn't get too upset over the little trick I pulled on him.”

“I'm afraid he never got over it,” Mr. Swift remarked. The elderly inventor sat down beside Irene and took her hand. She was surprised to see tears in his eyes. “My son spent years heartbroken over you. He tried so hard to get you back. He really believed he could save you.”

“Years?” Irene asked. “What do you mean, years? Have I been in a coma or something?”

“You didn't make it,” Mr. Swift said quietly. “You died when the hyperplane struck the ocean. People from all over the world came to attend your funeral. Your sacrifice made you a hero – one of the great legends of all time. You became known as the girl who gave her life in order to give mankind another chance.”

“And Tom brought me back to life?” Irene asked dubiously.

“Not exactly,” Bud said. “It’s a lot more complicated than that.”

“Then let’s start at the beginning, Bud. First of all, where am I? Is this the infirmary at Swift Enterprises?”

“You’re actually on the starship *Exedra*,” Anita explained.

Irene’s eyes widened. “A starship? So you’re from the *future*?”

“Yes and no,” Anita replied.

“What do you mean, ‘yes and no’? You either are or you’re not, right?”

“We’re not all from the *same* future,” Anita explained. “Mr. Swift and Bud are, but I’m actually from a parallel universe. My friends and I just came along because Mr. Swift wanted to borrow a time machine built by a Tom Swift from a *different* parallel universe, but he didn’t have a starship. Since Mr. Swift’s planet had just been destroyed they came to our universe to get the *Exedra*.”

“Oh boy,” Irene replied. “I see Tom’s been getting into all kinds of trouble in my absence. What’s been going on?”

It took Mr. Swift about an hour to explain to Irene how she came to find herself in the sick bay of the *Exedra*. By the time he finished his story Tom Swift IV had entered the room. “Everything’s ready!” he reported. “We’re leaving New York now and are heading out into space. Once we get clear of the planet’s atmosphere we’ll engage the lightspeed drive.”

“Which Tom are you?” Irene asked.

“IV,” he replied. “It’s good to see you, by the way! I’m glad that alien molecule was able to patch you up. I’m sorry I haven’t had time to chat but I’ve been busy trying to work out a jump into the future. I’ve never done anything like that before and there’s not a lot of room for error.”

“I still can’t believe all this,” Irene said. “Time travel! Parallel universes! Timeline problems! The end of the world! What on earth have you guys gotten yourselves into? Have all of you lost your minds?”

“Mostly just Tom,” Bud explained. “We all tried to stop him

but he's a pretty hard guy to stop.”

Irene sighed. “You're telling me! I know exactly what that's like. I did warn him not to come after me, though. I made it very clear in my final message that he needed to let go and move on. I guess he didn't want to hear that.”

“Don't be too hard on him,” Mr. Swift cautioned. “He loved you very much. Losing you changed him. It was a very difficult thing for all of us to go through.”

“I'm sure it was,” Irene said softly. “Thank you so much for rescuing me. I don't mean to sound ungrateful – it is a miracle to have a second chance at life. And I can't tell how excited I am to see the future! This is going to be *great*. I can't wait to see what I've missed!”

Irene got out of bed and stretched. She then glanced down at the outfit she was wearing. “Oh my goodness! I'm a mess. I can't let Tom see me like this! I haven't bathed since we left California and my hair is a wreck. Anita, is there a shower on board this ship of yours?”

“Right this way,” Anita replied. “I think I might even have a change of clothes that's your size.”

As Anita led Irene away the rest of the group made it back to the bridge. Tom III took control of the *Exedra* and navigated it out of the Earth's atmosphere and into space. There was silence for a while and then Bud spoke up. “Hey, aren't we going to have a problem when we get home?”

“Oh?” Mr. Swift asked.

“Please tell me this isn't another causality issue,” Tom IV begged.

“I'm just confused,” Bud explained. “Right now there are two Tom Swift Sr.'s in the world. Right? There's you, right there, and there's also the one at the Tomasite plant.”

“True,” Mr. Swift replied. “As far as we know our past selves are still alive.”

“Right. So won't there still be two Tom Swifts when we get back to the future? Doesn't that mean that the future is going to



have *two* Tom Swift Sr.'s and two Bud Barclays – and maybe two Tom Swift Jr.'s as well, for that matter?”

“Hey, that's a good point,” Tom III remarked. “I never thought of that.”

“But there won't be two of *us*, right?” Ben Walking Eagle said. “We're just going to go back to our own universe. I mean, sure, there might be two Bens walking around for a day or two if we happen to go back to a past version of our universe, but the past-Ben would eventually go back in time and leave me there. Past-Ben would turn into future-Ben.”

“But what if you met this past-Ben and convinced him *not* to go back in time?” Tom III asked. “Would you disappear or would there be two Bens at that point?”

“Mr. Swift didn't disappear when the past version of himself was killed in the nuclear war,” Ben pointed out. “The law of causality seems to break down when you start messing with time travel.”

“I think it might be a matter of distance,” Mr. Swift said thoughtfully. “Both my past and future selves can coexist right now because those two selves are separated by many years of time. However, it's possible that when we return to the future we will replace the alternate versions of ourselves. Since they're so close together in time the waveforms might be forced to collapse, leaving just a single version of the person.”

“Waveforms?” Bud asked dubiously.

“It's all in the mathematics,” Mr. Swift explained.

“It's like cars in a parking lot,” Tom IV remarked. “Two cars can park next to each other just fine. However, if you try to shove both cars into the same parking place, one car is going to displace the other. The theory is that when we get back home we'll 'displace' our other selves.”

“Unless they displace us,” Tom III said.

“It's a possibility,” Mr. Swift remarked.

When the *Exedra* finally reached a safe distance from Earth Aristotle engaged the ship's lightspeed drive. The drive was

disengaged a few seconds later. A picture of the Earth reappeared on the forward viewscreen – one that looked identical to the planet they had just left.

“Did it work?” Tom IV asked.

“One moment,” Aristotle replied. “Yes, I can confirm that we are at the correct time. The star alignments and planetary positions are correct.”

Mr. Swift let out a sigh of relief. “Thank you! In that case we have a job to do, gentlemen. Who would like to accompany me to see Ed?”

“I'm in,” Tom IV said. “I want to make it *very* clear what I think of people who steal from my lab.”

“I'll go,” Bud added.

“I'll stay here with the ship,” Tom III replied.

“I'll stay behind with Tom and Anita,” Ben Walking Eagle said.

“All right,” Mr. Swift replied. “Before you transport us down below can you confirm that Ed is in his office?”

“That appears to be the case,” Aristotle replied. “The ship's sensors are indicating a large life form at the location that you specified.”

“Then let's go,” Tom IV said grimly. “It's time to pay that man a little visit.”

\* \* \* \* \*

“You really *must* stop dropping in on me like that!” Ed complained. “Can't you call first and schedule an appointment, or at least knock? That's the whole reason I have a door – so people will have to open it *before* coming inside! What good is a door if you Swifts keep pulling these transporter stunts? It's very rude of you – very rude indeed!”

Tom Swift Sr., Bud Barclay, and Tom IV had materialized directly inside Ed's private office. Mr. Swift looked at Ed, puzzled. “I've never dropped in on you like this before! Besides, this is a urgent matter. I did not have the time to call ahead and

get on your calendar.”

“Maybe you haven't, but your son has! He dropped in a few days ago and read me the riot act. Didn't he tell you? He scared the willies out of me! I'm not going to cross him again – no sir! He's a real live wire, that one is.”

“Tom's been here?” Tom IV asked, surprised.

“Of course!” Ed looked at him, confused. “You look familiar. Do I know you? I feel like I should know who you are.”

“Yes, you should know me,” Tom IV said grimly. “You broke into my lab to steal my time trigger plans. And I am *not* happy about it.”

“Oh!” Ed exclaimed. “So you're Tom IV! I'm so sorry – I really am. I had the best of intentions! I meant no harm – no harm at all. But I'm afraid I can't give the plans back to you. Tom burned them – burned them right there in that trashcan. I don't know what got into him.”

“He *burned* them?” Tom IV asked incredulously.

“Don't you people ever communicate with each other?” Ed asked. “I mean, sorry. Yes, he was here. He told me those stones destroyed the entire universe. He wouldn't give me the plans for them, no sir! He was quite upset about. Accused me of wiping out all life on Earth! *Me!* Have you ever heard of such a thing?”

“Tom must have made it back after all,” Tom IV said.

Mr. Swift nodded. “I should have realized he would stop here. He's probably back at Swift Enterprises by now.”

“I'm sure he is,” Ed replied. “And if you'll excuse me I have work to do.”

“I'm sure you do,” Tom IV said. “But listen. You broke into my lab and stole something incredibly dangerous. Since you're a friend of Tom's I'm going to let it slide. But if I ever catch you traveling to my universe again–”

“I know, I know, there will be death and destruction,” Ed replied, sighing. “I should never have gotten mixed up with you Swifts. Never! You people lead the most horrible lives. I've had nothing but trouble these past few days and it's all your fault!”

“Things might improve if you stopped stealing things and

started keeping your promises,” Tom IV replied. “You might give that a try.”

“But I never even *had* the stones!” Ed cried out. “Here everyone is blaming me for using them in horrible ways, and I've never even so much as seen the cursed things.”

“If I were you I would be grateful for that,” Mr. Swift remarked. “Where I come from, the claytronic stones were the last things you ever saw.”

The two Toms then left the office. Ed looked at the door and sighed. “Maybe it's time for you to retire, Ed. Leave this inventing stuff to someone else. Fly fishing – that might be a good hobby for you to take up. Or perhaps championship bowling! Why not?”

\* \* \* \* \*

“So what do we do now?” Tom Swift III asked, after the group was back aboard the *Exedra*.

“I hate to impose on you, especially after all you've done, but can you stay with us for a few more hours?” Mr. Swift asked. “There are a few more loose ends that need to be tied up.”

“Certainly,” Tom III replied. “Besides, this is still the past for us. We'd have to travel into the future to get back to where we came from.”

Mr. Swift smiled. “Thank you so much. Could you contact the outpost in space and get me the Transmittaton chief? I think it's time I had a long talk with my son.”

“He doesn't know what we've been doing, does he?” Tom IV asked. “I bet you're going to have a lot to tell him!”

“I'm hoping he'll have a lot to tell me,” Mr. Swift replied.

Tom III typed away on a keyboard. A moment later Laurence Grinsby answered. “Hey there, sir! How can I help you?”

“Can you locate Tom for me?” Mr. Swift asked.

“Looks like he's in his office at Swift Enterprises,” Laurence remarked a minute later. “At least, that's where his wristwatch is, according to the plant's patrolscope system. Do you want me to

get him for you?"

"Actually, I'd rather be transported down there, if that's possible."

"Sure thing, chief," the officer replied. A moment later Mr. Swift disappeared from the bridge.



## CHAPTER 18: A FATHER-SON CONFERENCE

TOM SWIFT JR. LOOKED UP when he heard a knock on his office door. “Come on in,” he called out.

His father entered the office and closed the door behind him. “I hope I'm not disturbing you, son.”

“No, you're not,” Tom said, sighing. The young inventor was sitting behind his desk. There was a stack of papers on it but Tom had not touched them in days. His father could tell that he was preoccupied.

“I'm surprised to find you here,” Mr. Swift remarked as he took a seat. “It's quite unusual to find you in your office.”

“I've just been doing a lot of thinking lately, Dad. I haven't been in an inventive mood.”

“I can understand that,” Mr. Swift said. “Speaking of moods, I just had a meeting with Ed Gamino. He told me that you paid him a visit a few days ago and were quite upset. Apparently you told him some very disturbing things.”

Tom nodded. “I wondered how long it would take you to find out about that. Frankly, if you hadn't come to me in another day or two I was going to tell you about it myself. There's been a lot going on lately that I think you need to know about. I'm sorry to have to tell you this, but I haven't been completely honest with you lately.”

*If only you knew*, his father thought. Aloud he said, “Why don't you tell me about it. I'm here to listen.”

Tom took a deep breath and began talking. He started by telling his father how he had tried to get Tom Swift IV to give

him plans for his time trigger. He then told him about Ed Gamino's offer, and how Tom's acceptance of it ultimately led to a nanite flood that destroyed the Earth. He finished by telling the account of his disastrous trip back through time – a trip which failed to rescue Irene but did put an end to the claytronic stones.

His father was silent for a few moments after Tom finished his story. He was tempted to tell his son that he already knew what had happened but decided against it. He could tell how upset and remorseful his son was, and decided that that was not the right moment to tell his side of the story.

“I just don't know what to do, Dad,” Tom said. “I've done horrible things. I know I was able to stop the flood but that doesn't excuse the fact that I enabled it to happen in the first place! After all, what if time travel hadn't worked or what if I'd failed to stop the nanites? What if there had been no way to undo what I'd done? I let my love for Irene blind me to what I was doing. And now – well, now I just don't know what to do with myself. I've let everyone down, and that's something that I can't fix.”

“I'm afraid you have, Son. This is something you will carry with you for the rest of your life. You've disappointed me greatly and you've betrayed the trust of many people who thought very highly of you. Trust, once lost, is very difficult to regain. I think you'll find Tom Swift IV much more reluctant to answer you when you call in the future.”

“I know,” Tom said. “I'm sorry, Dad, I really am.”

“And then there's Ed,” Mr. Swift continued. “He's not a bad person, Tom. He just gets excited sometimes and doesn't really think through all of the possibilities. He's the sort of person that needs watching to make sure he doesn't hurt himself. Instead of doing that, though, you let him down. Your relationship with him will never be the same.”

“But he stole the time trigger plans!” Tom protested. “That was hardly an honest thing to do.”

“He did it because he trusted you. It never crossed his mind that anything you invented might be a serious danger to the



world. You could have taken him aside and shown him why the stones were dangerous, but you didn't because you wanted what he had to offer. You didn't even take any precautions to make sure the stones were treated safely! You could have just told Ed you'd supply the stones yourself when the time was right. But instead you gave dynamite to a child and he blew himself up with it.”

“I never thought of that,” Tom replied.

“That's the whole problem,” his father said. “You never stopped to think any of this through. You didn't think about what might happen if something went wrong with the stones, or if something went wrong when you traveled back in time. You never gave a single thought to the immense danger you placed the entire world in – or if you did you just ignored it. You put the lives of countless innocent people in danger just so you could have a *chance* at saving someone who was *already dead*. That's a terrible thing to do, son. You should never have even considered it.”

“I know,” Tom replied. “I know. If I could take it all back I would, but I can't. I just got lost inside my grief and I went too far. But what do I do now?”

“You move on,” his father replied. “You can't erase the past, but you can learn from it and choose not to make the same mistakes in the future. You can use the lessons that you've learned here to build a brighter future. That's all you can do.”

Tom sighed. “I'm sure you're right. But Dad, for such a long time I held out hope that I could save her. I really, honestly thought that I could do it. I had a future – a future with her – and now that future is gone. I know, now, that I'll never get her back. And I just don't know what to do with myself. Irene was the one thing in life that I really wanted and now she's gone forever. And I just don't know what to do.”

His father thought for a minute. “I know it's not the same thing as having Irene, but there's always the Barclay Group project. Since your claytronic stones are no longer an option it will take the colonists much longer to build their city. I'm sure your help would be immensely appreciated.”

“You mean that project hasn't been canceled?” Tom asked. “I thought, after all that happened with Ed—”

“The colonization project is much bigger than Ed,” Mr. Swift replied. “I highly doubt that they are going to call it off at this point! Too many people are involved and too much money has already been spent. And yes, despite everything that's happened I do think they would value your help. After all, no one has more experience establishing space colonies than you do.”

“I guess,” Tom replied. “I'll look into it.”

“Good,” his father said. He stood up. “I'm sure I don't have to tell you to never, ever do anything like that again.”

“You don't,” his son replied.

“I will be watching you much more closely than I have in the past. I may have given you too much freedom before you were ready for it.”

Tom simply nodded and said nothing. Mr. Swift looked at his teenage son. He knew his son was despondent, and his heart ached to help him. “I hope you know how much I love you, Son. Your mother and I are very proud of you. You've done a lot of amazing things and I know you have a bright future ahead of you. Learn from this, but don't let it crush you. Remember, you're not the only one that's ever made a mistake. I've done things I regret as well – in fact, I am largely to blame for the series of events that led to Irene's death. At the time I never dreamed that my attempt to get talcap wood for my ocean airport would lead to all this, but it did.”

“It's not your fault, Dad,” his son replied. “Besides, Irene chose to fly that hyperplane. No one forced her to. If she hadn't done it none of us would be here.”

“I know,” his father said. He thought back to the planet he'd seen just a few hours ago – a world that had been destroyed in an atomic war. The memory still haunted him. *And it all started with talcap wood*, he thought sadly. *But at least I can make this right.*

Aloud he said “I know you're busy but I'm afraid there is one more thing. There's someone else here that would like to talk with you.”

Tom sighed. "I'm sure there is. I can think of a number of people that would probably like to give me a piece of their mind."

"If you'll wait just a moment," Mr. Swift said. He then left the office and closed the door behind him. Several minutes passed but his father did not return. Tom stared at his door, puzzled. A feeling of nervousness grew. *What's taking so long?* he thought. He sighed.

A moment later the door opened. Irene Goddard walked into the room and took a seat in front of the desk. "Hey there, Tom!" she said, smiling.



## CHAPTER 19: A NEW TOMORROW

“IRENE!” TOM SWIFT JR. EXCLAIMED in shock. He stood up, astonished. “It's impossible! It can't be!”

Irene smiled. “I'm glad to see you haven't forgotten me! Bud tells me I've been out of the loop for quite some time. From what I can tell you've been pretty busy since we last saw each other.”

“But I don't understand,” Tom said, not taking his eyes off her. “How is this possible? I mean, I actually watched you die – with my own eyes, in fact! Even with time travel I wasn't able to save you. How did you get here?”

“It's actually pretty simple,” Irene replied. “I wasn't in the plane that you saw crash. Your father beamed me out of it moments before it hit the ocean.”

“But that's impossible! I didn't invent the Transmittaton until years later. ”

“He didn't use your Transmittaton – whatever *that* is. He used the transporter on board the *Exedra*. Apparently Tom III has teleportation down to a science! It worked pretty well, too, from what I could tell.”

“The *Exedra* was there? But – why–”

Irene laughed. “Oh, Tom, I love you. It's so good to see you again! When I left Brungaria I never thought I'd see you again. I was convinced I'd signed my death warrant – and then the next thing I knew I was sitting there talking to Anita. I am just *delighted* to be here, I really am. It feels like being born all over again. Everything is new, fresh, and exciting.”

Starting at the beginning, Irene told Tom everything that she

had learned about the events of the past few weeks. Tom was dumfounded. “You mean I crashed into the *Exedra*?”

“You did,” Irene replied. “I guess even geniuses can't think of everything. I mean, really! There were actually *three* Tom Swifts on board that starship and yet none of them realized that a large, invisible object lying directly in your path just *might* be a collision hazard.”

“Wow,” Tom replied. He shook his head in disbelief. He was astonished at how quickly his life had been turned upside-down. Just a few minutes earlier he had given up all hope, and now he found that his despair had been swallowed up by unbelievable joy. It was the most fantastic feeling.

“I don't know what to say,” he said at last. “I'm so glad to have you back. It's like going through a dozen Christmases all at once. I've longed for this moment for ages, and now that it's here – I'm just shocked!”

“Then I'll just have to leave you in shock,” the red-haired girl replied. She got up, walked around the desk, and kissed him. “I hate to leave you but I've really got to go see my parents. I'm sure they'd like to know that their daughter has come back to life. But what would you think about a date tonight?”

“I'll be there,” Tom promised. “My schedule is wide-open! I'll be at your parent's house at six to pick you up.”

“Fantastic!” Irene replied. “So you'll take me to dinner by the lake?”

“Absolutely. By the way, do you need a ride home?”

Irene shook her head. “We're in the future now, Tom! We don't need cars anymore. I'll just radio your man-in-space and have him beam me home.”

“Oh. Sure, you can do that. But I hope you realize that matter transmission isn't exactly mainstream yet! That technology is still pretty new.”

“That's something we'll have to fix,” Irene said eagerly. “From what I can tell you've done an amazing job creating the inventions of the future but a lousy job marketing them. All that's about to change, Tom, and I can't wait to be a part of it. Oh – by

the way, may I have my pencil radio, please?”

Tom looked at the girl in surprise and then removed the pencils from his pocket and handed them to her. “Why, sure! I made them for you, you know, after you asked me to that day. But how did you find out about them?”

“Bud told me,” Irene replied, grinning. She used the pencil radio to contact the outpost in space, and a moment later she vanished.

Tom smiled. *This is going to be a good day after all*, he thought. He glanced at his watch. *I'd better get busy! I've got a lot to do before that date tonight.*

The young inventor went straight to his laboratory and got to work. He'd only been working for a few minutes, however, when he was interrupted by a knock at the door. When he opened it he saw Phyllis Newton standing there.

“Hey, Tom,” she said. The teenage girl looked distraught and unhappy.

Tom's heart sank. He remembered the scathing lecture she'd given him earlier. *That talk hasn't happened in this timeline yet*, he realized wryly. *I guess I'm in for it now!*

“Hi, Phyl,” he said nervously. “Um, would you like to come in?”

“Not really,” she replied. “I mean, not anymore, anyway. It's just not fair! I had it all worked out. I was going to come over here and dump you, after telling you what a lousy boyfriend you'd been. I was really going to put you in your place!”

“I know,” Tom replied. “I remember that conversation very well. You really let me have it, and I have to say I deserved every word. I've treated you horribly.”

“What do you mean, you remember it?” Phyl asked, puzzled. “How can you remember a speech I never gave?”

“We had that conversation in a different timeline,” Tom explained. “It's kind of complicated.”

Phyl shook her head. “Whatever. I don't want to know. But, anyway, as I was saying, I was just about to come over here when

I got a phone call from Irene. That's when I found out that your father brought her back from the dead.”

She sighed. “She's so happy to be back, Tom. She really loves you, and I know you never stopped loving her. I couldn't compete with her when she was dead and I know I can't do it now. So I'm just going to walk away and leave you two alone. Not for your sake,” she said, glaring at Tom, “but for hers. She's always been good to me and I'm not going to mess with her. Especially not over you. Just – treat her well, ok? She's a very special person. Don't treat her the way you treated me or you'll lose her.”

“I won't,” Tom promised. He felt acutely uncomfortable. *What am I supposed to say?*

“Ok,” Phyl replied. “I'll get out of your way then.” She sighed, turned around, and left. Tom watched as she got into her car and drove away.

*There's got to have been a better way to handle that,* Tom thought to himself. *Why do I never know what to do in these situations?* He stood there for a few minutes, thinking, and then went back inside his lab.

\* \* \* \* \*

Late that evening Tom and Irene took a meandering stroll along the shores of Lake Carlopa. The sun had set long ago and the stars were out, filling the sky with countless pinpoints of flickering light. The moon had risen hours earlier and its glow lit the area with a faint, silvery light. In the distance the happy couple could see the seafood restaurant where they had eaten supper. It was one of the happiest meals Tom could remember. Tom was surprised to find that just being with Irene was enough to make him happy. He didn't have to say anything or even do anything; just walking by the lake with her, holding her hand, filled him with a joy beyond words. He was deeply satisfied.

The couple found a large oak tree and sat down underneath it. The night was a warm one but a cool breeze blew over the lake. They sat down next to each other and watched the fireflies flicker



in the forest.

“So what are you going to do now, Tom?” Irene asked.

“My Dad thinks I should go to Epsilon Eridani,” Tom replied. “It’s the largest space colony that’s ever been built – it’s even bigger than our operation on Nestria.”

“I’d love to go to Nestria someday,” Irene replied. “You have no idea how much I’d love to look up in the sky and see the Earth hanging there. That would be a dream come true.”

“I would be more than happy to take you. In fact, there are a whole lot of things I can’t wait to show you! Why, there’s Fearing Island, the Outpost in Space, Bartonian, the hydrodome – and you haven’t even had the grand tour of Swift Enterprises yet, for that matter! I could spend months just showing you around.”

“I think I could work that into my schedule,” Irene replied, grinning. “Really, Tom, I’d love it.”

“I would too. But to get back to your question, I think my Dad is right. Having a chance to build a true city in the stars is too good an opportunity to pass up. Interstellar colonization is a new chapter in mankind’s history – it’s the future, Irene. How could we pass that up? I mean, who *wouldn’t* want to be a part of it?”

Irene smiled. “I agree, Tom. But what I meant was not what are you going to do *later*, but what are you going to *right now*?”

Tom looked at her, puzzled. Irene laughed. “You haven’t changed a bit, have you? Maybe that’s why I love you so much. I’ll give you a hint: do you have anything for me?”

Instantly the young inventor remembered what he’d forgotten. He looked at the red-haired girl, astonished. “How could you possibly know? Have you been in my lab this afternoon?”

Irene shook her head. “I haven’t even seen your lab since I got back. But Tom, if you want to keep something a secret you shouldn’t leave your blueprints lying around on workbenches where other people can find them. We used to share the same laboratory, you know!”

Tom sighed. “Please tell me I didn’t do that! Dad and I went to such great lengths to hide it from you, and–”

Irene merely smiled. “No one ever said security was your

strong point, Tom. But that's ok – I love you anyway.”

Tom stood up and put his hand into his pocket. He suddenly felt acutely nervous. Irene looked so beautiful, sitting there in the moonlight, looking up at him. Just seeing her was enough to make his heart melt. *I don't deserve this*, he thought. *But thank you.*

He removed the box from his pocket, got down on one knee, and gave the box to Irene. She eagerly opened it. When she saw the diamond ring inside she gasped. She carefully took it out and gazed at it. “It's so beautiful,” she whispered.

Tom's mind went blank. All he knew is that he was deeply, madly in love with the red-haired girl that was holding his ring, and he knew that he would always love her, to the end of his days. The flowery speech he had spent the entire afternoon drafting disappeared from his mind. All he could think to say was, “Irene, will you marry me?”

Irene placed the ring on her finger and looked Tom in the eye. She smiled, with pure love radiating from her eyes. “Of course,” she replied softly. She stood up, put her arms around Tom, and kissed him.

Tom closed his eyes and relaxed. All was well in the world. *It doesn't get better than this*, he thought happily.