THE SASSAPHRON MESSENGER

A SPACETIME ADVENTURE

Gordon E. Legge

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DEDICATION

With love and gratitude to Alex, who inspired this book, and to Wend, who made this book possible.

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Chapter 1. Arrival

Alex McIntosh and Jeffrey Wong were best friends. They had been classmates since kindergarten. Now they were in Sky Lake Junior High School, which everyone called "Sky High." Perhaps the two boys got along so well because they both came from singlechild families. Or perhaps it was because opposites attract. Alex was a stocky, redheaded thirteen-year-old with chubby cheeks and a friendly smile. He had a calm and mellow disposition. He studied hard at school, listened to rock music at home, and loved slamming a baseball with an aluminum bat. Jeffrey was a wiry, excitable kid with black hair. His arms and legs were usually in motion. His eyes were always alight with a new fantasy. He loved mathematical puzzles, science fiction, and adventure stories. Both boys were computer whizzes, part of a new generation of kids who were more familiar with cyberspace than with their own back yards.

The McIntosh house was located in a secluded neighborhood of Sky Lake, Minnesota, an outlying suburb of the Twin Cities of Minneapolis and St. Paul. The yard behind the house bordered a grassy meadow, and was separated from it by a white picket fence. A row of spruce trees stood on the far side of the meadow. Beyond the trees was the picturesque little lake that gave the suburb its name. A bike trail ran around the lake.

Jeffrey and his family lived a few miles closer to Minneapolis. The Wongs had moved to Minnesota from Hong Kong shortly before Jeffrey was born. They had prospered in the electronics business after coming to America. The Wongs spent summers in their cabin on a high wooded hill overlooking Lake Superior. Despite their summertime separation, the boys kept in close touch--by e-mail, paper-mail, homing pigeon, or whatever else came to hand.

It was a sweltering Friday evening in July. The thermometer had topped out for the day at 95 degrees. Everybody was sweaty and tired. Jeffrey had just arrived by bus from cabin country for a weekend in the city with the McIntosh family. The boys and Alex's parents, Gordon and Wendy, sat around the table in the kitchen. Gordon had thrown together grilled chicken and a green salad for dinner. For dessert, they nibbled fresh strawberries dipped in powdered sugar. Everyone had a tall glass of milk.

The mealtime conversation had been dominated by the startling revelations from California. That afternoon, tv and radio news had carried the remarkable announcement from the University of California at Berkeley. Scientists belonging to the SETI team--Search for Extra-Terrestrial Intelligence--reported detecting intelligent radio signals from space. Gordon switched on the tv and clicked through the channels. He stopped when he spotted a well-known news anchor interviewing an astronomer from the SETI team, a Dr. Kugelbahn.

Kugelbahn spoke quickly and authoritatively, "...and the signals are growing stronger fast, as if the transmitter is approaching the Earth at high speed."

The anchor asked "How soon will the source of these signals reach the Earth?"

"Our calculation indicates it will be a few hours or, at most, a few days," replied Kugelbahn.

"How sure can you be that the signals are of intelligent origin? Could it be a false alarm, something of natural origins, or even a hoax?"

Alex chimed in, "I bet I know what it is. It's one of those stunts pulled off by college students, like the ones at MIT." Alex had heard about many of the pranks at MIT because his father had been a student there.

"We've considered the possibilities of natural causes and hoaxes" replied Kugelbahn, "but the evidence is against those explanations."

The anchor pressed "Haven't there been false alarms before?"

"Oh yes," said Kugelbahn, "For example, around 1900, the astronomer Percival Lowell was obsessed with the idea that there were canals on Mars built by intelligent beings. And in the 1960's, astronomers thought that the regular signals from pulsating stars were from intelligent aliens. This time, the complex mathematical structure of the signals is a much more definite indicator of intelligence. We are tracking the source of the signals continuously as it approaches the Earth."

"Dr. Kugelbahn, is there a military threat connected with the intelligent signals?"

"We have no evidence of any threat."

The interview ended. The regular program resumed, featuring a bunch of kids throwing banana-cream pies at each other.

Jeffrey did a dance, clapping his hands and shouting gleefully "The Martians are coming! The Martians are coming!"

Alex poked him in the ribs and said "Don't be a dork." They all laughed.

The last feeble rays of the setting sun struggled into the McIntosh kitchen. "Come on Jeffrey," Alex said, "Let's have a quick game of badminton before it's totally dark." Jeffrey reluctantly agreed and followed his redheaded friend outside, chattering excitedly about little green dudes in space suits.

"And what if they bring a killer disease like AIDS or the Andromeda Strain?" said Jeffrey.

"Cool" said Alex. He was used to Jeffrey's creative fantasies and medical paranoia.

The sun dropped out of sight, giving way to lingering pinks and purples in the darkening sky. The heat of the day had subsided, but the air was still thick with humidity. Dew had already formed on the grass. The boys lobbed the badminton bird back and forth across the net, in and out of the beam of the backyard spotlight. The bird's shadow traveled to and fro across the grass, chased by the shadowy silhouettes of the two boys.

Jeffrey paused with his back to the net. Alex waited impatiently. "Come on! Serve!" he shouted. Jeffrey was peering into the velvety sky.

"What are you looking at?" called Alex. Then he saw it too: a faint, glowing red spot, with a long, thin tail that faded into nothing. As the boys watched, the spot grew larger.

"It could be an airplane burning up," suggested Jeffrey.

"No way!" said Alex, "but it could be a satellite."

With increasing rapidity, the spot grew brighter and brighter. The two boys stood side by side, motionless, watching the streaking red spot. Suddenly, they realized that it was coming directly at them. They could hear a deep rumbling sound, building toward a crescendo. The glowing red light expanded in the sky like an exploding ball of fire as it plummeted toward them. In terror, they dashed for cover, diving under the junipers at the edge of the house. There was a blinding flash, followed by a loud explosion, and a shock wave that caused the ground to pulsate and the windows of the house to rattle. An intense blast of hot air pelted the boys with a shower of dirt and singed grass. The blast knocked out the spot light. The deep rumbling sound was replaced by sizzling and crackling like a thousand pieces of bacon in a huge skillet.

In the deepening darkness, the boys could see something long and tapered, shaped like a cone with its point down, lodged in the grassy meadow, only a hundred yards or so from the back of the house. It glowed with an eerie blue light.

In panic, Gordon and Wendy rushed outside, wondering what had happened. Had a gas main exploded or a plane crashed? Where were the boys? "Alex, Jeffrey!" they shouted.

"We're okay," called Alex from beneath the junipers.

Then he felt something squirm beside his leg. Startled, he reached down and felt a furry body. It was the McIntosh family's seal-pointed Siamese cat named Pericles. (The cat, who possessed a loud Siamese voice, had been named after a famous public speaker from ancient Athens.) Pericles was probably in the bushes when we dived for cover, thought Alex, and I'm sure he's okay. The two boys crawled out and entered the dim circle of light from the windows. They were plastered with dirt and grass. The boys joined Alex's parents on the back steps. Wendy who was a doctor checked them over quickly and determined that they were unscathed. For a moment, they all stood gazing at the faintly glowing object. It appeared to be about ten or 12 feet high, five or six feet across at the top, but tapered almost to a point where it stuck into the ground.

"Get inside the house" Gordon ordered, "It might explode!"

"What is it?" both boys should as they scrambled indoors, their heads turned to keep an eye on the strange, blue, thing that had fallen out of the sky.

"I don't care," shouted Wendy, "just get inside."

"It might be part of an airplane ... maybe even a fuel tank," said Gordon.

"It sure doesn't look like it" said Alex.

Wendy dialed 911 and asked for emergency fire and police help.

A voice on the tv penetrated their awareness. "We interrupt this broadcast for a news bulletin." The announcer described a spate of UFO reports within the past half hour, the majority coming from the Twin Cities area of Minneapolis and St. Paul.

Jeffrey blurted out "That's it! It's a UFO! It's from Mars or Alpha Centauri or some place like that! I'm sure of it!" The two boys rushed back to the door. Gordon barred their way. For a moment, they all stood silently, listening to the UFO reports on the tv, and peering out into the darkness beyond the throw of light from the windows. They could clearly see the lustrous blue glow of the mysterious projectile.

In a few moments, they heard the distant wail of police sirens, growing louder, as the cars circled the lake.

Chapter 2. The Theft

Alex's imagination churned with UFO possibilities. "We've got to get a closer look," he urged, trying to slither past his father on the way to the door. Gordon grabbed him by the arm.

"No!" said Wendy sharply, "Stay inside until the police get here. It's not safe!"

Jeffrey agreed. He grabbed Alex's other arm. "Alex, stay inside. That thing out there might explode into a million pieces. It could throw viruses in your face. There could be reptile creatures on board that might kidnap you!"

"No way," scoffed Alex, "it's probably just a busted-off piece of an airplane. Didn't you hear that rumbling sound when it came at us?"

"Yeah," said Jeffrey, "and it didn't sound like any airplane I've ever heard.

Pericles appeared outside the screen door and meowed loudly. Out of habit, Gordon opened the door, releasing his grip on Alex. Alex seized the opportunity. With a muscular jerk, he shook loose from Jeffrey and dashed out the door, almost tripping over the cat. Jeffrey, in frenzied indecision, twirled around twice, and then chased after Alex. The protests of Gordon and Wendy went unheeded.

The boys ran across the portion of the yard illuminated by light from the house, and then entered the shadows. Alex tripped on a discarded badminton racket and nearly fell. They headed straight for the still-glowing object. Before they could get close to it, bright lights swept across the yard. The boys thought it must be Gordon and Wendy coming after them with flash lights. Looking back over their shoulders, they saw headlights instead. A pickup truck had entered the driveway beside the house. It had no flashing light or siren; it didn't look like an emergency vehicle. The wail of the sirens was still some distance away.

Two shadowy figures jumped from the truck waving flashlights and ran into the yard. They immediately spotted the boys. "Stop right where you are!" a woman's voice commanded. One of the figures grabbed Alex from behind and threw him down roughly. In fear, Jeffrey fell on the ground, face down. The second figure ran toward the house and shouted "I'll take care of anyone in here."

The pickup truck shot down the driveway past the house and rolled onto the lawn, its headlights blazing. For an instant, the glare illuminated the scorched black object that had fallen from the sky. It was just a few yards beyond the picket fence which had been

knocked down. From his position on the ground, Alex could see the object stuck in the grass. It was cone-shaped and tapered almost to a point. The truck drove over the flattened fence and swerved around the mysterious object. Then it backed up close to the object and stopped.

A heavy boot on Alex's back pinned him to the ground. He was surprised to learn that his captor was the woman. "I've got these two under control," she shouted. Then she hissed at her two captives, "If either of you move, I'll shoot, and you'd better believe I mean it." She waved something dark that looked like a pistol. In her other hand, she held a flashlight. She played its beam back and forth over the two prone boys. They lay motionless on the ground, scared stiff, and in no mood to disobey orders.

Two more figures jumped from the truck. They were carrying shovels. In the dim glow from the headlights, they appeared to be wearing bulky protective gear. Alex had noticed that the woman whose foot was placed so firmly on his back was wearing thick gloves, a face mask, and a suit of some sort that covered her from head to toe. Alex could hear her panting. He tried to guess who these hostile strangers were. They couldn't be firemen or police, could they? Would people from the FBI or the Army be so unfriendly? He was too terrified to speak. Meanwhile, Jeffrey lay on the grass trembling with fear, wondering which would strike him first, a bullet through the heart or deadly fragments from the exploding object.

The people with the shovels dug furiously around the base of the mystery object. Alex could see dirt flying everywhere in the faint light behind the truck. He saw the object wobble, and then tilt to one side. Top heavy, it fell quickly, landing with an audible thud.

"Stay right where you are!" the woman ordered. "If you move, you're dead meat." She ran off to help her companions. Together now, the three intruders manhandled the mystery object into the back of the pickup truck.

Alex began to scramble to his feet. He dropped back on the ground when he heard a pistol shot. A bullet struck the soft earth six feet from him. Jeffrey remained as still as a possum.

The truck's headlights snapped off and everything was black. The house lights had been extinguished. The flashlights were off. The blue, lustrous, glowing object was gone. Only the red tail lights of the pickup could be seen. Alex heard the screen door of the house open. A silhouetted figure ran to join the truck. The truck bumped across the grass, onto the driveway. In seconds, it was on the road, and rapidly accelerating.

Only a moment or two later, the police squad car arrived. The two officers were greeted by Gordon and Wendy who had been held captive by one of the gang. More squad cars pulled up. Police swarmed into the yard. Wendy and Gordon shouted for Alex. He was on his feet, and running to greet them. "We're ok," he called. The police quickly located Jeffrey. He had not moved an inch, unable to believe that the peril had passed. Alex pulled his friend to his feet.

"Where's the UFO?" the police captain asked.

Gordon and Wendy began to point, but were confused. The object had disappeared. They had not seen the pickup truck, nor had they realized that the intruders were interested in the mysterious object.

In a tumult of words, Alex and Jeffrey explained that the glowing blue thing had been stolen. The police seemed dubious. They began a thorough security check, sweeping through all areas of the house, yard and garage. They fanned out into the meadow, noting the damage done to the picket fence. They called for search lights which soon arrived. They cordoned off the area, and closed the street that ran in front of the McIntosh home. Captain Ecklund issued a bulletin on the police scanner to watch for a pickup truck with a strange cargo. The boys could provide few details.

A few curious neighbors gathered in the street and asked questions. Some of them had heard the UFO's rumbling sound. Others had seen the red spot in the sky. The police said there was nothing to worry about, and refused to comment on the unusual events.

There was one big clue: a deep gash in the ground. It was located in the meadow behind the house, just a few yards from the damaged picket fence. It was clearly the spot where the mystery object had landed, and where the cloaked intruders had dug it up. The boys' story was further substantiated by the fresh tire tracks visible on the lawn. Several police detectives stretched out tape measures and wrote down locations and distances in spiral notebooks. They took samples of dirt. They conferred in low voices about the possible causes of the gash in the earth. They asked the boys lots of boring questions. A police photographer took many shots with a very bright flash.

Alex heard one detective refer to the backyard area as the "crime scene." The police would not let the boys near the landing site, and instead, sent them inside with Gordon and Wendy. Anxiously, the four of them observed the police investigation from within the house. Jeffrey shivered and shook. Wendy put a reassuring arm around his shoulders.

After about an hour, Captain Ecklund, a big man with a deep voice and a black mustache, told them that experts had been summoned, and that no further investigation would be undertaken until they arrived. He advised them that there was no sign of danger and that the police could not yet establish with certainty what the object had been. He hastened to add that his officers had some "pretty good ideas." Ecklund assured them that the house and property had been secured, and that there would be no further disturbances that

night. Two police officers would stand guard throughout the night to ensure safety of the family and the crash site.

"Crash site?" queried Wendy.

"Something fell out of the sky," Captain Ecklund said, "and it wasn't a falling star."

When the police departed, Gordon, Wendy and the two boys sat down at the kitchen table to unwind. Alex gripped a can of coke in both hands and stared down through the glass table top. He could see his grimy, grass stained tennis shoes. His white socks were soiled too.

The radio news was still carrying reports of UFO sightings. Most of them sounded like what the boys had witnessed--red, fiery objects, streaking across the sky. Reports came from several American cities in the upper MIdwest. There had been a sighting by crew members aboard a freighter on Lake Superior. They had been amazed to see a red flaming object crash into the water only a few hundred feet from the ship. A rumor spread briefly that a terrorist missile had been fired at the ship.

The SETI scientists in Berkeley reported that the intelligent radio transmissions had continued to grow in strength, but had ceased abruptly just minutes before the rash of UFO sightings began.

It was past 1:00 a.m. when the two boys went upstairs to bed. Both showered to remove the grass and dirt that had peppered them earlier. Jeffrey jumped into the guest bed in Alex's room. Although they were exhausted, neither boy could sleep. They whispered together long into the night. Over and over, they asked each other the same questions. Was it a UFO? Why had it landed here? Who or what was on board? Who were the people that had stolen it? Were there any clues at the landing site behind the house?

At last, they slept.

* * * * *

Jeffrey woke up soon after dawn. He heard Alex's rhythmic breathing. He slipped out of bed and looked out the window. The trees in the backyard cast long shadows in the early sunshine. There were two sleepy policemen lounging on the grass near the spot where the UFO had landed. The ground was torn up around the landing site, and there appeared to be a hole near its center.

Jeffrey tiptoed across the carpet toward his sleeping friend. He spotted a crow's feather on Alex's desk and grabbed it. Deftly, he tickled the tip of Alex's nose. There was a pause in the rhythmic breathing. A hand feebly struggled out from beneath the sheet in a vain attempt to ward off the annoyance. Then Alex's eyes fluttered open.

"Hey Jeffrey! What did you do that for?" croaked Alex. He sat up, rubbed his eyes and yawned. "I want to sleep some more." He was about to slump back onto the pillow when the events of the previous evening swept across him, like a wave hitting the beach. "Holy cow!" he exclaimed and jumped out of bed, "Has anything happened? Let me see." He rushed to the window and looked out.

"Come on, Jeffrey, let's investigate." Both boys pulled on dirty shorts and T-shirts. After stepping into sandals, they tiptoed downstairs, not wanting to disturb Alex's sleeping parents. Alex grabbed a granola bar on their way through the kitchen. The wall clock said 5:15 a.m.

It was quiet outside, except for the birds. The summer sun was already hot. Alex could feel the long wet grass on his bare toes. A robin hopped a couple of times and flew away carrying a juicy earthworm.

The boys cautiously approached the two young policemen. One of them, named Dwight, was standoffish. The other one, a burly African American named Tim, was friendly and talkative. Tim told the boys that during the night there had been investigators from the FBI, and doctors from the Health Department. He expected experts from NASA later in the morning.

"Why doctors?" asked Alex innocently.

"Beats me" said Tim. He yawned and scratched the stubbly beard on his chin.

"To check for viruses," Jeffrey whispered to Alex.

Alex shrugged him off. He had an idea. "Tim, would you and Dwight like coffee or a breakfast snack?" he asked politely.

"Now Red, that sure is nice of you. I could really use a nice hot cup of coffee, thank you" said Tim. Dwight nodded in agreement.

"Coming right up!" said Alex. The boys ran back into the house. Alex spooned instant Maxwell House into two mugs, added water from the faucet, and nuked them in the microwave. He grabbed two granola bars and placed them on a serving tray with the steaming mugs.

"What about cream and sugar?" Jeffrey asked.

"Forget it," said Alex. He lifted the tray in a hurry but coffee spilled out of the mugs.

"I hope you're not planning to become a waiter," said Jeffrey.

Ignoring the comment, Alex asked Jeffrey to open the back door. Slowly, he carried breakfast out to the two police guards.

"Thanks kids," both cops said gratefully. They settled themselves comfortably on a couple of canvas chairs, sipping coffee and nibbling on the granola bars.

"Mind if we have a quick look see?" Alex asked, gesturing toward the roped-off area containing the crash site.

"Go ahead," said Tim, "but don't leave footprints or mess up anything."

Alex and Jeffrey slipped under the ropes. They trotted toward the landing site, crossing twenty or thirty feet of singed grass. At the spot where the object had landed, they found a clean, well-shaped tapered hole in the black earth. The boys knelt on the ground at the lip and peered into the hole. The inside walls were smooth and hard, as if fired by intense heat.

"Look!" said Alex, "What are those marks?"

"What are you looking at?" said Jeffrey. Then he saw them too. In the slanted rays of the early morning sunshine, they could see symbols of some kind etched into the blackened walls of the pit.

"They almost look like letters or numbers," Alex said.

"I'm going down to have a look" said Jeffrey. He began climbing into the hole.

"Hold it," shouted Tim, "You're not allowed to go in there."

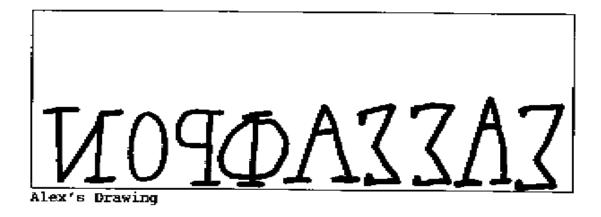
"Okay okay" said Jeffrey.

The boys remained on their knees at the edge of the hole, craning their necks for a better view.

"Wait," said Alex. He slipped under the ropes and ran back toward the house. He took a leap to clear the flattened fence but tripped. Down he went, banging his knee. "Ouch!" he groaned in a muffled yelp.

"Are you okay, Red?" said Tim, coming over to help him up. "Take your time. You won't miss your train!"

"I'm okay" said Alex. He picked himself up, brushed the grass and dirt from his hands and knees, and ran into the house. In a moment or two, he was back at the landing site with a small sketch pad and a marker pen. He began copying the patterns. They were hard to see. Several times, he tore out sheets and crumpled them, unhappy with his artwork. At last, he completed a successful drawing.



Jeffrey inspected it. "This might be some kind of serial number," he said doubtfully, "but some of those symbols don't look like regular letters or numbers."

"Perhaps they're from another country, like Russia" said Alex. There was something familiar about the strange symbols.

"Since they're letters or numbers of some sort," said Jeffrey, "it probably wasn't a UFO. Maybe it did fall from a plane after all," he said ruefully.

"Or maybe it's part of a satellite," said Alex. He too was disappointed.

The boys politely collected the empty coffee mugs from the police guards and went back inside. Wendy and Gordon were still in bed.

After rinsing the mugs, Alex sat down at the kitchen table across from Jeffrey. He picked up his drawing and studied it at arms length. Then he noticed that Jeffrey was staring intently at the back of the page.

"Alex, let me see that paper." Jeffrey reached out and snatched the page from Alex's hand, ripping a corner.

"Jeffrey! Give that back," said Alex angrily.

"I know what it is," said Jeffrey with excitement. "This stuff is mirror writing. When you turn it around, these things are math symbols. Look!" He turned the page around so Alex could see the drawing through the back. The symbols and their order from left to right were reversed. Jeffrey pointed at the symbols that had looked like distorted 3's in

Alex's drawing. Reversed, they looked like distorted E's. Now Alex knew why they were familiar. He had seen symbols like that in his dad's math books.

"You're right," said Alex, "but why are these symbols backwards?"

Jeffrey was on his feet, circling the kitchen table at high speed. "It's obvious," he said. "These symbols must have been printed on the outside of the UFO that landed last night. Symbols on the outside would leave a reversed imprint on the inside of the hole."

Alex didn't understand, but Jeffrey seemed very sure of himself.

At that moment, Gordon appeared in his bathrobe.

"Dad, what's this?" Alex asked, pushing the torn page backwards into his father's face.

Gordon peered at the symbols. "Looks like Greek to me" he said.

"Come on, Dad, no jokes," pleaded Alex.

"I'm not joking. I mean it," said Gordon. "These look like Greek letters. The funny E's look like sigma. The circle with the stick through it looks like phi. Where did this come from?"

Alex told about copying the symbols from the impact crater left by the UFO. Jeffrey explained his mirror-writing theory.

"Your explanation makes sense if these letters were sculpted on the exterior of the object," said Gordon. "Looks like whatever landed is of terrestrial origin, and not a UFO."

"Well, it might be from a satellite," said Alex.

"Maybe," said Gordon, "But I doubt if Greece has any satellites." He went into his study and fetched a dictionary. "Here, look up the Greek alphabet and try to figure out what you've got. Maybe this'll be an easy mystery to solve. Have you shown this to the police?"

"No way!" Alex and Jeffrey said together.

While the two boys examined the dictionary, Gordon switched on CNN. The news was still full of UFO gossip. One report said that police and NASA authorities had identified a landing site in Minnesota, but would not comment on what they had found.

NASA scientists and reporters speculated whether these sightings were related to the mysterious SETI signals which had abruptly ceased the evening before. The CIA was reportedly working on the theory that the UFOs were fragments of an abandoned Soviet space station that had broken up on re-entry into the atmosphere. Speculation was rampant, but there were few facts.

"I've got it," shouted Alex. "It's sassaphron!--sigma alpha sigma sigma alpha phi rho omicron nu--They're Greek letters all right, and they spell sassaphron." After a pause, he asked, "Dad, what does sassaphron mean?"

"I haven't the faintest idea," said Gordon.

Wendy appeared for breakfast, but she hadn't heard of sassaphron either. "Are you sure it isn't sousaphone?" she asked, smiling. Everyone giggled. "Or how about Saskatchewan?" she added.

"Let's do a computer search," said Alex.

"Now you're talking," said Jeffrey.

"Go for it!" said Gordon.

The boys ran upstairs to Alex's room.

Chapter 3. Searching for Meaning

Karl Kugelbahn's fascination with space travel and astronomy began at an early age. He was inspired by the excitement of the Apollo missions to the moon. By eighth grade, Karl was building and launching his own rockets from an empty field near his home.

Karl's father, Wolfgang Kugelbahn, was born and raised in Germany. He had known Werner von Braun, the famous rocket scientist. They were both students at the University of Berlin in the early 1930s. When Karl's scientific achievements received international acclaim, people began calling him "the next Werner von Braun." Karl did not like this comparison. He wanted to be recognized in his own right. Besides, he was proud that his father had fled Nazi Germany to avoid working for Hitler. Von Braun, on the other hand, had developed the Nazis' deadly V-2 rockets. Why should he be considered an American hero and role model?

After working several years at the Goddard Space Flight Center in Maryland, Karl's success earned him a prestigious professorship at Berkeley. He was also named director of the SETI project there. The San Francisco area suited him well. He skied at Lake Tahoe in the winter and played tennis all year round. He assembled a fine staff of bright young scientists.

Several years of hard work by the SETI team paid off when they detected the intelligent radio signals from space. Karl was thrilled; he had begun to doubt that the project would ever bear fruit. Communication with alien intelligence would be one of the greatest discoveries of all human history. When the signals suddenly ceased, accompanied by a spate of UFO reports, he was confused and worried. Had the alien probe been destroyed on contact with Earth's atmosphere?

A few hours after the UFO sightings, Karl received a secret report from the first NASA team to reach the landing site near Minneapolis. The report was discouraging. A couple of kids claimed to have witnessed a fiery landing. But, according to their story, an armed gang in space suits had carried the UFO away.

"Bosh!" muttered Karl in disbelief. Kids were always imagining things. They could never be trusted.

The NASA inspectors had found only a peculiar hole in the ground. Photographs of the interior of the hole showed the imprint of Greek letters that spelled *SASSAPHRON* in mirror writing.

Karl put the report down. He leaned back in his chair with his hands behind his head. Sassaphron, he thought, what a silly word. Who had dreamed that up? Cautiously, he typed the strange word on his computer with one index finger, while holding a cup of espresso coffee in his other hand. He was worried that a scam was in the works, that someone was already trying to exploit his discovery. The whole history of UFOs was riddled with mistakes and outright hoaxes. He feared that his grand discovery would be sabotaged by rumors and exaggerated stories spread by copy-catters and swindlers. Was this sassaphron business the first example? Who would separate fact from fiction? Karl shrugged.

He began a computer search for the meaning of sassaphron. After 20 minutes or so without success, he decided to consult the mathematician on staff, Marian Kilmer. Her job was to interpret the complex mathematical structure in the SETI signals. When Karl reached her office, she was deep in thought in front of her computer. Karl looked over her shoulder at the screen. An image was forming line by line. It looked like a sphere or egg with markings on it. Karl decided not to interrupt her.

* * * * *

Meanwhile, Alex and Jeffrey were conducting their own search for the meaning of the word *sassaphron*. Both boys had been using computers at home and school since kindergarten. They had quickly graduated from video games like Nintendo to more sophisticated computer games. In third grade, Jeffrey learned how to program in BASIC. By fourth grade, both boys could touch-type and were writing their school reports with fancy word processors and clever graphics. They used electronic dictionaries and databases on CD/ROMs. By fifth grade, both boys knew how to use modems to connect their computers to the Internet. They had e-mail accounts and special programs to roam the worldwide web of information data banks. Gordon and Wendy had even given Alex a separate phone line for his computer. After all, lots of families had a second line for the kids; why not encourage Alex's interest in computers with his own line? Much to his parents' chagrin, Alex soon did most of his school research on the internet and rarely visited the local library. The *Encyclopedia Britannica* collected dust on his bedroom bookshelf.

Alex's computer sat on a table in his bedroom. It was a good place for the boys to do their research. Through the window, they could keep an eye on activity near the landing site. Alex powered up the machine. In a jiffy, he loaded the modem software and connected to the internet.

For several hours, the boys searched through countless databases, mailing lists, news groups, and electronic bulletin boards for any mention of the word sassaphron. They checked on-line encyclopedias and dictionaries. They examined the contents of

CD/ROMs. Alex had a snooping program that searched for matches to a key word or letter string in computer sites across the country and around the globe. Besides the word *sassaphron* itself, they also tried words that differed from it by one or two letters. No luck!

A few times, they came upon something close. "Saphar" said Alex, "what's that?"

"That's the second month in the Moslem calendar," said Jeffrey. His friend Abdel had told him many things about the Koran, and how to say the days and months in Arabic.

Their search for sassaphron turned up some similar sounding names and subjects, like saffron, siphon, seraphim, saphena, Sassari, sassafras, and Susan B. Anthony. They searched through works on ancient Greece and Greek mythology. Xenophon appeared in an on-line version of Thucydides' *History of the Peloponnesian Wars*. While skimming through this text, Alex was tickled to find Pericles mentioned--not a cat, but the famous politician from ancient Athens. The boys also came upon Sarpedon in a database on Greek mythology. He was a son of Zeus who was killed in the Trojan War. Jeffrey made a mental note to find out more about the Trojan horse.

The boys took turns at the keyboard. Each had his own specialized knowledge of the highways and byways of cyberspace. While one of them pointed and clicked, the other searched through manuals and magazines for new leads. Occasionally, one of them would run downstairs to check for news on the UFO investigation. Nothing much was happening.

They searched through on-line technical reports, news archives, and government documents. By mid-afternoon, their heads were spinning.

"We'll have to quit and go to the library," said Jeffrey. "Sassaphron is probably some ancient Greek thing that doesn't appear anywhere on the net."

Reluctantly, Alex was coming to the same conclusion. He hated to admit defeat.

"Let's try searching through log-in names one more time," Alex said as a delaying tactic. They embarked on a detailed search through electronic directories of many types. In just a few seconds, they could exhaust the entries for a large university or a government agency.

After a period without success, Jeffrey said irritably "I knew that it was a dumb idea to repeat that search."

"You think of a better idea, Sherlock" retorted Alex. In frustration, he went downstairs for a snack.

On his next turn at the keyboard, Alex continued searching through long lists of e-mail addresses, relaxing the search criterion to find anything remotely similar to sassaphron. A long list of possible matches scrolled by on the screen at high speed. None of them looked promising. Among the hundreds of entries, Alex noticed one that flickered indistinctly as it rolled by. He repeated the listing. Once again, he noticed the blurry entry. He managed to stop the scrolling in time to catch a better look. "What's that one say?" he asked, pointing.

"I can't read it," said Jeffrey. "There must be some strange characters in that one that don't print properly on your screen. What's this a list of, anyway?"

"It's a list of file-server names containing the letter string 'aphro'," Alex said.

The boys were tired and baffled. They were ready for some diversion. "Let's see what this stupid one is. I'll try logging on," said Alex. Jeffrey agreed. Alex moved the highlighting bar to the flickering gray image, and clicked. They watched in surprise as the computer negotiated a long series of connects and transfers from one machine to another. There were long pauses with the screen blank, separated by machine-to-machine greetings in which uninterpretable symbols and numbers were briefly visible.

"Oh Alex," said Jeffrey. "We're going on a long ride!"

"I've never seen so many connections," said Alex, mystified. "maybe we're caught in some kind of network loop."

At last, they saw a rainbow of streamers cross the screen, followed by a shimmering, indistinct pattern of blue and green stripes. A "CONNECT" message appeared, indicating that the computer had found its target. Next there came a "log-in" message containing some uninterpretable gibberish (perhaps a picture in an incompatible format, thought Alex) followed by a request for a username. Alex typed his name. After a long pause, there was another message, "Enter your city name?" Alex typed "Minneapolis". After another long pause, the next message said "There is no such city. Enter your city name?" Thinking he must have made a typo, Alex typed Minneapolis again. The computer made the same obnoxious response "There is no such city. Enter your city name?"

"Try it in full capitals," suggested Jeffrey.

Alex tried MINNEAPOLIS, but got the same result. After two or three more attempts, he was ready to give up. Then he noticed a new message on the screen: "There is no such city. Shall I do an extended search? (Yes / No)." Alex clicked on Yes. The computer responded: "Minneapolis found in Historical Database 22."

This message was replaced abruptly by another one that read "Hello. Who are you? Who are you trying to reach?" The characters were faint and broken. They flickered erratically.

Alex typed "Hello. My name is Alex. We are looking for sassaphron. Who are you?"

A few indecipherable characters appeared and then vanished.

Alex repeated his message.

This time, he received a clearer signal: "My name is Michelle. My cyber address is SASSAPHRON. My personal icon contains a drawing of the Greek letters."

Alex and Jeffrey leaped from their chairs. "We've done it!" shrieked Jeffrey. He did a little dance accompanied by some boxing jabs in the air.

"Keep cool," said Alex, "the connection is flaky. I hope we can hold it." He typed "Shall I call you Michelle or Sassaphron?"

After a long delay, a fragmented reply came back "Michelle is fine."

"Where do you live? Who are you?" typed Alex.

Each interaction was followed by a delay of several seconds.

"I live in Minnephron. Where do you live?"

Alex shook his head. He asked Jeffrey, "Where's Minnephron?"

"I don't know. Probably near minestrone," cracked Jeffrey.

"Eat my socks," said Alex.

He typed "I live in Minneapolis, Minnesota, in the U.S. Where's Minnephron?"

Michelle's reply seemed unfriendly, "Don't be a nerd. Tell me where you really live."

Alex answered, "I'm telling you the truth. I'm really from Minneapolis."

Michelle's next message said "If you're really from Minneapolis, then I've done it! I've made an antique connection! Please give it to me straight, Alex. Where do you live? What time is it, and what is the date?"

Alex's fingers danced on the keys, "I live in Minneapolis. My friend Jeffrey is with me. He lives in Minneapolis too. He has a summer cabin near Duluth, Minnesota. It's 2:25 p.m. on Saturday, July 15, 1995. Michelle, what country do you live in? What time is it there?"

Jeffrey was leaning over Alex's shoulder. He said, "I have a hunch. I bet she lives in Athens, Greece."

"I bet it's Paris, France," said Alex.

There was a long pause. They thought the connection was broken. Then Michelle replied: "I live in Minnephron. It's 1:15 a.m. on August 12, 2121. If you are telling me the truth, I have succeeded in making my cybernet connection with the past. Minneapolis was destroyed in The Great Catastrophe. Minnephron is only a few miles from the ancient site of Minneapolis. Please don't joke with me, Alex. It's very important to me. Tell me again. Where do you live and what is the date?"

Alex could not believe what he was reading. He felt his heart beating very fast. "This kicks!" he exclaimed in excitement. He typed "Michelle. I promise you, I'm telling the truth. I live in Minneapolis. Today is July 15, 1995. What do you mean by 'The Great Catastrophe'? Why do you use the cybername Sassaphron?"

Alex's computer screen shimmered and went dark. A message said CONNECTION CLOSED. The connection was broken. Breathlessly, the boys repeated the steps that had led them to Michelle. Luckily, Alex remembered how he had constructed the list with the blurry entry. Once again, there was a long series of network transfers, culminating in the rainbow of colors and the green and blue stripes. When the connection was reestablished, the boys were once again confronted with the request: "Enter your city name?" Not knowing what to do, they decided to follow the path that had led to success the first time. Alex typed Minneapolis. The same sequence followed, and then they reached Michelle.

"Is it Alex again?" came the message.

"Yes. Is that you Michelle? I had trouble again because your computer wouldn't accept Minneapolis."

Michelle's message was apologetic "I'm sorry, Alex. I forgot about that. Next time, just use my password Creusa when it asks for city name. That'll get you through."

Alex jotted down the password. "Thanks. Please tell me what you meant by The Great Catastrophe? And why do you use the electronic name Sassaphron?"

Michelle replied, "My cyber project is to make an antique connection. Some people claim it can't be done, but my information sciences teacher says it's theoretically possible. I use 'sassaphron' as my cybername in honor of the Sassaphron Messenger."

Jeffrey was electrified. He should at the screen, "Did the Sassaphron Messenger arrive last night in the UFO?"

"Who's the Sassaphron Messenger?" typed Alex.

Michelle's next message said, "Not who, but what. I'm not an historian, but the main point is that the Sassaphron Messenger helped save us from destruction."

Alex and Jeffrey could not believe what they were reading on the computer screen.

"What destruction?" Alex typed.

"What the Sassaphron Messenger warned us about. It came around the end of the 20th century."

Alex typed "I think the Sassaphron Messenger landed last night behind my house. And then a gang stole it."

Michelle's message said "Then you'd better find it."

"Why?" typed Alex.

Michelle's reply was bewildering. "Because if you don't, you'll have no future, and I'll have no past."

Alex turned to Jeffrey. "This is crazy. Who is this guy, and where is he? What's he babbling about?" (Alex was learning French at school and thought that Michelle was French for Michael.)

Jeffrey said "He's probably a girl. Michelle is a girl's name. Ask her where to find the Sassaphron Messenger."

Alex typed, "Michelle, pardon the rude questions, but are you a boy or a girl? How old are you? Can you tell us where to find the Sassaphron Messenger?"

Michelle's reply said "I'm a girl. I'm 14 years old. I guess you're a boy if your name is Alex, but I have a friend Alex who's a girl. I told you that I'm not very good at history. It's one of my worst subjects. I do remember that the Sassaphron Messenger disappeared for a while after it landed. It turned up in catacombs, or some place like that. You have to find it or ..." The connection was broken. The screen said CONNECTION CLOSED.

Eagerly, the boys tried to reconnect yet again. This time, they could not find the flickering blurry address for Michelle.

Chapter 4. A Meeting at the Pentagon

Edmund Iglehart was an astronomer, and a professor at the university. He was slighly overweight, rather short, and in his late forties. His bristly black hair was going gray at the temples. A facial tic near the corner of his mouth pulsated when he was nervous. It annoyed him that he couldn't control it.

Ed was a brilliant scientist, but arrogant in the extreme. His father, a famous trial lawyer, taught Ed how to take advantage of people by embarrassing and outwitting them. Ed thrived on argument and confrontation. Students feared him. Everyone admired his brains, but almost nobody liked him.

Ruth Geiger was Ed's wife. She was a computer scientist, and also a professor. Ruth was about ten years younger than her husband. Her long, brown hair framed an attractive face. She had a slim figure, the reward for daily swimming and aerobics. Ruth had better social skills than Ed, although she avoided eye contact with people. Like her husband, she was opinionated and self-centered.

No one could understand how the two of them managed to agree on anything. They had no children, and devoted almost all of their time to their careers. They lived in a renovated farmhouse on ten acres of land a few miles outside of Minneapolis.

One topic united them. They were both passionately interested in extraterrestrial intelligence. Ed knew the astronomical arguments for and against the existence of life elsewhere in the galaxy. He had read all the important books on the subject, and had written several articles. He was regarded as an expert and was often quoted in the newspapers. Ruth's interest stemmed from her work on artificial intelligence. She specialized in writing software programs that could reproduce themselves and evolve in intelligent ways. She imagined extraterrestrial aliens to be more like computer programs than biological life forms.

When NASA announced plans to search for extraterrestrial intelligence, Ed and Ruth submitted a proposal for research money. They had a clever scheme for using a network of small computers and radio telescopes for detecting and tracking SETI signals. When NASA awarded the money to Kugelbahn, Ed and Ruth were furious. They made it clear to anyone who would listen that their scheme was far superior, and that Kugelbahn's method was bound to fail.

* * * * *

One afternoon in late June, Ed received a phone call from someone at the Defense Department in Washington. The man identified himself as Bob, but didn't give his last name. He asked Ed to serve on a secret committee to deal with an urgent national problem. He could not reveal any details, except that the problem was serious and that Ed's expertise was essential. First, Ed must undergo an FBI security clearance.

The next day, an FBI agent named Susan Brindley, interviewed Ed in his university office. Susan was attractive with curly brown hair. Her dark blue eyes matched her suit. Ed wondered if she was carrying a gun under her jacket. Her style was polite and businesslike. Susan asked many questions. She required Ed to make a list of all the groups and associations he'd ever belonged to. She met with the head of Ed's department and asked several professors and students about his reputation. She wrote down creditcard numbers, bank-account numbers, and license numbers. After leaving the campus, she questioned several of his neighbors. The next morning, Ed was granted his clearance.

Almost immediately, Ed was invited to a meeting at the Pentagon in Washington DC. The mysterious Bob booked his flight and arranged for a limousine to pick him up at the airport. Susan Brindley met him at the entrance to the Pentagon. She escorted him through a maze of long hallways and security checkpoints.

Eventually, they arrived at a meeting room deep inside the huge building. A large, maple conference table stood in the middle of the room. Ed could see reflections of the fluorescent lights in its polished surface. Black leather chairs surrounded the table. Several smaller tables were arranged around the perimeter of the room, piled high with reports, maps and photos. Dingy gray carpeting covered the floor. Coffee and doughnuts sat on a food cart. The room had no windows.

No one had told Ed what the meeting was about, but he had guessed the topic would be extraterrestrial life. When he saw Karl Kugelbahn seated at the large table, he knew his guess was right. Folwell, the chief research scientist at NASA, was also there. Folwell had made the decision to award the SETI grant money to Kugelbahn instead of Ed and Ruth. Ed frowned and took his assigned seat.

There were thirteen people gathered around the big table. Four of them, including Colonel Thomas Rippon who was chairing the meeting, were from military intelligence units. There were a couple of others who didn't identify themselves; Ed suspected they were from the CIA. Three of Kugelbahn's buddies from the SETI team sat with him and Folwell. Ed recognized one of them, Dr. Marian Kilmer the mathematician. Finally, there was an expert on germ warfare from an army research lab. Seated at the smaller tables

were clusters of people from several government agencies, including the FBI. Susan Brindley sat at one of these tables.

Colonel Rippon called the meeting to order. He got right to the point. The SETI team at Berkeley had detected intelligent signals from space. He asked Kugelbahn to describe the discovery. For two hours, Kugelbahn and his colleagues presented the scientific evidence and argued for the authenticity of the signals. The case was convincing; there could be little doubt that the signals were for real.

Listening to Kugelbahn's dramatic story, jealous anger erupted inside Ed. This was the discovery of the century, perhaps the prize of the millennium! Kugelbahn had stepped in and stolen it. The Berkeley gang had gotten the SETI money by bowing and scraping at Folwell's feet. Kugelbahn was a second-rater, a brown-noser, a cheat! Ed felt his facial muscle twitching. He gripped the underside of the table tightly to maintain his composure.

Kugelbahn told how the SETI team tried to interpret the remarkable regularities in the signals. They began by representing them as abstract mathematical drawings, but to no avail. After many hours of work, Marian Kilmer made an amazing discovery. She found that a long, repeating sequence of signals could be reconstructed as a three-dimensional shape. She illustrated her finding to the group, using a computer on one of the small tables. The screen showed a shape that was roughly spherical, with relief markings. To everyone's amazement, it appeared to correspond to a crude map of the Earth. Some of the details were wrong, but the overall representation was unmistakable. One prominent feature was a depression in the map with radiating lines, located roughly in the middle of North America. Using the computer, Kilmer overlaid an accurate map of North America. The depression was centered in southern Minnesota.

These revelations caused a buzz of conversation around the room. Colonel Rippon asked for silence.

Kugelbahn resumed his presentation. He had code named the mysterious source of the signals *Hermes*, after the Greek messenger of the gods. The SETI signals were already strong and growing stronger every day. He displayed charts indicating that the source of the signals might even be targeted on the Earth. No public announcements had been made, for fear of sparking widespread panic or dangerous rumors.

Kugelbahn paused. For the first time, he seemed anxious. He chose his words carefully. "We have a problem. We know Hermes's approximate position and heading. But our tracking data aren't quite accurate enough to tell us if Hermes is actually heading for the Earth. Of course, it is in our national and international interest to know if this source of intelligent signals is coming toward us." Kugelbahn sat down. Rippon then explained why the meeting had been called. If Hermes reached Earth, it could pose a military or biological threat. Colonel Rippon suddenly turned to Ed. "Professor Iglehart," he said in a Texas drawl, "we have a problem here. We have this uninvited visitor from space known as Hermes headed our way, and he may even be intending to pay us a call. But our scientific experts from Berkeley can't be sure if or when our friend Hermes will arrive. Now, Professor, we've been informed that you have a better method for tracking objects moving through space than Professor Kugelbahn here. Am I correct, sir?"

Kugelbahn cringed at these words. Ed's anger gave way to vindictive satisfaction. All eyes were on him. "Yes, Colonel, you are correct."

"Please explain," said Rippon.

"My wife, Ruth Geiger, and I described our methods in a proposal to NASA three years ago, but Dr. Folwell saw fit to put his faith in Dr. Kugelbahn."

"Yes, Professor, we know the history," said Rippon impatiently, "but tell us how your tracking method works, and if it can give us better data on Hermes."

Ed enjoyed being the center of attention. He sensed that he held the best hand. He wasn't about to be pushed around anymore by Folwell, Kugelbahn or this Colonel what's-hisname. "Colonel, I will describe our method and make it available for tracking Hermes. But first, you must agree to two conditions."

Everyone in the room was shocked. Colonel Rippon was not used to asking twice. He spoke sharply, "State your conditions, Sir."

"First, my wife Ruth Geiger must be invited to join the project. And second, Dr. Kugelbahn and his friends from Berkeley must leave the room now and must never be given any detailed information about our methods." Ed glanced briefly at Kugelbahn and saw that his face was livid.

Rippon replied coolly. "Per your first condition. Your wife has not been granted a security clearance, and therefore she cannot be included in the project. Per your second condition," he turned to Kugelbahn. "Professor Kugelbahn, what do you have to say? Are you agreeable?"

"Certainly not!" said Kugelbahn emphatically, trying to control his temper. "It's an outrageous condition. His demand amounts to having me turn the SETI project over to him. I would never do it! And, at this critical stage, it would be disastrous. There's no proof that his method even works. I'm willing to give his method a try, to see if it can

help us predict Hermes's path. I hope he will reconsider his rash statements and agree to cooperate with us."

"What do you say, Professor Iglehart?" asked Rippon.

"I have stated my conditions, Colonel. You want me to act as Kugelbahn's assistant, and let him use the tracking method Ruth and I developed, but you don't want her involved. I, on the other hand, am willing to work on this project with my wife, but not with Karl Kugelbahn."

For the next half hour, Colonel Rippon negotiated with Kugelbahn and Iglehart. He threatened legal action and presidential orders to obtain their cooperation. Others around the table joined in the conversation. The pressure mounted on Ed to turn over his tracking method to Kugelbahn. Ed became angry. His face reddened, his eyes narrowed to slits, and sweat broke out on his forehead. The tic at the corner of his mouth twitched uncontrollably. He felt like a cornered animal. There were only two choices: surrender or escape. He stood up abruptly and said in a hoarse voice, "You invited me to this meeting to steal my ideas and to bail out Kugelbahn. You want Ruth and me to turn our discoveries over to Folwell and company, even though they slammed the door in our faces three years ago. I have heard enough. Goodbye. You can find me at home in Minnesota."

He left the table and marched to the door. Susan Brindley was at his elbow immediately. With a nod from Colonel Rippon, she unlocked the door and escorted him out of the conference room. She had studied his record in enough depth to realize that no one could change his mind. He was too arrogant and too stubborn.

Susan took Ed to one of the Pentagon's many exits and arranged for a cab to take him to the airport.

She said, "Everything that went on at the meeting is top secret. As you heard, Ruth didn't get a security clearance. You are legally bound not to tell her about Hermes."

Ed shrugged.

"This is a serious matter involving national security. Do you understand the legal requirement for secrecy?" Susan asked firmly.

"Why didn't she get a security clearance?" asked Ed.

"Ruth has had a history of participation in anti-government activities dating back to protests against the Vietnam war."

"That was more than twenty years ago," scoffed Ed. He had also been a protester, but apparently that had escaped the FBI snoops.

Ed got in the cab and slammed the door.

Five hours after stalking out of the secret meeting at the Pentagon, Ed arrived home. He slammed the door and threw his raincoat over a chair.

Ruth was in the living room, working on a computer program. "How was your meeting?" she asked casually, without looking away from the screen.

"Terrible!" growled Ed on his way into the kitchen. A couple of minutes later, he returned to the living room with a bottle of red wine and two glasses. Ruth joined him.

Ed told her the whole story, from start to finish. She listened attentively, with increasing defiance. They polished off one bottle of wine and opened another. In time, their anger subsided into conspiracy. By midnight, they had a plan.

The next morning, Ed arrived on campus bright and early. He alerted his longtime lab technician, Copland, and one trusted student, Tavershall, to prepare for an afternoon trip to the university's radio observatory. He was tight-lipped about the purpose of the visit, but they were used to his silences.

Kugelbahn had been cagey about details of Hermes's location, but Ed had heard enough to piece together most of the story. Referring to his scribbled notes from Kugelbahn's presentation, Ed worked all morning to calculate optimal orientations for the antennas of the radio telescope. After lunch, the three of them piled into a pickup truck and drove the 25 miles to the observatory. They spent the rest of the day in hot and sweaty work, configuring the telescope.

Ed had also built a small observatory on his own property. His home radio telescope was linked electronically to the university telescope. That evening, Ed worked late into the night. From his study in the farmhouse, he could collect data from the two linked observatories. With clever computer control, he could steer the telescopes to receive signals from different directions in space. All night, Ed fine-tuned the wavelengths and adjusted the directions of the telescopes. The incoming signals produced flickering green traces on video screens spread around his study.

Even when Ed finally went to sleep, the linked telescopes kept searching the skies for Hermes, guided by Ruth's software. The search continued nonstop, day and night. It took Ed only about two and a half days of constant searching to find Hermes. The signals were moderately strong, and unmistakable. Once Ed found the signals, he and Ruth initiated the tracking scheme they had invented. Soon, they were piecing together Hermes's path through space. They established that Hermes was already in the Solar System. Next, they discovered that Hermes was on a course to rendezvous with Earth. Finally, their software indicated that Hermes would reach the Earth on the evening of Friday, July 14.

"We've nailed it!" exclaimed Ed, clapping his hands.

Ruth reminded him that it was Kugelbahn who had discovered Hermes.

"Oh crap!" retorted Ed. "That mutton-head doesn't know if Hermes is in the next county or a hundred light years away. We're the ones who pushed for this project in the first place, and we're the ones who can see it through."

Ed stayed at home during his search for Hermes. His students were not surprised. Often, their boss remained aloof at home, working day and night in his own radio observatory. Although absent in the flesh, he would stay in close electronic contact with them. His personality infected the laboratory computers; barrages of terse e-mail messages would demand this or that piece of information. His students could grouse about him behind his back, but they couldn't shake loose from his electronic grasp.

This occasion was no different, except that Iglehart was working even more intensely than ever. The time stamps on his e-mail messages showed he was busy day and night. Everyone in the lab suspected that he was on the trail of another elusive alien. They were not surprised when he ordered them to load the pick-up truck with emergency gear, including the flak jackets and protective clothing. They had gone through the same routine in the past. From previous experience, they knew that Iglehart's urgent projects often ended in a crescendo of activity. But they were not prepared for the bizarre climax to this episode.

* * * * *

On Thursday, July 13, Iglehart phoned Copland and Tavershall. He claimed to be on the verge of a momentous breakthrough. They must not leave the lab until further notice. He hinted that there would be news in the press the following morning.

On Friday morning, Ed leaked the discovery of Hermes to his brother, a reporter for a major newspaper. Ed hung up the phone and said gleefully "Kugelbahn will fry for letting the cat out of the bag. Those Pentagon geeks will be after his hide!" By early afternoon, the story hit the airwaves and the papers.

Friday was sweltering. The heat was unrelenting, even when the sunshine faded into dusk. Ed monitored the signals from Hermes while Ruth set up their small optical telescope. She pointed it in the direction where they expected Hermes to appear.

Then, without warning, the radio signals from Hermes stopped. Frantically, Ed typed computer commands, fearing that his apparatus had failed at the most critical moment. There was no evidence of equipment failure. Anxiety turned to panic. He was dripping wet with sweat.

Suddenly, Ruth burst out in excitement "I see something!." She had spotted a tiny fleck of light, just above the horizon, with low contrast against the fading light of day. Ed pushed her aside rudely and looked for himself. Sure enough, there was something coming!

In the early afternoon, Copland and Tavershall had heard the radio reports about the discovery of intelligent signals from space. Although the findings came from the SETI group at Berkeley, they were sure that Ed was involved. They were not surprised when Ed called that evening and ordered them to bring the loaded pickup truck directly to his farm.

On the freeway, they heard from Ed by cellular telephone. There was nervous excitement in his voice. "Look for a red dot in the sky," he said. He gave the sky directions. "You'll see it soon." He was right. There was a red speck, growing larger and brighter by the minute, with a faint tail.

Ed's voice barked orders on the cellular phone. Evidently, he and Ruth were in their car. Ed told them that the car and pickup would meet, and the four of them would form a welcoming party for whatever was coming.

A few minutes later, they met in an outlying suburb of Minneapolis, not more than a couple of miles from Ed's farm. Together, they watched the fiery red object as it streaked toward Earth. It made impact, less than half a mile from where they were waiting.

"You must do as I say," Ed ordered in a commanding voice. "We don't know what has landed, or who may try to claim it. But it is ours if we can get there first." The four of them quickly put on masks and boots, and wrapped themselves in protective cloaks. Ed distributed handguns to everyone. "Shoot if necessary," he said, "but we must take whatever we can find, at any cost."

Like a small band of commandos, they moved in to capture the remnants of Hermes. They found the landing site in an open grassy area behind a secluded house. Two kids had apparently spotted the landing and were approaching the crash site. "I'll take care of them," said Ruth. Tavershall ran to restrain anyone he could find in the house. It was fairly easy for Iglehart and Copland to manhandle the small, sizzling projectile into the pickup truck. Their fire-retardant gloves and clothing enabled them to handle the glowinghot object. In a matter of minutes, they completed their mission. With Iglehart at the wheel of the pickup, the gang sped off into the night with their mysterious cargo safely stowed.

Chapter 5. The Catacombs

Alex and Jeffrey tried again and again to contact Michelle without success. They gave up and sat dejectedly, staring at the blank computer screen.

"Let's make a solemn pledge," said Alex, extending his right hand to Jeffrey.

"About Michelle?"

"Yes," said Alex, "Let's promise never to tell."

"I promise!" said Jeffrey. They shook hands firmly.

"It's just too strange, and too important," said Alex. "We have to work it out for ourselves."

"You betcha!" grinned Jeffrey.

The boys wandered downstairs. Gordon was in the kitchen, snipping the stems off fresh green beans. He noticed that the boys looked forlorn.

"What's the matter, kids? Couldn't you track down 'sassaphron?""

Instead of answering, Alex asked, "Dad, what are catacombs?"

It was a strange question, but Gordon wasn't surprised; Alex had boundless curiosity. "Well, they're underground tunnels and rooms for burials. The early Christians in Rome hid from persecution in catacombs under the city. Your Mom and I toured the catacombs in Rome once."

Alex couldn't believe that the thieves would take the Sassaphron Messenger to Rome. "Dad," he said, "are there any catacombs around here?"

"I don't think so," Gordon replied. "Why do you ask?"

"We have a clue!" Jeffrey blurted out. "The thieves are hiding the Sassaphron Messenger in catacombs."

Both boys looked up at Gordon for help.

"What kind of clue?" Gordon asked. He saw the two boys wink at each other.

"Just a clue, Dad," said Alex, making it clear that he wasn't going to tell.

Gordon wondered what Jeffrey meant by a 'Messenger,' but decided not to press. He respected their ingenuity and common sense. Perhaps they were on to something. After pondering for a few moments, he said, "The only thing close to catacombs I can think of around here are the caves below the river bluffs, ... or maybe the abandoned tunnels under the downtown buildings, or...," he paused, thinking.

"Or what?" asked Alex.

"Or the network of underground passages connecting buildings at the university. As far as I know, no one is buried down there, but they may as well be. A lot of those tunnels are pretty dark and deserted. There's an amazing network of them. People claim you can go anywhere on campus in the winter without wearing a coat; just find your way through the underground maze." Gordon was a psychology professor at the university. He had used many of the underground passages himself.

Alex and Jeffrey could almost read each other's mind. Could the thieves be hiding the Sassaphron Messenger in catacombs under the university?

"Dad," said Alex firmly, "you've got to take us on an underground tour of the university."

The boys pestered him to go exploring early the next morning. Sunday would be a good time to explore because nobody would be around. Besides, Jeffrey had to go home Sunday night.

Exploration of the musty dark underground of the university on a hot Sunday morning didn't appeal to Gordon. He suggested that they go fishing instead, but the boys were insistent. Gordon was also curious about the events of the previous night, and had a hunch that the boys knew more than they were telling. After some grumbling, he gave in.

Saturday afternoon and evening, there was a steady stream of investigators from state and federal agencies. They examined the crash site in detail. They photographed, videotaped, measured, annotated, and drew maps from every possible angle. They walked around the exterior of the house. Several of them questioned Alex and Jeffrey. Most of them didn't take the investigation too seriously. Never did the computer connection with Michelle come up.

One of the FBI agents was a friendly but inquisitive woman named Susan Brindley. She was much more determined and thorough than the others.

Before the questioning began, she tried to create a good rapport with the boys. The three of them sat together around the breakfast table. Susan politely asked Alex's parents to leave.

Jeffrey had never met an FBI agent before. As soon as the adults left the room, he looked directly into Susan's face and asked "Do you carry a gun?"

"Yep. Do you want to see it?"

"Yes" said Jeffrey immediately.

With a deft move, she produced a weapon from beneath her jacket, and held it up for them to inspect. It was a 9-mm calibre pistol, shiny and clean.

The boys were fascinated. Alex had an uncle in the FBI, but he had never seen his gun.

"Is it loaded?" asked Jeffrey.

"It wouldn't make much sense to tote it around empty," said Susan, "and I'm not going to let you touch it."

"How many bullets does it have?" asked Alex.

"More than a dozen," replied Susan.

"I bet you've never had to use it in action," said Alex.

"I bet I have," said Susan.

"Tell us about it," said Jeffrey, jumping up from his chair in excitement. Was it like *Silence of the Lambs*?"

She shook her head. "We'll save my stories for a rainy day. I'm here to get to know you guys, and to find out what you saw last night. Now, let's get down to business."

"Wait a minute," said Alex, holding up his hand, "let's make a deal. We'll tell you what happened last night if you promise to tell us about one of your FBI adventures."

"Yes!" said Jeffrey in delight, thumping Alex on the back.

She liked these spunky kids. "Okay," she said, "I promise to tell you one of my adventures in return for your story about last night."

They shook hands all around to seal the bargain.

For the next hour, she led the boys step by step through the events of the previous evening. She pressed for details until they could supply no more. She was equally interested in the gang of thieves and the mysterious object that had crashed.

"I hear you were out looking at the crash site this morning," she said.

They nodded.

"Did you see anything interesting or unusual?"

Reluctantly, Alex said, "Maybe."

"I'm sure you guys are sharp enough to have noticed what I saw in the crater," she said.

"We didn't see anything in the crater," said Jeffrey, blushing.

"Yes you did," she said, her dark blue eyes sparkling. "You saw those patterns that look like letters, didn't you?"

The boys shrugged.

"I bet you couldn't decipher them."

"We could so," snapped Alex. "We figured them out. They're Greek letters in mirror writing."

"And what do they say?" probed Susan.

"Sassaphron," said Jeffrey. The word popped out of his mouth like a cork out of a champagne bottle.

"Sassaphron," she said, "a pretty strange name for a UFO. What do you think Sassaphron means?"

The boys remained silent. Susan sensed that they were holding out on her. "Did you pick up anything or discover anything else when you inspected the crash site this morning?"

"No," said Alex. "Anyway, according to our bargain, we promised to tell you what happened last night, not what we did today. Now it's your turn to talk. You owe us a story."

Alex is a better negotiator than some of the lawyers I deal with, thought Susan. It would be worthwhile to stay on good terms with these kids. She had better not press them further now. Perhaps they didn't know anything else anyway.

"You guys have given me some good info. Thanks a lot. I'll keep my word and tell you one of my adventures. Here goes."

The two boys leaned across the table expectantly.

"Do you remember hearing about the case of the little McDougall twins, Julie and Moira? The twins were about three years old at the time. They had moved with their mother to the Twin Cities area from Wisconsin to get away from their father. The mother had divorced him and testified in court against him for wife beating. He had been very rough on her. He was convicted and went to prison. While serving his time, he nursed a growing hatred for his ex-wife and decided to get revenge. He was released after two years. Right away, he stole a gun and came straight to the Twin Cities. He stormed into his ex-wife's apartment in the middle of a Saturday afternoon. After threatening to shoot her on the spot, he kidnapped the twins and headed back across the Wisconsin border.

That's when the FBI was called in. By the time I arrived, the father was holding the two children hostage in a farmhouse near Eau Claire. He'd broken in at gunpoint while the farmer and his wife were having supper. He forced them out. He found a hunting rifle, a shotgun, and lots of ammunition in the farmhouse, so he had quite an arsenal. We had the place surrounded, but couldn't get close to the farmhouse because it was in the middle of a big open lawn. We communicated with him on the telephone. I was the chief negotiator. He let me talk to Julie and Moira, and they sounded okay, but scared. He said he would shoot them if anyone came close. What he wanted was to trade the twins for his wife. She was panic-stricken, and would have gone for this bargain. Of course, we couldn't agree to it for fear he'd kill or harm her." Susan paused for a few sips of coke. Her eyes seemed to lose their focus on the boys as she recollected every detail of the hostage drama.

"So, what happened?" Alex asked, anxiously.

"Our strategy in these cases is to outlast the hostage taker. We were prepared to wait, as long as the children were not in immediate danger. Halfway through the night, I could tell he was tiring. We had thought of cutting the electricity to the place, but had not done so for fear of putting the kids in danger. He had all the lights in the house on. We could see him with our high-power binoculars wandering around the place, watching out the

windows. He had the outdoor spotlights on, and we had our lights too. It was pretty bright. He was a big guy, about 6 feet 4 inches, and 240 pounds. I think he'd been a construction worker. He hauled those kids around with him, and always had his gun. About 4 a.m., he agreed to turn the kids over to me if I would come into the farmhouse to get them. But he refused to surrender. I said I wouldn't go inside. After bargaining for a while, he agreed to release them to me at the door. I knew it was a dangerous situation. but I had developed some rapport with him. I had to walk down the driveway through the open grassy area to the front of the farmhouse. Of course, he could have shot me at any time. I was wearing a bullet-proof vest, but that gave me very little protection. I advanced very slowly, and as I got close, he appeared in the doorway with the two kids. He had both of them slung under one arm, and he held his gun pointed straight at them. The two children were motionless. I could see that they were unharmed but in terror. My plan was to collect the children and walk back the way I had come. As I reached the door, he suddenly dropped the kids and shouted at them 'get out of here and run to your mama,' and he swung the gun around at me and yelled 'but you stay here missy'. I had feared he might try something like this and I had only a split second to act. I dropped to the ground and karate kicked the gun from his hand. He was in the act of firing. The bullet sailed over my head, just missing the little girls who were toddling down the driveway. His gun went flying. He lunged at me. I managed to roll to the side to avoid him and drew my concealed gun. I nailed him twice as he came after me for the second time. I felt his blood all over me." Susan stopped.

For a moment, the boys were speechless. "Did you kill him?" asked Jeffrey.

"I'm afraid so," said Susan. "I had no choice. It was him or me."

"Were the twins okay?" asked Alex.

"Yes, scared and hungry, but okay."

Susan rose. It was time for her to leave. After promising to let them know when the sassaphron object was recovered, she smiled and said goodbye.

"She's a neat lady," said Alex.

"Should we have told her about Michelle?" asked Jeffrey.

"No," said Alex. "We're not even sure who or where Michelle is. Let's keep her a secret."

* * * * *

Shortly after 6:00 a.m. on Sunday morning, Gordon dragged the two boys out of bed. He was keen to meet his obligation early, and not spend the hottest part of the day prowling the university's underground. Jeffrey was wide awake and alert from the moment his feet hit the floor. Alex was groggy and slow as molasses. After cereal and milk, the three of them jumped in the Ford Taurus station wagon.

Alex had misgivings. He and his parents had seen *Phantom of the Opera* during a trip to New York. "Dad, will it be like the catacombs under the Paris Opera House?"

"Maybe a little bit," said his father, smiling.

They reached the campus at about 7:30, and parked the car near the psychology building. Gordon dug a flashlight out of the glove compartment. There was nobody in sight. A couple of bold squirrels scurried up looking for handouts.

Inside, the building was silent and hot. Even the ventilator fans were still. The search party took the elevator to the basement.

Except for a couple of red EXIT signs, the basement was dark. The custodians were turning off all unnecessary lighting during off hours for energy conservation. Gordon played the flashlight down the dingy gray hallway. He pointed to a heavy door at the end of the corridor and said, "The tunnel from here to the next building is through there."

They walked over and opened the door. The passage in front of them was dark, with only a faint glow of daylight seeping in from somewhere above. It was silent and spooky. They hesitated. Alex summoned his courage and stepped forward, "Let's go!" he said.

They began working their way from building to building with only the beam of the flashlight to guide them. Having gained access to the basement of one building, they sometimes had trouble finding the tunnel to the next building. Occasionally, daylight would creep in from a stairwell or from beneath a closed door. Mostly there was silence. Once, a clickety-clack sound made them freeze in their tracks. What was it? "It's somebody typing," Alex whispered. Rounding a corner, they saw a sliver of light from a door ajar. Tiptoeing by, they saw a student concentrating on a computer screen.

After passing through several basements, Gordon said, "We're somewhere under the main university quadrangle now. I think this passage will take us to the engineering and science buildings."

A few moments later, they heard a sound. It seemed far away. It was a repetitive pounding, echoing far and wide in the silent underground network. They stopped to listen.

"What is it?" whispered Alex.

"Maybe it's guns," Jeffrey answered. He was shivering, despite the sweltering heat.

"No way!" said Alex. "Let's keep going." He pushed back his shoulders, and set off bravely toward the sound.

Bang! Bang! The disembodied thumping grew louder.

They reached another door, connecting to the next building. Gordon switched off the flashlight and quietly opened the door. The banging became much louder.

"We're on the right trail," whispered Alex. "Keep the flashlight low." Gordon directed the beam only a step or two in front of their feet. They worked their way along a cluttered hallway. Old electronic apparatus with vacuum tubes stood on dusty shelves. There were twisted wires, plugs, pulleys and flywheels everywhere. They could smell the moldy old books and journals piled high on some of the shelves. "We're in the physics building," Gordon whispered.

Alex's shoulder knocked a large spool of wire and it clattered to the floor. The noise echoed up and down the hallway. But the banging did not stop.

They could see a square of light ahead. Stealthily, they crept toward it. Alex discovered that the light came from a small window in a connecting door. He peered through it. "Shut off the flashlight," he whispered. "I see something." Jeffrey crept up beside Alex. Gordon looked over their shoulders.

Through the window, they could see three men in a dimly lit corridor. One of them, a short stocky man, was hammering a large wooden panel into a big gap in the corridor wall. The others were shoving a large, dark tapered object through the gap in the wall. A woman was visible through the gap, apparently giving the object balance on its way through.

"The guy with the hammer looks like Edmund Iglehart," Gordon whispered. "He's a professor in the Astronomy Department. What's the big thing they're shoving through the hole in the wall?"

"It's the Sassaphron Messenger," both boys whispered with intense excitement.

"Really?" whispered Gordon in disbelief.

The men finished heaving the large object through the gap in the wall. Iglehart began nailing another wooden wall panel in place over the opening.

"We have to get the police," whispered Gordon.

"No," shouted Jeffrey in a loud voice, "we have to save the Sassaphron Messenger. Michelle said we have to." He pressed down on the levered door handle. It began to squeak open.

The crew in the corridor beyond heard the noise. Iglehart stopped hammering. Turning, he grabbed something from the floor. It was a gun.

"Run!" Gordon commanded. They turned tail, and dodged back down the cluttered hallway, with only the jittering beam from the flashlight to guide them. Iglehart was after them.

Alex reached the door to the tunnel first and opened it for the others. They passed through just as Iglehart dashed through the door at the other end of the corridor. "Stop," he yelled, "or I'll shoot!" Alex shoved the door closed behind him. He heard a bullet thud into the thick wooden door over his head, splintering a portion of it. They rushed through a short tunnel and entered the engineering building. Should they retrace their steps down the long dark hallway, or make a right turn down a cross hallway? They could hear Iglehart scrambling after them. Gordon calculated that they could not reach the end of the long corridor before Iglehart entered the corridor behind them. If they continued straight, Iglehart would have a clear shot at them. Gordon ordered the boys to turn right. Ten feet down the cross hallway, there was a recessed entry to a closed door. Gordon pushed the two boys into the recess in front of him.

Five seconds later, Iglehart threw open the connecting door and entered the engineering building. It was dark and silent. He knew that the intruders could not have gone the length of the engineering building and must be lurking nearby. Slowly, he worked his way down the dark hallway, with very little light to guide him. Iglehart was a brilliant scientist, but he was not well trained in cat and mouse games. He thought his quarry was in front of him. He didn't hear the rustling sound behind him. Gordon easily felled him with a tackle around the knees. Iglehart fell heavily. His gun clattered across the concrete floor. He struggled to escape his unknown assailant, but two strong young boys were on him, pinning his arms. Gordon recovered the gun. He ordered Iglehart to stay on the floor with his arms outstretched. Alex trained the flashlight on Iglehart. When Gordon was sure that none of Iglehart's cronies had joined the chase, he ordered Iglehart to his feet. Slowly, Gordon and the two boys marched their prisoner toward the nearest EXIT sign.

The group emerged into brilliant sunshine. Alex noticed the pickup truck parked next to the Physics building.

Gordon pointed to an outdoor campus phone and directed Jeffrey to call the police. Soon, two patrolmen on bicycles showed up and took Iglehart into custody. He refused to answer any questions, and demanded his right to contact a lawyer. Gordon and Alex quickly explained to the police officers that the other gang members were still in possession of the UFO remnant. Gordon pointed out that the thieves could easily escape, using the same underground passages he and the boys had used to reach the Physics building.

The two bicycle cops radioed for help. Everyone waited anxiously for at least fifteen minutes. Then, the silent campus came alive. Police cars rolled up. The Physics building was surrounded by a swat team dressed in black fatigues and carrying automatic weapons. Some of them disappeared into nearby buildings to secure the underground escape routes. The campus patrolmen ushered Gordon and the two boys to a safe distance, complaining that the city police could be trigger happy.

"I bet the other gang members have already escaped," grumbled Alex. Gordon shared his concern at the delay.

When Iglehart pursued the unknown intruders, Ruth, Copland and Tavershall continued to manhandle the Sassaphron Messenger through the gap in the wall. Their plan was to hide it in the cavernous store room. Iglehart knew that the large store room was rarely opened. Once the extraterrestrial object was in there, he felt sure no one would discover it. Because it wouldn't fit through the door, it was a matter of necessity to open the wall.

When Ruth heard Iglehart's gunshot, she knew they would have little time. With increasing anxiety, she urged the others to complete the job. Just as they finished and were deciding how to escape, police with bright lights and a megaphone cut them off in both directions along the underground corridor. Ruth and the others had no choice. They surrendered without a struggle. The police soon found the secret chamber and recovered the Sassaphron Messenger.

FBI agents, including Susan Brindley, were soon on the scene. She congratulated Gordon and the boys for their heroism.

"How did you know where to look?" she asked Alex as they stood together, watching the gang of four being handcuffed.

"Just a lucky guess," muttered Alex.

Edmund Iglehart and his wife Ruth Geiger were put in jail. They were charged with a variety of crimes including assault and battery, conspiracy, and activity endangering national security. Iglehart was also charged with leaking classified information. Copland and Tavershall were charged with lesser offenses, and released pending trial.

Karl Kugelbahn arrived from Berkeley early the next day. The Sassaphron Messenger was turned over to him. After a brief on-the-spot inspection, he had it wrapped and prepared for shipping. Late that day, the Sassaphron Messenger was carried to California on an air force cargo plane.

Kugelbahn took a few minutes to congratulate the trio who had apprehended Iglehart and saved the Sassaphron Messenger. Alex thought it was more like a speech than a friendly greeting. Kugelbahn said, "Thank you for making clear to everyone Edmund Iglehart's unscrupulous character. Thank you also for exposing his fraud before it did damage to science and public safety. If he had been successful in his outlandish scheme, there is no telling what mischief he would have caused."

Kugelbahn gave the boys a letter of commendation from Dr. Folwell, science director of NASA. In the letter, Folwell asked the boys to let him know if there was any way that NASA could reward them for their heroism. Alex and Jeffrey replied to Folwell by email. They asked to be kept informed about the inspection of the Sassaphron Messenger. They also requested that once the inspection was completed, they be given a souvenir part of the object. Folwell agreed by return e-mail.

No one could fathom how Alex and Jeffrey had chanced upon the idea of searching the maze of passages under the university. Susan Brindley felt sure the boys were keeping a secret. She suspected that they had recognized one of the gang during the theft of the Sassaphron Messenger on Friday evening.

"I think you know something you're not telling me," she said, as they ate ice cream sundaes back at Alex's house that evening. She smiled at them. "You know I'll find out eventually, so why don't you tell me now?"

The boys tried not to smirk as they concentrated on hot fudge and whipped cream.

"Even if we knew something," said Alex, "you wouldn't believe us."

"Oh yeah," Susan said, "try me."

Alex and Jeffrey's eyes met. They went on eating in silence.

Chapter 6. Return of the Sassaphron Messenger

Jeffrey returned to his summer home in northern Minnesota. Both boys resumed their vacation activities and waited for news from Berkeley about the Sassaphron Messenger.

Alex was attending a French summer school in the Twin Cities. He chose Jean-Pierre as his French alias. His parents had promised him a trip to Montreal if he could demonstrate mastery of conversational French. He accepted their challenge and studied hard.

Alex decided to keep quiet about his weekend adventures. His resolve was soon tested. First thing Monday morning at French school, his friend Kevin (alias Etienne) asked, "Jean-Pierre, did you do anything exciting over the weekend?"

Alex was ready, "Rien!"

Etienne's French was pretty shaky. "Rain? Not around here. Come on. Did you see all that stuff on TV about UFOs?"

Alex ignored the question. "I just hung out this weekend. Instead of talking French, I learned the Greek alphabet--alpha, beta, gamma--you know. It kicks!"

Etienne was puzzled and bored. He turned the conversation to the weekend baseball scores.

Jeffrey spent most of his time reading, playing computer games, and watching movies on the VCR. His grandfather, who was visiting from Hong Kong, attempted to teach him Cantonese, the dialect of Chinese spoken by the Wong family. Much to his parents' annoyance, Jeffrey made little effort to learn. Instead, he developed a surprising interest in ancient Greece and Rome. He was entranced by the legends of conflict between people and gods, and the strange creatures that haunted their worlds. He learned the Greek alphabet and how to count in Roman numerals. When his family got a new German shepherd, Jeffrey named him Cyclops after the one-eyed giants in Greek mythology. No one could understand why; the dog had two fine, shiny bright yellow eyes. The boys kept in daily contact by Internet. They always asked the same question: How soon would they receive news about the Sassaphron Messenger? Their interest remained high, although the UFO stories rapidly faded from the pages of the newspapers. Regularly, Alex sent e-mail inquiries to Dr. Kugelbahn. The reply was always the same, "No yews yet." Alex was sure the inspection of the Sassaphron Messenger must be proceeding. He was irked that Kugelbahn would not trust him with the findings.

Alex tried again and again to connect with Michelle, but without success. He couldn't find her flickering blurry icon. He began to doubt Michelle's reality. Who or where was she anyway? Perhaps she was just another computer hacker across town, hoodwinking a couple of gullible kids. Alex knew that people could communicate over long distance using internet, but he doubted that Michelle could really communicate across long intervals of time.

Jeffrey sensed a change in Alex's attitude from his e-mail messages. Alex's interest in Michelle and the Sassaphron Messenger were flagging. Jeffrey tried to boost his friend's spirits. "Alex," he typed, "we have to keep trying. Michelle is our friend from the future."

Alex had increasing doubts. "It could have been anybody," he typed, "a hacker down the street or halfway around the world."

"But how can you explain the clue about the catacombs?" typed Jeffrey.

"I don't know if you can call underground hallways catacombs," replied Alex. "I didn't see many dead Christians buried there. It was probably just a lucky coincidence. Just like fortune tellers and clairvoyants who make a lucky guess once in a while."

In late August, Edmund Iglehart and Ruth Geiger pleaded guilty to criminal charges. They were both sentenced to lengthy terms in federal prisons. Neither Alex nor Jeffrey had to testify in the brief court hearing. Karl Kugelbahn returned to the Twin Cities for the hearing. He was pleased with the outcome. Iglehart deserved to be behind bars where he wouldn't cause mischief for a good long time.

In September, the boys returned to Sky High. Quickly, they slid into their Fall schedules. Weeks and months passed. In November, snow swept across the plains and covered the ground with a thick white blanket. Alex sharpened his ice skates for hockey. The vivid memories and intense emotions of the weekend in July slowly faded.

* * * * *

It was a chilly day in early April. When Alex arrived home from school on the bus, he noticed an unfamiliar car parked in front of the house next door. A woman was seated

behind the wheel. She looked familiar to Alex, but he couldn't place her. He went inside his house and locked the door. His parents weren't home yet.

A couple of moments later, the doorbell rang. Alex peered through the glass window next to the door. It was the woman, and now he recognized her. It was Susan Brindley, the FBI agent. She smiled at him through the glass. He remembered her sparkling dark blue eyes. She was wearing a woolen hat and scarf against the late winter chill.

"Hi Alex, I need to talk to you," she mouthed.

Alex opened the door and invited her in. He had been told to never let in strangers, but he decided an FBI agent was not a bad risk.

"Hi, how are you?" Alex stammered, not knowing what to say.

"I'm just fine," Susan replied. "You look great! How's Jeffrey?"

"Good," answered Alex.

They stood eyeing each other in the entrance hall for a moment or two. "Can we sit down and talk for a couple of minutes?" Susan said. "I have some news about your sassaphron thing."

"You do?" said Alex with sudden excitement. "What is it?" He looked into her face and his blue eyes met hers. She winked, breaking the ice.

He smiled, and led her into the living room. She laid her heavy raincoat over the back of a chair and sat down on the sofa. The pale yellow afternoon sun flickered through the windows and across the floor.

"Can I get you something to drink?" asked Alex, trying to remember how to be a good host.

"Sure," said Susan. "What have you got?"

Alex went out to the kitchen and opened the refrigerator. "Would you like milk, beer, mineral water, or orange juice?" he called.

"Actually, I could use something hot. I've been waiting for you out in the cold for quite a while."

"I could fix you some tea, or instant coffee?" Alex offered.

She accepted the tea. He put a cup of water in the microwave. Foraging around, he found some herbal tea. In a few moments, he returned to the living room with a hot mug of something red with a pungent aroma.

Susan accepted it politely and took a sniff. "Raspberry?" she guessed.

"Tomato," said Alex without missing a beat.

They both laughed. "You're right," said Alex, quite impressed. "It's raspberry tea. You've got a good nose."

"Having a good nose for things is a requirement in my line of work," said Susan.

Alex perched on the edge of an easy chair across the coffee table from Susan. "Please tell me what the scientists have found out?" he pleaded.

Susan took a sip of the hot stuff. "Well, Alex, first I'll tell you the bad news. They've decided it's a hoax."

Alex couldn't believe his ears. "What do you mean, it's a hoax? What's a hoax?" he asked.

"That big old funnel that turned up behind your house, the sassaphron thing." Susan spoke in a casual tone, but Alex noticed that her fingers had tightened around the handle of the mug.

His heart sank. "That can't be right," he said. "I don't believe it."

"Yep," said Susan. "Dr. Kugelbahn and his staff have gone over it from head to toe with a microscope, a geiger counter, CT scan, MRI, and every instrument you can think of. They've checked it for biological toxins and extraterrestrial dust. They don't know quite what it is or where it came from, but they say it's a hoax."

Alex became defensive. "Do you think that Jeffrey and I..."

She interrupted. "No, no, nobody thinks you're the perpetrators. They think that somebody with some knowledge of rocketry blew this thing into the sky somewhere and it just happened to land near your house. Maybe they heard the news from Berkeley about the intelligent signals from space and hoped to capitalize on our excitement. What they planned to gain is unclear. It was probably just a prank. Dr. Kugelbahn thinks that Iglehart and Geiger may be behind it, although there's no evidence of that."

"That doesn't make sense," said Alex in frustration. "If they were behind a hoax, why would they have stolen the Sassaphron Messenger from us?"

"I agree with you," said Susan quietly. He heard the skepticism in her voice. He sensed that she was an ally. Susan continued, "There may be one bit of good news. Dr. Kugelbahn sent a letter along for you with an offer." She took the letter from her purse and handed it to Alex. It was very official looking and was stamped CONFIDENTIAL. The address included both Alex's and Jeffrey's names. Alex looked at it nervously, wondering if he should open it. "Go ahead," Susan said. "It's for you. He sent me a copy, so I know what it says."

Alex tore open the letter. The stationery had the logo of the SETI project. Alex read:

"March 31, 1996

Dear Alex and Jeffrey:

We have now examined the sassaphron object in great detail. (The letter listed some of the tests that had been done.)

As I believe you know, the exterior appears to have been exposed to high heat. Any protective coating was certainly burned away. The surface contains no identifiable markings apart from the large embossed forms that spell out SASSAPHRON in Greek letters.

The inside of the object is hollow and covered with peculiar engravings. Many of these markings look like ancient Greek letters, but they cannot be identified as such. There are also abstract designs made up of curved line segments, and elongated curvilinear patches. Ultimately, we have decided that these markings are meaningless. The presence of Greek letters on the exterior (obviously of terrestrial origin) and the presence of the meaningless markings on the interior have convinced us that the sassaphron object is a hoax. We have decided that there is no direct connection between the intelligent extraterrestrial signals we detected and the crash of the sassaphron object near your house.

Carbon 14 dating was inconclusive, but we feel that the materials, though a strange and unknown alloy of iron, carbon and a high proportion of nickel, could certainly be produced on Earth. Although the materials are certainly unusual, there is no compelling evidence that they are of extraterrestrial origin.

You asked for a souvenir from the sassaphron object. Because you played such an important role in finding this object and were so brave and cooperative, I am offering to send the object back to you. If you are unable to accept it because of its size and because it is a fake, we will destroy it. I have a special request to make. Please do not tell anyone outside your families of the outcome of our investigation. There are many space freaks, conspiracy theorists and other alarmists who are likely to attack our findings and spread fear in our nation. They may also seek you out and cause you trouble. We think it best to keep this matter secret.

Agent Brindley from the FBI will carry this letter to you. Please notify her as soon as possible whether you wish to accept return of the sassaphron object.

Dr. Folwell from NASA joins me in thanking you for your help.

Yours truly,

Karl Kugelbahn, Ph.D. Professor and SETI Project Director"

Alex was crushed. He fought back tears of disappointment, frustration and anger. "It's not true. He's wrong! The Sassaphron Messenger is real! It's important! It has critical information!" He threw the open letter on the table.

"What kind of critical information?" probed Susan.

"I don't know," said Alex. "But it does!"

Brindley once again had the feeling that Alex knew more than he was telling. She decided to toe the party line.

"Sorry," she said. "I'm afraid it's another UFO fake. There are thousands of them. People are out for publicity, or to make a buck, or simply to scare people. We don't know where this one came from, why they dropped it here, and what they hoped to get out of it. We'll file it as just another cosmic caper." She eyed Alex to gauge his response.

He was flushed with anger. He grabbed the letter and read it for a second time. Once again, he threw it down. "How can Dr. Kugelbahn be so sure?" Alex finally asked Susan.

"Dr. Kugelbahn is a very smart man. He also has smart people working with him, some of the best scientific brains in the world. They have the fanciest measuring instruments in the world. They have access to FBI forensics and technology from NASA as well. They've done a thorough investigation."

"Will they really ship the Sassaphron Messenger back to us if we say yes?" he asked, brightening a bit.

"Yes they will. Dr. Kugelbahn thinks it's the least he can do for you."

"I'll have to talk to my parents, but I'm sure they'll let me have it. I'll get in touch with Jeffrey right away."

"Where will you keep it?" asked Susan. "Dr. Kugelbahn wants to be sure it's out of sight. It's pretty big."

Alex was stymied. "Behind the house, maybe."

"That's too open," Susan said. "When they were inspecting it at Berkeley, they had to slice it in two crosswise. Each section is about seven or eight feet long; one is narrow and tapers to a point, and the other is fairly circular and several feet across. It's going to be hard to hide."

Alex thought of their large, two-car garage. There would be plenty of room for the two halves of the Sassaphron Messenger, side by side. Would his parents allow it? It would be a tough sell.

Susan got up and put on her coat. The mug of red tea sat on the coffee table, still nearly full. "I'll be here tomorrow when you get home from school. I'll want your decision about the sassaphron object. Talk it over with your parents and Jeffrey tonight. If you are able to accept it, it will be delivered secretly. You will have to keep it safe and out of sight. If word gets out, NASA and the FBI will deny knowledge of it. Do you understand, Alex?"

He nodded, although he didn't understand the need for all the secrecy.

"Thanks for the tea, Alex." She extended her hand.

Her grip was warm and friendly. He was sure that she too was unhappy with the outcome of the sassaphron inspection, even if she didn't say so.

After Susan departed, Alex ran up to his room and powered on his computer. He ran the letter from Kugelbahn through his scanner, and transmitted it an electronic image of it to Jeffrey.

Jeffrey's reply was almost instantaneous. He must have been doing his homework, thought Alex. The words on the screen from Jeffrey shouted at Alex "THEY'RE WRONG! WRONG! WRONG! WRONG! WRONG! We've got to get the Sassaphron Messenger back. You can hide it in your big garage. We'll inspect it together. We can get some help from Michelle if we can ever connect with her again."

Alex was in an agitated mood when Gordon and Wendy arrived home for dinner. He explained to them about Susan Brindley's visit and showed them Kugelbahn's letter. "We have to take back the Sassaphron Messenger or they'll destroy it," said Alex. "We can, can't we?"

"We've got no place to put it," said Wendy.

"Yes we do," said Alex. "It will fit in the garage."

"Then we wouldn't have room for our cars," said Wendy.

"So what!" said Alex. "What's more important, the cars or the Sassaphron Messenger?"

Wendy was practical. "Look, Alex," she said firmly. "The experts have discovered that it's a fake. It's a huge bulky, charred fake. Why should we give up our garage to a fake? Besides, it may attract attention from undesirables. We can't accept it."

"But we have to," Alex shouted shrilly. He stomped his foot in frustration.

"Go to your room and cool off," ordered Gordon in a stern voice.

Alex ran upstairs and slammed his bedroom door. He went straight to the computer keyboard. His fingers hammered out an e-mail request to his friend; could Jeffrey take the Sassaphron Messenger?

Jeffrey's reply arrived quickly. The Wong's garage was too small and there was nowhere else to put the Sassaphron Messenger. His parents would not allow him to take it. Jeffrey pleaded with Alex to persuade Gordon and Wendy to change their minds.

Alex felt trapped. Not knowing what to do next, he absentmindedly wandered through the web of internet connections. Point and click, point and click on the blue hyperlinks: first, the latest baseball scores, then yachting results in the America's Cup, then satellite pictures of the Caribbean, then telescope images of dust storms on Mars. It was like a magic-carpet ride!

Hurtling on, searching for nothing in particular--suddenly, surprisingly, he caught sight of the flickering faint, but unmistakable trace for Michelle. His attention came into focus. Now he realized what he'd been searching for! Eagerly, he moused to the gray, blurry image and clicked. Just as before, he watched his computer execute a complex series of network transfers. After an excruciating pause, he saw the telltale rainbow, the blue and green stripes, and then the CONNECT message. Alex went through the log-in procedure, remembering Michelle's instruction to type Creusa instead of Minneapolis.

"Hello, Alex, is that you?" The message danced across his screen.

"Yes it is, Michelle. I have good news and bad news. The good news is that my Dad and Jeffrey and I found the Sassaphron Messenger in the catacombs under the university. Thanks for the clue. The bad news is that the Sassaphron Messenger is a hoax."

Her reply came quickly. "Thank goodness you found it. But what do you mean, it's a hoax? You didn't find the right thing?"

"The scientists at Berkeley and NASA have studied it and say the markings are meaningless. They say it's just somebody's practical joke. That means you're a hoax too. Who are you, Michelle, and why have you been joking us around?" He was angry, but glad to confront Michelle. Who was she really, and what was she up to?

This time, Michelle's reply came back in staccato bursts, a few characters at a time, intermingled with strange symbols. Alex was able to piece together the message. "Alex, are you calling me a liar? I'm no more a hoax than you are. What are you accusing me of?"

He typed furiously, describing the investigation and the conclusion that the Sassaphron Messenger was only a prank. "NASA plans to destroy the Sassaphron Messenger," he concluded.

"Oh no, Alex, you mustn't let them destroy it! That would mean disaster for you, and probably me too. You must believe me."

"What difference does it make to you?" he asked. "If you live in 2121 like you claim, why should you care what happens in 1996?"

"It's 2122," she corrected him. (He noticed that her calendar had advanced a year since his first contact with her, like his own.) "I care because what happens in the past affects what happens NOW. Don't you understand that? Your life now in 1996 depends on what happened in 1776 and 1945 and a lot of other times. If the American Revolution hadn't happened, where would you be?"

Alex couldn't understand what Michelle was driving at. He continued to doubt that she was genuine. Could she be a school friend playing a trick on him? Maybe even Jeffrey? Or could Michelle be a loony computer hacker somewhere on the net? If he continued the conversation long enough, she'd probably slip up and reveal her true identity. He pressed on. "Yes, what happened yesterday, or even long ago, can affect me today, at least the big events can. I'm not sure about the little things. But once events have happened, there's no changing them."

Alex waited for several minutes before Michelle replied. "That's where you're wrong. You're narrow-minded, Alex. You have the old-fashioned idea that events in the past are unchangeable. You're locked into the old way of thinking. Most people nowadays believe that the past is as changeable as the future. I know what you're thinking--we can't do much to affect the future either. Well, yes, but sometimes we can, and sometimes we can change the past as well. Don't you see? That's why I'm doing my best to keep in touch with you. The very fact that I connected with you, across a gap of more than a century, means that the future can communicate with the past."

Michelle's text continued to roll down Alex's screen in a flood of words. "When I first met you electronically last summer, I was so thrilled. I told my teacher and my brother and my closest friend Saraphron. I had fulfilled my dream of connecting with the past! But then it dawned on me that you were involved with the Sassaphron Messenger, and I got scared. I'm still scared. What if I interfere with the events of the warning? Or is it really my role to play a key part in the warning? And then, I couldn't get back in touch with you until today. I waited, and waited, and you didn't connect. I've been in a real panic Alex. Why did you wait so long to communicate?"

Alex's head was spinning. He had never heard anything like this before. He had once read about time flowing like a river, always in one direction. But Michelle seemed to be saying that the river could sometimes flow upstream too. Also puzzling, she seemed to be worried about the Sassaphron Messenger.

"Michelle, Jeffrey and I have tried many times to reach you. I only found your address today by luck. I can't be sure I'll find you tomorrow either. But I'll keep trying. Don't worry, Jeffrey and I will do our best to save the Sassaphron Messenger. But what should we do with it? How can we help?"

Alex was not prepared for what came next. "HUGS and KISSES!" said the screen. "You're a dear. Please don't call me a hoax or a fake again. I want to be your friend!" Across 126 years of cyber separation, Alex blushed. Even a digital hug and kiss were enough to make him squirm.

There were more words from Michelle. "Alex, I'm serious. You must look after the Sassaphron Messenger. You must do everything you can to protect it. If it's destroyed, then there's no warning and ..." There were a few more meaningless symbols, and the connection went dead.

Alex tried to reconnect but without success. An avalanche of questions swept over him. Who was Michelle? What was the Sassaphron Messenger? Where did it come from? Why did it have Greek letters? What was the warning about? What would happen if it were destroyed? Did Michelle really live in the future? Would her fate somehow hinge on the safety of the Sassaphron Messenger? He sent e-mail to Jeffrey, describing his conversation with Michelle.

Jeffrey's reply came in full caps: "WE MUST SAVE THE SASSAPHRON MESSENGER!!!"

Alex prepared for diplomatic negotiations. He wrote down some polite phrases and rehearsed his plea several times. Then, he went downstairs to sweet talk his parents. They had read and discussed Kugelbahn's letter. Gordon was inclined to accept the verdict of the scientists, but Wendy was skeptical. They listened to Alex's presentation carefully. Finally, Wendy said, "All right. Let's agree on this. We can keep the Sassaphron Messenger in the garage until the end of June. That's almost three months from now. We'll cover the windows and keep the door locked, and no one will know that it's there. We can park in the driveway. After all, Spring is on the way. You and Jeffrey can study it and do what you like with it. At the end of June, it will have to go."

Three months is an eternity for a kid. Alex declared victory inwardly. He threw his arms around Wendy and gave her a hug. "Mom, thanks! You're a genius!"

Back on the computer, he first checked for Michelle. There was no sign of her icon. Then he sent the good news to Jeffrey. "Hurray!" came Jeffrey's electronic reply.

The next afternoon, Susan Brindley was waiting in her car when Alex arrived home from school. Alex waited for her on the sidewalk as the bus pulled away. He noticed the first green buds on the branches of the maple tree in the front yard. The grass was still a lifeless brown.

"We can take it," Alex said gleefully, smiling up at Susan.

She smiled back. "All right, but keep it quiet. We don't want any news reporters, or UFO freaks, or rogue astronomers snooping around here."

Susan waited for Alex's parents to get home, but graciously declined his offer of cinnamon plum tea. She explained to Gordon and Wendy how the Sassaphron Messenger would be shipped from California and the importance of keeping its presence a secret.

A week later, a moving van arrived. It backed up the driveway. A huge rectangular crate, well sealed, was deposited in the garage. The door was closed and the windows covered with black curtains. The movers, actually FBI agents, split the seals, opened the heavy wooden crate and mounted the two parts of the Sassaphron Messenger on wooden platforms in the McIntosh's garage.

Chapter 7. Michelle's Revelation

On the day the Sassaphron Messenger was delivered, Jeffrey came home from school with Alex. The boys went straight to the garage. Their previous encounters with the Messenger had been dramatic, but at a distance. This was their first chance to see it up close.

As Susan Brindley had described, the object had been neatly sliced into two circular sections, each about seven feet long. One section tapered almost to a point, while the other widened to a large, flat end about four feet in diameter. Both sections were hollow, with thin, hard walls. The intact messenger had been a remarkably simple thing, a sealed capsule that could have bobbed and floated for an eternity in the ocean of space.

The outside surface had been thoroughly cleaned by the Berkeley scientists, but it was still covered with black burn marks. Presumably, the burns had resulted from frictional heating during the Messenger's high-speed plunge through the Earth's atmosphere. If Iglehart faked this thing, thought Alex, he sure went to a lot of trouble.

"I've found SASSAPHRON," reported Jeffrey triumphantly. Sure enough, on the exterior of the tapered end, he had located the heavily embossed letterforms that spelled out the word SASSAPHRON. The letters were several inches high with deep crevices between them. The boys stared in wonder. This was the hot, glowing object that had plummeted from the sky nine months earlier, and had baked the walls of the earthen crater behind Alex's house. Where in the world did this Sassaphron Messenger come from, and why did it have a name written in Greek letters?

"It must be terrestrial in origin," Alex said decisively. "It doesn't make sense that aliens would know Greek."

Jeffrey countered "Don't you think they'd try to communicate in a way that people can understand? It wouldn't make sense for them to use their own language, would it?"

"But how could they communicate in a human language if they're from another world?" said Alex.

"Maybe they intercepted some radio or TV signals," said Jeffrey.

Alex shook his head. "Since when did the ancient Greeks have radio stations?"

"Who says they're ancient?" retorted Jeffrey. "Greece is still around."

The boys set to work examining the interior of the two sections. The light in the garage was bad because the windows had been covered with curtains. Flashlights didn't provide enough extra light. They borrowed floor lamps from the house, connecting them to the power outlet in the garage. It was easiest to peer inside the larger of the two sections. They soon found the cryptic engravings described in Kugelbahn's letter. They saw unfamiliar letter-like and word-like forms chiseled into the interior surface. The deep cuts were presumably designed to withstand substantial damage or deterioration. The symbols were simple and primitive looking, lacking the detail of modern type fonts. The symbols were large and structured in regular lines. They were grouped with breaks that might mark the boundaries between words.

When the boys inspected the smaller section of the messenger, they discovered that the message was repeated over and over in decreasing size toward the tapering end. Whatever it meant, the authors had gone to a lot of trouble to repeat the message over and over, working on an interior curved surface. Inside the tip, the boys found the same message engraved in very tiny, but exquisitely formed microsymbols, repeated dozens of times.

"It must have taken an elf to do this," said Jeffrey in amazement. "Why would anyone go to all this trouble?"

"Here's my guess," said Alex. "Suppose the Sassaphron Messenger had struck rocks or something else very hard when it landed. It could have shattered into thousands of pieces. By encoding the message over and over at many sizes, the Sassaphrons hoped that at least one of the copies of the message would survive for someone to read." (The boys had begun referring to the imaginary architects of the mysterious messenger as the Sassaphrons. Inspired by Michelle's hints, they imagined that the Sassaphrons intended to send an important message.)

Interleaved between repetitions of the message, the boys found the strange geometrical patterns also mentioned in Kugelbahn's letter. They consisted of web-like structures in elongated patches, some with straight edges and some with swooping irregular curves. At first sight, the patterns looked like swirls excavated by the ocean tide on a sandy beach. On closer inspection, they clearly possessed some orderliness.

After completing their detailed examination, the boys sat on a vacant sawhorse and tried to decide what to do next.

After a period of thoughtful silence, Alex stood up. He spoke with determination. "We have to decipher the message! Michelle says it's critical. Anyway, someone went to a lot

of work to engrave all that stuff. Kugelbahn must be wrong. It can't be just meaningless writing, just a hoax. There's too much."

"I agree," said Jeffrey. "Where do we start?"

"We know that the symbols on the outside are from human language," said Alex. "Maybe the interior symbols are from human language too." The boys decided to begin a search through ancient and modern writing systems to find something that matched the Sassaphron code.

For the next few days, they scoured books and encyclopedias. They used their computers to search through databases on linguistics and anthropology. They read about many ways of encoding written information, ranging from simple codes, like the one where letters are replaced by other letters, to the complex codes used by spies. They examined books listing graphic icons used worldwide, hoping to find matches to the Sassaphron engravings. When Alex spotted a promising item, he would run downstairs to his garage to make a direct comparison. Several times, Jeffrey rushed over from his house to check out something he'd found. There were many false alarms. A couple of times, there was a perfect match between a symbol in a book and a single symbol on the Sassaphron Messenger, but the lack of correlation with other symbols convinced the boys that the match was purely a coincidence.

"There are only so many ways you can draw a few curved lines," muttered Alex. "We're bound to run into accidental matches."

As the string of disappointments grew longer, their frustration mounted. It boiled over one day after a fruitless comparison between a 19th-century French military code and the Sassaphron symbols. The boys stood, leaning against the wooden platform that supported the smaller of the two Sassaphron sections. They had been needling one another about the false matches.

"Maybe Kugelbahn is right," grumbled Jeffrey. "It probably is just a hoax, put together by somebody with a good imagination."

"I can't believe somebody would've made all this up," said Alex, nodding at the intricate engravings.

Jeffrey said, "Why not? I've made up magic codes and secret alphabets before. I could have done better than this stuff."

"Oh yeah," said Alex. "Since when did you chisel your secret stuff into metal? And I bet I could break your codes in five minutes."

"Alex," Jeffrey shouted angrily, "you'd better stop bugging me or I'll quit this stupid Sassaphron project, and I'll tell every kid at Sky High that you're a loony, and that you think you've got a flying saucer in your garage!"

"You'd better not tell, Jeffrey," retorted Alex in a threatening tone. "I'll report you to the FBI. They'll put you in jail and put a muzzle on your big mouth."

Jeffrey stuck out his elbow and pushed Alex.

In anger, Alex body-checked Jeffrey. The smaller boy staggered precariously, and then fell heavily against the lip of the open edge of the Sassaphron section. It reacted to his weight by rolling, pivoting around the tapered end and sliding toward the edge of the wooden platform. Jeffrey reached out for balance and grabbed the open lip. The whole section tilted and teetered, heading for the floor. At the last second, Alex hooked an arm into the hollow opening. Planting his foot firmly, he managed to use his weight to prevent the section from falling. Jeffrey regained his balance and helped Alex push the Sassaphron section back on the platform.

Both boys stood silently for a few moments to catch their breath. They realized that their carelessness had almost led to disaster.

"Wow, that was a close call," said Alex.

"I didn't realize it would roll so easily," said Jeffrey. "But, I guess we should have expected it, since its round."

To avoid future accidents, the boys secured the two large sections with ropes and wooden stops to ensure that they would not roll around again.

The boys also pledged not to fight, at least not close to the Sassaphron Messenger. "I can't promise that we won't ever fight again," said Alex. "Even though we are good friends, we do have a few battles. But let's promise to do our fighting at a safe distance from the Messenger." They shook hands solemnly.

* * * * *

Two months passed by. During May, Alex and Jeffrey were busy with year-end activities at Sky High including the annual arts and music festival. The boys spent what little time they could on the Sassaphron Messenger, with no appreciable progress. In early June, the boys realized they had less than a month to go, not much time to complete their investigation.

The need for secrecy about the hidden object in the garage was distasteful to the whole McIntosh family. Everyone hated telling little white lies. A curious neighbor next door had noticed the cars in the driveway every night. Casually, he asked why the McIntoshs weren't using their garage. Gordon had to make up a story about severe ice damage to the floor. The neighbor asked to have a look, but Gordon waved him off politely. Another neighbor had seen the moving van. She asked if the McIntoshs were leaving town. Wendy said no, and explained that a large sleeper sofa had been delivered.

Everyday, even the busiest school days, Alex tried to connect to Michelle. He thought of her as a pen pal--or would "mouse mate" or "bosom buddy" be better terms, he wondered--to whom he'd promised to keep in touch. Finally on a day in mid-June, he was successful. Scanning one of his lists of addresses, Alex again caught sight of the now familiar faint flickering icon for Michelle. With a deft twist of his wrist, Alex pointed the mouse arrow at the shimmering symbols on the screen and clicked.

"Jeffrey," Alex called in excitement, "I think I'm connecting to Michelle."

Jeffrey jumped up from the floor where he was thumbing through a textbook on ancient Mediterranean languages. He stood behind Alex where he could get a good view of the screen.

Alex completed the log-in ritual.

"Hi Alex," came Michelle's quick message.

How does she know it's me, thought Alex? I guess it's pretty easy for her. She probably doesn't have many other mouse mates using hundred-year-old software.

"It's me and Jeffrey," responded Alex.

"I'm glad I can still reach you old-timers now and then," came her message. "I keep trying, but we don't make contact very often. When I was thinking about you the other day, I realized that if you were still alive, you'd be about 135 years old. You'd be old gray beards! By the way, what color is your hair? Guess what else? Nobody believes I've succeeded in making an antique connection. One guy in my class claims that you must be information in a personnel database. He says there are databases with facts about dead people as far back as the 1980's, and a software agent that imitates the person. Is that what you are, Alex? Have I been fooled by a smart software program? Can you prove to me that you're real, Alex? I want to believe in you."

Alex was hurt by Michelle's doubt. "Michelle, you didn't like me calling you a hoax last time. Please don't call me a software program, okay? I'm real and I'm not dead. I have

red hair (Jeffrey's hair is black) and I'm not 135 years old. You may have doubts about us, but we still have doubts about you too. How do we know you're living in the future, in 2122? Can you prove that to us? Maybe you're one of the other kids in our class at Sky High trying to fool us. Could you send us a picture? We can send you ours."

Jeffrey liked this tack. "Yes!" he exclaimed. Seeing a picture of Michelle would make her seem more real.

Her reply was disappointing. "I've already been sending you imagery and voice. I've had to revert to written transcription because it's clear your equipment can't handle the sight and sound codes. You only get text from me, right? Not pictures or sound?"

"Right" responded Alex. He went on, "Aren't you typing your messages to us?"

A smiling face icon accompanied Michelle's reply, "Typing? How quaint! Do you mean you're using a keyboard? That explains why your answers are so slow. I just thought you talked funny. No offense. I've seen keyboards at the computer museum. I don't know anyone who's ever used one. It must have been hard to learn that weird pattern of keys and a bore to type whenever you wanted to send a message." There was a pause.

Alex typed, "How do you input words to your computer, Michelle?"

"I just speak to my computer. It can send my voice file or transcribe the words into text. My computer recognized the primitive text format of your computer and allows me to communicate with you. I guess your primitive equipment can't understand my image and voice codes."

Alex replied, "Even if we can't interpret your image formats, perhaps you could interpret ours. Should I send you pictures of Jeffrey and me? We're both pretty good looking."

Jeffrey giggled and poked Alex in the ribs. He was surprised at his friend's hutzpah. The boys had digital photos of themselves on disk. Neither had yet had the need to send a photo (digital or paper) to a girl.

Michelle answered. "I doubt my computer would accept your image format, but we can try it sometime. I bet you're both really handsome!"

The boys blushed.

Alex decided to change the subject. He typed, "Since we got the Sassaphron Messenger, we've spent a lot of time inspecting it. We can't figure out the engraved codes. The NASA scientists couldn't figure them out either. I can see why they think it's a hoax."

"It sounds like NASA was the same in your time as it is now," Michelle replied. "Everybody says they're great at calculating the paths of spacecraft, but they've never been any good at communicating with the extraterrestrials."

"The Sassaphron symbols don't look like they come from extraterrestrials," typed Alex. "They look like they come from human writing."

"Well, that's what you'd expect if the aliens picked up the code on their earlier visit," came back the message from Michelle.

The boys were astonished by this revelation. Jeffrey pulled back on Alex's chair in excitement, almost dumping his friend on the floor. "That's it!" he cried.

"What earlier visit? What code?" typed Alex.

The connection with Michelle was faltering. Gibberish tumbled across the screen. All they could catch was the single phrase "..their visit to ancient Greece.." The screen went dark. Then they saw the dreaded CONNECTION CLOSED message.

After repeated failures to re-connect with Michelle, Alex pushed back from the computer keyboard. He put his hands behind his head and leaned back, thinking carefully about what they had just learned.

"Does Michelle mean that the Sassaphrons have been to Earth before?" he asked Jeffrey.

"Yes," said Jeffrey. "That explains why they know written letters from Earth, like the Greek alphabet."

"Yes!" Alex clapped his hands. "And it may explain something about the mysterious Sassaphron characters. Perhaps they're ancient human symbols picked up by the Sassaphrons on their earlier visit. This could be our big breakthrough."

The boys slapped their raised hands together.

Chapter 8. Exchanging Messages with Professor Tom

Summer vacation began in early June. Alex and Jeffrey had lots of time to study the ancient Greeks, especially their language. Jeffrey took the lead, using what he had already learned from his readings on ancient mythology. They studied books on Crete and Mycenae. Jeffrey introduced Alex to the epic poems of Homer--*The Iliad* and *The Odyssey*. Alex was especially intrigued by the tales of the Trojan war.

"I have a riddle for you, Jeffrey," said Alex. "Why is the Sassaphron Messenger like the Trojan horse?"

"Beats me. Why?"

"They're both hollow with surprises inside."

"Another possible answer is that they're both hoaxes," said Jeffrey.

"I like my answer better," said Alex.

They became instant experts on the writing systems of the ancient world. Together, they learned about cuneiform writing, the wedge-like forms engraved in tablets by the Babylonians and other peoples around 3000 b.c. Jeffrey uncovered information about two writing systems that were precursors of the Greek alphabet, linear A and linear B. "Alex, look at this stuff." He showed Alex some illustrations in a book. "This linear A writing looks a bit like the Sassaphron code. And guess what? Nobody's been able to decipher it."

Alex had a look. He didn't see the similarity. Jeffrey's keen eye and imagination were capable of detecting a resemblance between the Sassaphron code and almost any squiggle or splotch.

"What we need," said Jeffrey, "is another Rosetta Stone."

"Whatever that is!" scoffed Alex. "Sounds like the name of a movie star."

"Alex, you dummy, it was the key that unlocked the secrets of the Egyptian hieroglyphics."

"We sure need a hero to unlock the Sassaphron glyphics," replied Alex. "Maybe we can find a genie in a bottle."

One morning, a couple of days later, Alex awoke to find an encouraging e-mail message from Jeffrey. "I've seen something that looks just like the Sassaphron writing," the message began. "I found a book on ancient Greek dialects and codes. One of the pictures is a photo of a tablet. The symbols on the tablet look EXACTLY like the Sassaphron symbols. I'll be over right after dinner. Okay? I'd come right away, but I've got a doctor's checkup today, and my mom won't let me change it. I can't wait till I get to your place. -J."

Jeffrey's parents dropped him off at the McIntosh house around 6:30. He ran up the front walk, carrying a thick textbook under his arm. He opened the book as he entered the house and shoved it into Alex's face.

Alex saw the resemblance at once. "Yes, yes," he said eagerly, "it sure looks like the Sassaphron code." The boys dashed to the garage to make a direct comparison. Quickly, they discovered that two of the symbols in the photograph were virtually identical to two of the Sassaphron symbols. Several others were similar, although the matches were not exact. The general style and layout of the sample of writing in the book looked like the layout on the Messenger.

The boys tried to understand the author's scholarly commentary. Much of the text was too technical for them, but they learned that the tablet in the photo was one of several that had been discovered recently in Greece. The tablets had been found among the ruins of an ancient temple, located in a small town that had been destroyed and forgotten.

"It sounds like this place disappeared long before Athens became famous," said Jeffrey as he worked his way through the chapter. "He says something here about Linear A. I think the writing on the tablets might be related to that."

"What's the author's name? We need to find him and get his help."

Jeffrey already knew the answer. "His name is Thomas Mokeley-Jones. He's a professor. It says here that his address is Corpus Christi College, Oxford University, England."

"Let's see if we can find him on the net," suggested Alex. They went upstairs and switched on the computer. After a little searching, they found the professor's e-mail address at Oxford. They composed a note to him. After polishing the message a few times, and passing it through the spelling checker, the boys sent it off:

Dear Professor Thomas Mokeley-Jones,

We have recently discovered some strange writing that looks very much like the writing on the tablet in the photo on page 327 of your book entitled *Dialects and Codes in Ancient Greece*. Could we send you a sample picture and ask you for your help in identifying and translating this writing?

Yours truly,

Alexander McIntosh and Jeffrey Wong

They waited anxiously next to the computer, hoping for a speedy reply. Alex switched on the gong that sounded whenever new mail arrived.

Gong! The boys jumped. But it was only a note from their school friend Kevin.

Gong! This time, it was an announcement from the Computer Club at Sky High. The club remained active during the summer.

Gong! Gong! Other messages trickled in, but there was none from Professor Mokeley-Jones.

Jeffrey's father picked him up about 10 o'clock. Soon after, Alex went to bed.

Alex decided to leave his computer on overnight. He slept through the gong that announced the professor's reply. The message was waiting when he got up the next morning:

My Dear Chaps,

Pleased to receive your message. You were spot on, in finding me. Would have replied sooner except that I went straight to the archives at the Ashmolean Museum this morning before checking my computer. Hope I haven't delayed you.

I'm afraid you must be mistaken. The Ashmolean holds the only known samples (on stone tablets and papyrus) of the writing pictured in the photo in my book. My postgraduate students and I unearthed them in a dig beginning three summers ago in Greece and still continuing. We have only recently made strides in deciphering them.

I would be delighted to examine any samples you may have found. Does one of the museums in Minnesota have an interesting collection of Greek antiquities? I am embarrassed to confess that I am not familiar with the Minnesota collections. If you wish to send me the sample containing the writing you have discovered, I will, of course, take exceedingly good care of it. I assure you that I will keep our communications in strict confidence. If you would prefer to send a photo, or even a computer scanned image, I shall attend to it directly.

Are you gentlemen affiliated with the Classics Department at the University of Minnesota? If so, please pass along my heartiest best wishes to Professor Jeremy Osterlund. He was an excellent student of mine many years ago, and a fine sculler I might add.

Thank you for your kind interest in my labours.

I remain yours very truly,

Thomas Mokeley-Jones, Ph.D. F.R.S. Fellow, Corpus Christi College Oxford University

The message concluded with a flowery electronic signature that read "Tom" in large sweeping strokes.

"Bingo," exclaimed Alex. Immediately, he forwarded the electronic message to Jeffrey. Then he dressed quickly in shorts and a T-shirt. By the time he was tying his tennis shoes, Jeffrey had replied. "I'll be over as soon as I can. Give me about an hour."

By the time Jeffrey arrived, Alex, with Wendy's help, had mounted a camera on a tripod in the garage. The camera was positioned to photograph a small portion of the Sassaphron message. Wendy had attached a close-up lens. Alex was fiddling with lamps to illuminate the faint engravings. He discovered that direct lighting washed out the features, but illumination from the side produced shadows that highlighted the marks.

In no time, the boys shot a roll of film with a variety of exposures. Wendy agreed to drive them to the nearby mall. While the film was being developed, they ate hot dogs for lunch.

"There goes my allowance," said Alex, nodding toward the camera shop.

"It's your choice to spend your money on the Sassaphron project," said Wendy.

"And a good one!" said Jeffrey. "I promise to pay for the next roll, Alex."

The photos were ready before they finished their hot dogs. "Don't get mustard on them," warned Wendy.

Alex stuffed the end of a hot dog in his mouth and examined the photos. Several of the shots were quite good. They showed distinctly a sequence of the strange letterforms engraved on the interior of the messenger.

Back at the house, the boys placed the best photo on the scanner. The machine whirred and, after a few seconds, deposited a digital image in computer memory. With the click of a mouse button, Alex sent the digital image speeding across the Atlantic to Oxford University.

"Shouldn't we tell him who we are and where we found this writing, and that we don't know that guy, Jeremiah Otterberg or whatever his name is?" said Jeffrey.

"We'll tell him later," said Alex. "But let's see what he says about this picture first."

They waited, trying to figure out what time it was in Oxford and whether a professor there would be awake or asleep.

Professor Tom's reply came in about an hour. It read:

My Dear Colleagues:

The image you sent is remarkable beyond belief. It surely represents glyphs from the same writing code described in my book. Where in the world did you find your samples? Although the symbols are certainly identifiable, details of the strokes are clearly uncharacteristic of those on the tablets I have studied. Indeed, perhaps this is so because your writing sample is apparently not engraved in stone. Nor, from the shading, does it appear to be paper.

Your discovery is all the more extraordinary because it may represent an independent sample from a lost writing code believed to be restricted to a very old, out-of-the-way and insular settlement of Ancient Greece.

Would you be so kind as to enlighten me regarding the origin of your sample? Did you obtain it in your travels in Greece, or did it turn up somewhere in North America? As you can see, I am bursting with curiosity.

While I await your reply, I will commence deciphering the sample you sent and hope to have some form of translation soon. Do you have additional samples?

Although dusk has now descended on our long midsummer day and the hour is late, I will not sleep before further study of the amazing image you have so kindly sent to me. I remain yours very truly,

Tom

The boys were delighted with this response. They read it over and over.

"How could the Sassaphron Messenger come from a lost settlement in ancient Greece?" asked Alex.

"Well," said Jeffrey. "Don't you remember Michelle's hint that the Sassaphrons picked up the code on their earlier visit?"

"Do you really think there's a link between Professor Tom's lost settlement and the extraterrestrial Sassaphrons?"

"There's got to be!" said Jeffrey firmly. "How else could that writing have ended up crash-landing behind your house? Anyway, Alex, we have to answer Professor Tom's questions. We have to tell him where we found the writing if we expect him to help us. We have to tell him about the Sassaphron Messenger."

"Not quite yet. He wouldn't believe us. It's too strange. Let's break it to him gently," said Alex. He typed the following message:

Hi Professor Tom,

First, let me tell you that Jeffrey and I aren't professors or scholars. We're just kids 14 years old.

Thanks for the help you are giving us with the mysterious writing samples we've discovered. We're afraid to tell you where we found the writing samples because it's so strange you wouldn't believe us.

We hope you will be able to translate the sample we sent you. We have a lot more where that came from.

By the way, does the word SASSAPHRON mean anything to you, spelled in Greek letters: Sigma Alpha Sigma Sigma Alpha Phi Rho Omicron Nu?"

By the time Alex dispatched this message, it was after 6 o'clock and time for dinner. The boys calculated that it was past midnight in Oxford. Despite Professor Tom's last message, they didn't expect to hear from him until morning. But after dinner, they were happy to see that he had replied:

My Dear Lads,

Your latest communication has astonished me twice more.

First, I am surprised and delighted to learn that you have attained just a baker's dozen plus one years. Congratulations on your youthful ingenuity and scholarship.

Second, the word SASSAPHRON is indeed well-known to me, but to almost no one else. I am astounded that you have heard of it. Let me explain its meaning.

Sassaphron was the name of the secluded settlement whose mysterious writing is the subject of our common interest. While the inhabitants of this settlement did not adopt the Greek alphabet for their writing, they apparently welcomed travelers from elsewhere in Greece. In our excavations at the site, we found the remnants of a huge obelisk which must have stood near the temple. This tall, tapered pillar had the name SASSAPHRON carved on it using the standard Greek letters. The obelisk must have served as a kind of 'billboard' welcoming visitors from Sparta and other places in ancient Greece. When the settlement of Sassaphron disappeared about 2600 years ago (that is, about 600 b.c.), its Greek name virtually disappeared as well. I will tell you more later.

I have only very recently uncovered the name Sassaphron in my own research, and find it utterly astonishing that you are aware of it as well.

Let me confess to one suspicion that has begun to trouble me. Perhaps one of my students has decided to play a joke on me and is conspiring with you. Could the strange story you are reluctant to tell me actually be the story of a practical joke? Please forgive me if my doubts are ill-founded.

In any case, I love strange stories and have learned firsthand that many are true. In my travels in Greece, Macedonia, Turkey and the Middle East, I have heard coutnless fantastic tales, many of which have turned out to be true. When we meet one day, I will tell you some of these tales. But please trust me with your story.

I am continuing to work on the translation of the short passage you sent to me.

Your friend,

Professor Tom

Jeffrey danced with pleasure around Alex's room. "Now we know what Sassaphron means," he said jubilantly.

"But why would the extraterrestrials have labeled the messenger with that name?" asked Alex.

"Beats me," said Jeffrey. "Probably, it's a pointer to the place they visited on their first trip."

"Or a signpost of some kind," murmured Alex. "Jeffrey, we'd better tell Professor Tom about the messenger. He's starting to suspect that we're a hoax. This whole adventure is so weird that nobody believes anyone else."

The boys wrote a long message telling Professor Tom about the arrival of the Sassaphron Messenger and its possible connection with intelligent signals from space. They also told him that the scientists at Berkeley and NASA had been unable to decipher the code and had concluded that the Sassaphron Messenger was a hoax.

It being Friday night, Jeffrey persuaded his parents to let him stay overnight at Alex's house. The boys had a game of ping-pong, made a batch of popcorn and then went to bed. They were asleep by midnight.

Jeffrey awoke with a start. The house was quiet and dark, but he had heard something. What was it? He could hear Alex's soft rhythmic snoring. He looked around the room in the faint glow cast by the computer screen. That was it, he realized. The computer! He'd been awakened by the gong. He crept out of bed and tiptoed across the carpet to the computer. He started sliding into Alex's chair.

"Yikes!" Jeffrey jumped up, almost knocking over the chair. Something warm and furry wriggled out from beneath him and scooted out the door. Pericles had been asleep on the chair. Alex kept on snoring.

Jeffrey took a moment to collect his nerve. Then he turned his attention to the screen. Sure enough, there was a message from Professor Tom:

My Dear Young Savants,

I apologize for being slow in replying. While working on the translation of your writing sample, I fell fast asleep at my desk. I awoke only when the early morning sunlight dazzled me through my study window. With a cup of tea in hand (Earl Gray to be more precise), I've now been back at work completing the short translation.

Your story of the coming of the Sassaphron Messenger is both marvelous and awesome. We must strive together to understand its significance, and how it relates to the events in Sassaphron 2600 years ago.

The brief sample of writing you sent me does not follow the standard syntax of the written language used in Sassaphron. The interpretation was difficult for me because your sample has inappropriate word order and uncharacteristic orthography, as if the words were put together by someone learning the language. The meanings also seem slightly garbled. Prior to receiving your revelation about the Sassaphron Messenger, I thought the translation referred to a military threat, possibly from Persia. My translation of the fragment is this:

'run far away or hide in deep caves. Find protection. The attack will come from the heavens without warning'

This is the best I can do. There is a little more, but I need context to work it out.

Now let me tell you the sad story of Sassaphron. We found writing samples engraved on stone tablets and papyrus sheets preserved deep in the rubble of an ancient stone temple. The temple and surrounding settlement were evidently demolished quickly by some massive destructive force. In the intervening centuries, erosion from the elements has obliterated the signs of this ancient disaster, and history has forgotten about it. My students and I have speculated about the nature of the calamity, but we do not yet understand it. We have determined that the devastation was complete, including the settlement itself, the lush olive and orange groves in the vicinity, and probably even the sheep and goats grazing on the nearby slopes. The disaster cannot be attributed to military action. In short, Sassaphron disappeared from the face of the Earth in the twinkling of an eye. It is reminiscent of the catastrophe at Pompeii in 79 A.D., but in this case there is no volcano to blame like Vesuvius.

There is another strange part to this story. The writings we have uncovered in the buried debris at Sassaphron hint that the inhabitants had some warning of the impending calamity. The writings refer to gods with fiery shapes in the sky warning of impending doom. It is remarkable that the fragment you sent me has a similar ominous tone to it.

What do you fellows make of all this? If you are willing to send the remainder of your writing sample to me, I will strive to decipher it immediately.

Incidentally, here is a tiny bit of historical background, in case you are interested. The Sassaphron writing is a transition between the ancient Linear A writing system and the alphabetic system developed elsewhere in ancient Greece. No one has yet succeeded in deciphering Linear A, though many have tried. It is my belief that the settlement of Sassaphron existed in relative isolation for several centuries. It was in a beautiful location on the coast of the Peloponnesian Peninsula, protected by rugged mountains from the domination of Sparta. Perhaps because of their independent spirit, the people of Sassaphron developed and retained their own rather distinctive writing code. The influence on it of the more widespread Greek alphabet provided the key by which I was able to unlock the code. My students and I are still documenting the code and attempting to understand the cultural significance of the information on the tablets.

I shall await your reply, anxious to learn more and work with you on this wonderful adventure.

Your friend and confidant,

Professor Tom

Jeffrey read this, sitting in the dark while his friend Alex slept. He remained motionless, as if in a trance. His thoughts raced across millennia, continents, and into the skies. Before his mind's eye, he saw images of warriors and gods from ancient Greek mythology and also bizarre aliens from science fiction movies and books. What had happened to the ancient settlement at Sassaphron? What was the meaning of Professor Tom's translation of the fragment from the Sassaphron Messenger?

At last, Jeffrey stirred. He thought of shaking Alex awake, but guessed that he would not succeed. Instead, he crept back into bed where he lay awake pondering the unfolding mystery. As he lay thinking, he noticed a small, dark shadow enter the bedroom. It was Pericles returning to his nighttime spot on the chair.

Alex read Professor Tom's latest message in the morning. The two boys decided to make a sequence of photos of the remainder of the Sassaphron message. They spent most of Saturday in the garage taking several rolls of photos. Their handiwork covered a complete cycle of the repeating Sassaphron message. By early Saturday evening, they had the photos developed (partly at Jeffrey's expense, and partly with a cash advance from Gordon and Wendy on Alex's future allowances). By joining the photos together, they produced a large page showing the complete Sassaphron message. Once this was done, they scanned the composite picture into the computer. The process resulted in several distinct computer images. With a detailed cover note to Professor Tom explaining how to reconstruct the overall message, they sent the digital images on their way to Oxford. Only minutes later, Professor Tom acknowledged receipt. He must have been waiting by his computer late into the night. He promised to get to work straight away on the translation.

Chapter 9. The Messenger's Message: Part One

Professor Tom toiled for several days to complete his translation. He headed off Alex and Jeffrey's impatient questions with frequent progress reports.

At last, on Thursday, Alex received the news they had been waiting for. Professor Tom was finished:

My Dear Young Chums,

After four days of incessant labour, I have completed a preliminary translation of the text from the Sassaphron Messenger. I use the word 'preliminary' because of the many ambiguities and strange constructions in the writing. I have made many speculative guesses, and these are subject to revision upon further study and analysis. I will mention here but one of many uncertainties I have encountered. I translated as "lifeless courier" a phrase that recurs frequently, evidently referring to one or more of the Sassaphron Messengers. The phrase might also have been translated as "inanimate courier."

My next e-mail to you will contain my translation. I have struggled with it as a problem in language translation without attending to the detailed sense of the message. Taken at face value, however, the writing rings in my ears like a tocsin bell, a serious and urgent warning. I send it without further comment now, for your study. While you are examining it, my friends, I must replenish my reservoir of sleep. Thereafter, I trust we may resume our joint investigation of this momentous discovery.

Your Bleary-Eyed Don,

Professor Tom

"He really must be tired," thought Alex. "Calling himself Don instead of Tom. Maybe it's his middle name."

A few minutes later, Professor Tom's translation of the Sassaphron message arrived. It read as follows:

"This lifeless courier brings urgent tidings to humankind. Pay heed to it for it comes to help you, not to harm you. This lifeless messenger has completed a flight through the heavens that is longer than long, crossing an inconceivable distance. It comes to you from my world, from a direction in the sky honoured in your legends by two heroic twins, sons of a famous queen. My world spins there, much slower than yours, and circles again and again around a star, mightier than yours; in your sight, that star is only a glimmering lantern point in the dark night sky; you do not understand the gulf of time and space that separates our worlds or the nature of my being. But I have learned about your creation and observed you. I will strive to speak across the enormous void that separates us to bring you warning.

Once I came to your world, but once only. That time was not long ago; less than three thousand circles around your star, and not one whole circle for me around my star. It is scarcely the time of travel to and from your world to mine, so short the time and so great the space between us. It is not within my power to come a second time to your world nor to act in your defense. All I can do is send to you lifeless couriers to bring you a warning.

I came that one time to your world on a mission of discovery, visiting many stars and their nearby worlds. I came to inspect the place destined for an assault from the heavens. I came, not knowing the extraordinary things I would find. Yet, I marveled at what I so unexpectedly saw--a world most precious, unique in my exploration of the galaxy. I have discovered nowhere else in my expansive journeys such a cradle of wonders, so worthwhile to nurture and preserve, but so fragile and vulnerable to the erratic assaults from the primordial relics. I saw the widespread waters covering much of your world and infiltrating the dry land masses. So bountiful compared to my dry, silent world. Those land masses teemed with movement and life. I observed the large areas of ground between the waters that bear an uncountable variety of green lifeforms. Intermingled among the proliferating green, I noticed other life of endless colors and textures that moved along the ground on bending limbs and through the atmosphere with flapping limbs. All such lifeforms are new and surprising to me. In my massive, dense and bleak world, the relentless and heavy downward force confines all natural moving life to a tortured creep across a jagged landscape.

I found in your world an emerging self-consciousness and intelligence embodied in your humankind. The humankind could communicate with me. It roamed on land and water. It cultivated and cared for the teeming green life, employing a spectacular renewable strategy. I, in my turn, must burrow ever deeper into the thin and diminishing crust of my world for sustenance. I observed with admiration and envy how the nature of humankind is harmonized with your world. Perhaps most strange of all to me, you have divided your memory and knowledge among many separate intelligences, each independently moving and living. It is such a different and exotic design from mine in which all knowledge and memory reside in a single being.

My one visit to your world was to a part of its land mass far from the landing site of this lifeless courier. I tried in vain to give a warning to the humankind I encountered in that part. I did not then possess successful use of the signs I have used in this lifeless courier.

The humankind in that far place across the great expanse of land and water could not comprehend me in my multiplicity of form and shape. They feared my appearance in the heavens. The humankind in that part of your world must surely have perished. I obtained from them their signs of permanent memory and send a warning to you making use of those same signs, knowing no other means to prepare you.

One other time not long past, I tried to send a warning to humankind using the same signs carried by the same kind of lifeless couriers. That was the merest moment ago when I warned of the assault in the icy region near the axial point of your spinning world. That time was less than one hundred of your circles past. I cannot understand yet the outcome of that enormous impact on the nature and survival of the humankind. But the impending impact that confronts you now is many times greater and more dangerous to you.

And it is for the unparalleled beauty and future promise of your world that I have persisted in watching your world and have worshipped you, and I now seek to save you in your time of danger. For you are a tiny bright dot in an enormous, black and forbidding emptiness. Although you lag far behind me in wisdom and in exploring the galaxy, you will surely surpass me in these ways given the fullness of time if you survive to flourish.

It is less than one of my circles and less than 3000 of yours since I discovered you and was thrilled by your glowing future. In such a short span of time, little transpires. I despair because it is likely that my tidings to you will go unrecognized or unheeded. When I summon the will in some future circle to cross the void to your world once again, I may find that you have perished. But in worshipful dreams anticipating your future glories, I shall cherish the hope that I may succeed in sending a warning to you.

I will send many couriers to the part of your world that will receive the assault. Whether humankind be there to receive my message, or perhaps some other wonderful and cognizant lifeform, I know not. But if you learn of this warning, run far away or hide in deep caves. Find protection. The attack will come from the heavens without warning. The attack will come in a short time after my lifeless couriers reach you. It will come this much time after: one of your circles about your star; or, if you understand it so, one circuit of your star along its path through the heavens. Take note in your permanent memory that it is but one circle and no more than one.

The attack will come from a hard dark clustering force cohering tightly together for eons in an elongated race of vast distance and great speed around your star. It will strike a place on your land mass near the landing place of my lifeless couriers. It will strike with fearsome force and fury, destroying all nearby things of your world. Its consequences may also wreak havoc on many of the fragile forms elsewhere upon your entire world. I cannot tell the totality of the impending disaster. I cannot know what action you should take to save yourselves and your kind. But run as far as you can or hide from the doom that will descend from the heavens.

There may be skill or knowledge of the galaxy among you. I did not find that awareness on my one visit to your world. If that understanding exists among you, I have included a second part in my warning to you. The first part is the very marks used in your permanent memory that I obtained from you; the marks that I have come to understand; the marks that carry this warning to you. The second part is a figure that reveals the awful assailant in its strange and tortuous route around your star, and its devastating meeting with your world soon to come. This second part may inform you, if there is one among you who can master my use of graphic artistry.

There will be a time in the future when I fulfill my wish to return to your lush world. I will come to worship and admire and observe. Will you be there? That uncertainty will remain in my psyche until I once again cross the vast space that isolates me from you. Until that time comes, I shall try to warn and protect you from the peril that may engulf you."

* * * * *

Alex leaned back in his chair after reading the translation for a second time. Slowly, sounds from the world around him began to penetrate the invisible cocoon that had enclosed him. His CD player was playing *Lake of Fire* by the rock band Nirvana. Irritated, Alex reached over and shut off the squeaky voice of their lead singer Kurt Cobain. Then he heard the distant rumble of thunder echoing around the sky. Clouds had swept in earlier in the day with the threat of rain. The wind was blowing harder. Alex got up and stood by the window, gazing into the distance. On the south side of the grassy meadow there was a row of maples. Gusts of wind whipped their branches. His eyes wandered to the spot where, nearly a year before, the mysterious fiery object had landed, a "lifeless courier." The thunder grew louder. He could see jagged streaks of lightning.

Alex returned to his computer. He had been warned to turn it off during lightning storms. He stared at the screen for a few moments, tempted to delete the translation. Instead, he saved it. He was about to forward a copy to Jeffrey, but decided against it. He switched off the machine and sat down on the edge of his bed.

The bedroom grew dark as the storm approached. Alex welcomed the gathering gloom, punctuated by the flickering glow of lightning. He took comfort in its familiarity. This other thing that had confronted him, this strange message; it was different. It was alien and ominous. It was beyond his understanding. Alex sat, staring out the window.

He remained motionless for three quarters of an hour. The summer thunderstorm spent its fury and passed by. The rain pelted down for a few minutes, and then the clouds parted. Rays of sunshine began to struggle through the blue holes in the clouds. Alex got up and stretched. He went downstairs and ate a handful of green grapes. Grabbing his well-worn baseball glove and a hard ball, he headed for the park to find a pick-up game. He was not Atlas. He was not ready to bear the weight of the world on his shoulders.

Chapter 10. An Unexpected Visitor

Alex played baseball with the neighborhood kids all day. He poured his energy into the game: swinging the bat wildly at every pitch, sliding and diving after grounders, and running the bases as fast as his chunky legs would carry him. The game ended when it was too dark to find the ball in the outfield. Pedaling his bike home, Alex experienced the sweet fatigue that follows sports. His muscles ached and he was covered with dirt from head to toe, but it had been a good day. He snuck in the back door to avoid his mother. She would make him take a shower if she caught sight of him, but he was just too tired. He tiptoed up the stairs and collapsed on his bed.

Alex slept late the next morning, and played ball again in the afternoon. What joy to be on summer vacation! He arrived home from the park at dinner time with a sunburn on his face and arms. Alex had lathered himself with sunscreen before going out but it was not enough to protect him from a whole day in the hot sun.

This time, Wendy was on guard and caught him as he crept through the back door. "Alex, you've got a terrible sunburn!" Her tone was a mixture of sympathy and reproach.

"Don't worry Mom, I'm okay. Just a little bit of a sun tan." He peered down at his red arms. Nonchalantly, he sat down at the kitchen table, yanked off his baseball cap, and opened a can of coke. He felt relaxed. It had been a good day, even if he would pay for it with an itchy hide.

Wendy was getting salads out of the refrigerator for dinner. "Jeffrey's been phoning you all day. He said that you haven't been answering your e-mail. Is your computer working okay?"

"Just fine Mom, don't worry," he answered.

"He's called you three times already. You'd better call him back."

Reluctantly, Alex went to the phone and dialed his friend. "It's me, Jeffrey."

Jeffrey's anxious questions tumbled out. "Alex, why haven't you answered my e-mail? Have you busted your computer? Have you heard anything from Professor Tom?"

Alex paused for a long time before replying, "My computer's okay, but I haven't heard from Professor Tom yet."

Jeffrey was disappointed. "Send him a message and ask him what's causing the delay. We should have gotten the translation by now. Do you want me to e-mail him?"

"No, don't," said Alex abruptly. "I'm sure we'll hear from him soon. He doesn't want us bugging him all the time."

They chatted for a few more minutes about school friends and a new rock-music group called Brush. Then Alex hung up. He felt guilty. Why had he lied to Jeffrey?

After dinner, Alex wandered upstairs to his bedroom. His computer had been off since the thunderstorm the day before. By keeping it off, he could avoid the shadowy world of Michelle, Professor Tom, and the lost settlement at Sassaphron. They existed in a sinister world of uncertain reality, a virtual world beyond the computer screen. Who were these people? What did they look like?

Alex turned away from the computer. He would rather think about his neighborhood friends--Blair, Sammy and Jason--and their exploits on the baseball diamond.

He slept late again Saturday morning. Most of the day, he stayed indoors, nursing his sunburn and reading *Sherlock Holmes* stories. Gordon noticed his son's gloomy mood. He offered to take Alex to the Twins baseball game at the Metrodome. Surprisingly, Alex said no. "My sunburn's too itchy," was Alex's excuse. Instead, father and son watched the game together on TV after an early dinner.

Halfway through the third inning, Alex heard a car door slam. He saw a yellow taxi in front of the house. A gray-haired man with a small suitcase walked briskly up the front walk toward the house. He was wearing a faded blue suit and a black bow tie. A long, tattered raincoat was draped over his arm. He was not the sort of person Alex expected to see in the neighborhood on a weekend evening in June.

"Who's that?" asked Alex.

"I've never seen him before," said Gordon with surprise. "I have no idea who he is. Maybe he has the wrong address." Gordon went to the front door to greet him.

The stranger had reached the front steps by the time Gordon opened the door.

"Ah yes," began the stranger, "This must be the home of the redoubtable Mr. Alexander McIntosh. And you, sir, I presume, are his father?"

"Yes," replied Gordon. He noticed that the man spoke with an English accent.

"Splendid! Lovely place you have here. And just look at all the grass! Quite exquisite!"

"Well, thank you," said Gordon, not quite sure how to respond. "Have you come to see my son?"

"Yes, I most certainly have." The stranger held out his hand. "My name is Thomas Mokeley-Jones. I'm from Oxford, England. I've been in electronic contact with Alex regarding the strange and marvelous Sassaphron Messenger that landed near your magnificent house. I expect he's told you about our trans-Atlantic communication?"

Gordon shook hands. He had heard Alex and Jeffrey talk about Professor Tom. "Yes, Alex has mentioned you, but he didn't tell me you were coming to the United States or that you would be visiting us."

"It was a sudden decision. When scholarship beckons, I follow. In my specialty, that usually means traveling southeast from Oxford to the ancient lands near the Mediterranean or the Persian Gulf. Rarely does my interest in the ancient world bring me to America. But the amazing tale of the Sassaphron Messenger has attracted me to the heartland of your great country."

Alex couldn't believe his ears. Last night, Professor Tom had seemed little more than an electronic ghost. Now, here he was, in the flesh. Shyly, Alex approached the front foyer where the two men stood.

Gordon introduced his son, "Professor Tom, this is Alex."

The man and the boy shook hands. "Alexander, my friend, what a pleasure to meet you! I had not pictured you to be such a strapping young fellow. And with a shock of blazing red hair too! Inherited from your Scottish ancestors no doubt, the illustrious McIntoshes!"

"I've got Scottish blood on both sides," replied Alex.

"Then where's your tweedy kilt?" asked Professor Tom, the r's trilling off his tongue in an imitation Scottish accent.

"I don't have a kilt," said Alex, slightly embarrassed. He remembered that his father had worn a kilt to give a lecture once, and had never lived down the razzing from the other professors.

"Hoot mon, not a kilt?" exclaimed Tom in mock disapproval. Then dropping the Scottish accent, he asked "and is your steadfast companion Jeffrey here too?" He peered about through his bifocals.

"No," replied Alex.

"What a pity," said Tom. "I trust I will have the pleasure of meeting him soon."

"Please come in," said Gordon. They dismissed the cab.

Professor Tom had a wiry build. His scruffy gray beard matched his hair. His face was weathered and wrinkled from years of exposure to the sun and wind. Alex noticed that he wore a gold chain around his neck that disappeared into his shirt. He walked with a sprightly step, and gestured widely with his leathery hands. He spoke with an upper-class English accent in a tenor voice.

After his marathon translation session, he had gone to bed for twelve hours. His sleep had been disturbed by nightmares.

"As I told you, Alex, I didn't pay much attention to the significance of the message during my work on the translation. When I finished, I sent the translation straight to you and then I went to bed. On Friday morning, while I was sipping and savoring my morning tea (Earl Grey, of course), the content of the message began to dawn on me. I realized that this was the cause of my distress overnight. I decided that I must come straight away to the source of this truly amazing discovery and do whatever feasible to help. I immediately booked a plane ticket and was on my way to the airport at Gatwick. Luckily, there was a direct flight to Minneapolis. Alex, did you get my e-mail message yesterday informing you of my travel itinerary?"

Alex sheepishly admitted that he hadn't checked his e-mail since Thursday. Apologizing, he added "That's the longest I've gone without checking my e-mail for more than a year."

Wendy arrived home from seeing a patient at the hospital and was introduced to Professor Tom. She invited him to have something to drink and a bite to eat. He politely declined.

Alex could not help noticing that Professor Tom was fidgety and nervous. As he spoke, his hands dived into his pockets to rattle coins, and then flew out again in exaggerated gestures. Throughout the conversation, he kept looking around as if searching for something.

Abruptly, he said, "Alex, I can't stand the suspense any longer. I would dearly love to see the Sassaphron Messenger. Would that be possible?"

Alex liked this Englishman. There was already a bond of friendship and respect between them. But Alex knew that the professor's arrival meant returning to the mysteries of the Sassaphron Messenger. He remained reluctant, torn between the excitement of the mystery, and a strong sense of foreboding. There was another thing too: guilt at misleading Jeffrey.

"Sure, I can show you the Sassaphron Messenger. But first, let me call Jeffrey and tell him you're here. He'll be excited and amazed."

"By all means!" exclaimed Tom, spreading his arms almost like wings.

Jeffrey wasn't home. "Tell him to give me a call as soon as he can. I have some urgent news."

Alex returned to the living room to find Wendy inviting Professor Tom to stay at their house rather than at a hotel.

"Thank you very much for your kind invitation, Dr. McIntosh, but it would be thoughtless of me to inconvenience you by accepting. I have already disrupted your peaceful evening by dropping out of the sky unexpectedly. I can easily take a taxi to a hotel."

But Professor Tom was no match for Wendy's persuasion. Soon, his tattered raincoat hung in the closet, and his suitcase stood at the foot of the bed in the guest room.

"Now Alex," said Professor Tom. "I'll burst my buttons with curiosity if you don't show me the Messenger. I hope you trust me enough to show me this wonderful *objet trouvé*."

Alex could not disguise the note of uncertainty in his voice. "Yes, of course." He paused, "Sure, I'll show it to you right now. It's in the garage."

Alex led the way. Professor Tom took off his jacket and threw it over the sawhorse. Alex guided him through a thorough inspection of the two hollow parts of the Messenger. Professor Tom was spellbound by the engraved markings on the interior surface, and the way the message repeated itself over and over in diminishing sizes. He pulled a magnifying glass from his pocket to examine the tiniest symbols and exclaimed in amazement at their clarity of form. Then he studied the strange geometrical shapes engraved between the repetitions of the message. He acknowledged that they were unfamiliar in appearance. "I've seen nothing like these shapes in the ruins from ancient Sassaphron."

After a couple of hours of inspection, Professor Tom stood back.

"Alex, have a look at this." He tugged at the gold chain around his neck until something popped out from under his collar.

Alex peered at the object in Professor Tom's hand. It was about the size and shape of a coin, but made from marble or polished stone. There was a shape engraved on it.

"It's exactly like one of the symbols inside the Messenger," said Alex in amazement.

"You are most perceptive," said Tom with a smile.

"Where did this come from?" asked Alex.

"It's the first artifact I dug up at the site of ancient Sassaphron," said Professor Tom. "We had nearly given up on the place when I found this. Without it, we would have missed the whole discovery. Ever since that day, I've worn it around my neck as a lucky charm. And what a marvel it is to find a matching symbol right here on the Sassaphron Messenger." He pointed to an identical pattern.

The boy and the man stood silently, looking back and forth between the little object on the gold chain and the two large sections of the Sassaphron Messenger.

Jet lag and hunger caught up with Professor Tom. Wendy and Gordon convinced him to have a ham sandwich and a glass of beer.

"The beer may not be up to English standards," said Wendy, "It comes from Wisconsin. And, I'm afraid we only have herbal teas."

"The beer is just right," said Tom. "As for the tea..." He jumped up from the table and dashed upstairs. In a moment, he was back with a package. He handed it to Wendy. "With my compliments," he said "and many thanks for your generous hospitality."

Wendy unwrapped the gift. Inside was a large tin of Earl Grey tea from Fortnum and Mason's in London.

Tom had another package which he handed to Alex. "This is for my young colleague and newfound friend," said Tom. Alex tore off the wrapping. It was a signed copy of Professor Tom's book *Dialects and Codes In Ancient Greece*. Alex glowed with pleasure. "I have a copy for Jeffrey, too," said Tom. "And finally, a wee dram for the McIntosh of McIntosh," he handed Gordon a bottle of Macallan scotch whiskey.

Then they all went to bed.

They awoke to a beautiful Sunday morning. Professor Tom came downstairs early, ready for action. His T-shirt had a cartoon of a man standing on the turret of a ruined castle saying "Come to my digs!".

Wendy fixed toasted English muffins with marmalade and served them with Earl Grey tea.

"Delicious," exclaimed Tom, "and so much better than the cold toast I get for breakfast in college."

While stirring his second cup of tea, Professor Tom proposed to Alex that they devote the morning to detailed study of the Messenger's message. It was time to make sense of the meaning. He was dismayed at Alex's lack of enthusiasm.

Alex could not find the words to express his anxiety, so he stalled. "Let me try calling Jeffrey again. He should join us."

Jeffrey answered the phone. "I got your message last night and would've called earlier. But my parents said I couldn't call early on a Sunday. Alex, you haven't answered your e-mail for two days? Anyway, what's up?"

Alex told him about Professor Tom's arrival. Jeffrey was elated. He promised to come over after lunch, the soonest he could arrange a ride with his parents.

Alex offered to take Professor Tom on a tour of the neighborhood while they waited for Jeffrey. He found out that Professor Tom was a bicycle enthusiast. Tom biked everywhere in Oxford and didn't even own a car. Alex and Tom decided to bike around Sky Lake. Tom borrowed Gordon's ten-speed.

Off they went, Alex well lathered with sunscreen at Wendy's insistence. Despite Tom's age (Alex guessed that he was at least sixty), he was fit and easily kept up. They stayed on the blacktop-bike trail for nine miles around the lake. En route, they saw a few wind surfers trying to catch the lazy breeze. Near the marsh at the north end of the lake, a bald eagle soared, riding a thermal updraft high above the rippling water.

Tom had rarely visited North America and was accustomed to the crowded cities and towns of Europe. "What a pleasure to have such large open spaces with so much greenery, right in the city," he said.

As they rode, Alex told Tom the whole Sassaphron story, keeping secret only the part about Michelle. Tom asked many probing questions about Iglehart, Kugelbahn, and Susan Brindley.

Near the end of their loop around the lake, Alex tried to explain his unhappiness about the Sassaphron affair. "At first, it was exciting and fun, a real adventure. Then, when we got the Sassaphron Messenger back from NASA, it became hard work. Jeffrey and I spent weeks trying to decipher the code. It was a mystery, a challenge. All the time, I was afraid it was a hoax. But even figuring out a hoax could be exciting. Then came the breakthrough when Jeffrey found your book and we connected with you."

The only sounds to reach their ears came from the birds in the trees and the occasional car on the lake-side road. As they approached the south end of the lake, Tom noticed the distant rumble of a bus coming along the parkway.

Alex continued, "When we learned that you could decipher the message, we knew that we had won; we had solved the mystery. We had even beaten NASA!"

"You sure had," said Tom.

"But then on Thursday, you sent me the translation. All of a sudden, I realized that the game wasn't over. More than that, the game had much higher stakes. I don't really understand what the message means, but I'm afraid of it. It's no longer a kid's game, or just a challenging mystery. It's some kind of terribly serious danger. I'm only a kid. I like baseball, and rock music, and computers. I'm not an FBI agent or the governor. Why should I be responsible for this? What do you think I should do, Professor Tom?"

They reached the parkway. Alex was in front. His head was down, his eyes on the path in front of him. Without stopping or looking, he continued out onto the street.

The city bus came barreling along at forty miles an hour straight at Alex.

"Stop! Alex!" shouted Professor Tom.

Alex looked up to see the monstrous face of the bus bearing down on him. He hit the brakes. The bike stopped, but Alex's momentum carried him forward over the handlebars into the path of the bus.

At the last split second, a leathery hand clamped onto his upper arm and snapped him back with a powerful jerk, cutting short his flight into peril. The bus hurtled past, missing both Alex and Tom by less than six inches. The rear wheel of the bus crushed Alex's bike into several mangled pieces.

Alex hit the pavement hard. Blood gushed from cuts on his bare arms and legs. Tom wasn't hurt. A young mother with a baby stroller witnessed the nearly fatal accident. She helped Tom get Alex off the road.

"You saved his life," she said to Tom. "I thought both of you were going to get hit. You would have been killed. It was just a matter of inches."

The bus stopped. The driver and a couple of passengers came back to see what had happened. The driver radioed for help.

Alex was sobbing and trembling with fear. He was bloody and bruised. Professor Tom was proficient in first aid, a skill acquired from many firsthand experiences in remote archaeological sites. He carefully checked Alex for broken bones and other serious injuries. Fortunately, there were none. He ripped his T-shirt into strips to bind a couple of bloody gashes. Soon, Alex was on his feet, still shaking like a leaf, and pale as a ghost despite his sunburn.

"Thank God you're safe, Alex," said Tom. "But you do look like you've been through the blitz."

"Thank you for saving my life," said Alex in a choked voice.

A police car pulled up.

"Hey, Red, is that you? Are you okay?" It was Tim, the policeman who had stood guard at the landing site of the Sassaphron Messenger. He joined the little group clustered around Alex. Remembering that Alex's mother was a doctor and lived nearby, he had the radio dispatcher give her a call.

Gently, Tim put his big arm around Alex's shaking shoulders. "You look like quite a mess right now, but you're going to be okay, kid," he said in a soothing voice.

Gordon and Wendy arrived in less than five minutes. Wendy expertly attended to Alex's many cuts and scrapes. After hearing the harrowing details, they thanked Tom over and over for saving their son's life. Then Alex and his parents drove home, Professor Tom following on Gordon's bike.

An hour later, Alex was still shaking. "What if we'd both been killed, Professor Tom?" he said in a halting, choked voice. "No one would know about your translation of the Sassaphron message. The warning would be lost. I haven't even sent your translation to Jeffrey."

"Yes, you're right," said Tom softly and thoughtfully. "It's a jolly good thing we stopped where we did."

After a few minutes of silence, Alex said with determination, "Let's start work on the message as soon as Jeffrey gets here. Okay?"

"Yes indeed," said Professor Tom.

Jeffrey arrived soon after lunch. He went pale and nearly fainted when he heard about the accident. It took Alex and Tom about half an hour to brief him on all the gory details. Jeffrey put his hand on Alex's arm. "Alex, you're my best friend! It would have been terrible if you'd been hit by that bus. You don't know how happy I am that you're okay!"

Alex was touched by his friend's affection and concern. Alex's eyes filled with tears. He apologized to Jeffrey about Professor Tom's translation.

"I'm sorry I didn't tell you about the translation and send it to you. It was just too scary at first. I didn't want to deal with it."

"That's okay," said Jeffrey. "Just think of the good side. You're safe, the message is translated, and Professor Tom is here. Let's go for it!"

Jeffrey jumped to his feet. Alex jumped up too and the boys clapped high fives.

"Tallyho!" cried Tom with enthusiasm.

* * * * *

The three of them spent the afternoon in Alex's room discussing the message. They agreed to leave discussion of the ominous warning until last.

After reading the message several times, Jeffrey asked "Why does it have 'I, me, my' and so on? Is this from a single person?"

Tom confirmed that the message was definitely worded in the first person.

Alex responded, "Look at the part where it says 'Perhaps most strange of all to me, you have divided your memory and knowledge among many separate intelligences, each independently moving and living.' I think he's saying that there's only one of him, and he is surprised that there are many of us. Could it be that his entire society is just one being?"

"Yes, Alex, you could be right," said Jeffrey excitedly. "But if you're right, and there's only one of them, it doesn't make sense to call him 'he,' since there's no 'she.""

"No 'he' and no 'she' means there's no you-know-what in Sassaphron Land," said Alex, "Must be a pretty boring place." Everybody laughed. "I can just picture it," said Jeffrey. "All the Sassaphron's intelligence is crammed into one enormous gelatinous brain. And it oozes its way around the planet."

Ignoring Jeffrey's imaginative suggestion, Alex went on "And the 'lifeless courier' refers to the Sassaphron Messenger, sent by the alien, but not to a living thing."

"Yes," said Tom. "Evidently, there was more than one."

"That would account for the many UFO sightings on the night the Sassaphron Messenger arrived," said Jeffrey. "Remember all the news reports, Alex?"

Alex agreed. Then he said, "This stuff near the beginning must be a clue about where the alien lives '...from a direction in the sky honored in your legends by two heroic twins, sons of a famous queen'."

"I understand that one," said Tom. "The legendary heroic twins are probably Castor and Pollux. Their mother was Leda, queen of Sparta, and their sister was Helen of Troy."

Jeffrey picked up the story, "Castor and Pollux rescued Helen of Troy when she was kidnapped."

"Yes, Jeffrey, quite right," said Tom.

"And Castor and Pollux are stars in the constellation Gemini," said Alex. He and Gordon both enjoyed astronomy and knew many of the constellations.

"So you think that's where the Sassaphron Messenger came from?" asked Jeffrey.

"At least that's where the alien who sent it lives," said Alex.

"Aren't those stars many light years away?" asked Jeffrey. "With our rockets, it would take centuries."

"Well, he says it's a long way," answered Alex. "Besides, he says he comes from the 'direction' of Gemini, but maybe he's actually closer."

"I think the alien's sense of time is different from ours," said Tom. "Perhaps a voyage of decades or centuries wouldn't be so hard for him. We think on the scale of a human lifetime. Seventy or eighty years is very long for us, much too long for a voyage. But the author of this message seems to have an expanded scale of time."

"What makes you say that?" asked Alex.

"Well, first of all, the alien's world spins more slowly than ours; he has longer days. His year is much longer than ours; three thousand Earth years is less than one of his years. He visited Earth nearly three thousand years ago which he says was 'not long ago', and apparently, he's still around to talk about it. If he is really one extended being, rather than a society of individuals like us, time may be less important for him."

"He sure seemed to like what he saw on Earth," said Alex. "He makes this place sound like a Garden of Eden. If our world is so much nicer than his 'dry silent world,' he might try to move in on us and take us over."

"Yes, that's possible," said Tom, "but the message is not hostile. On the contrary, he expresses admiration and wonder at what he saw on Earth, and his intention appears to be friendly, to warn us of danger. Taken at face value, he is a friendly alien."

Jeffrey jumped in. "So, it looks like he visited the Earth once, and landed near ancient Sassaphron. If you're right Professor Tom, and Sassaphron was destroyed around 600 B.C., then he came before that. Why did he come there? He says 'I came to inspect the place destined for an assault from the heavens."

Alex answered, "It looks to me like he was on a tour of the galaxy and stopped in, a bit like Christopher Columbus deciding to have a look at an unexplored island in the South Pacific."

"Here's my theory," said Professor Tom. "He had information that some type of destructive force would soon strike the Earth at a given point, perhaps a meteorite of some kind. Since he was in the neighborhood, on his 'tour of the galaxy' as Alex puts it, he decided to stop and have a look. To his amazement, he discovered a planet teeming with life, including human life. The settlement at Sassaphron not far from Sparta in ancient Greece, just happened to be close to the target site for the danger. He tried to warn the people of Sassaphron, but he didn't have the means for communication. As I explained in one of my messages to you, the writings I discovered in Sassaphron indicated that fiery gods with strange shapes had warned of doom. Apparently, the people were terrified and did not understand the warnings."

"But why didn't they understand the warning, if the alien knew their language?" asked Alex.

"I know why," said Jeffrey. "He didn't know their language then. He's learned it since. Look, he says here 'I obtained from them their signs of permanent memory and convey a warning to you making use of those same signs.' But what does he mean by 'signs of permanent memory'?" "Writing is a kind of permanent memory," said Tom. "Once you write a statement on paper or chisel it in stone, it can last for a very long time. I think he means that he took away writing samples, presumably on stone tablets or papyrus. He has figured out the Sassaphron language from those tablets, just like my students and I figured it out. We had the benefit of knowing other ancient Greek languages and scripts. It is staggering to me that the script I have labored to decode turns out to be the one employed by an alien intelligence to talk to us. Is it a miracle, or simply an accident of fate, that joined my destiny with the fate of the Sassaphron Messenger?" Professor tom grew silent, his eyes wide and staring into space.

Alex said, "This is the only Earth language he knows. That's why the message is written in this code. He says he doesn't know if 'humankind' will be around to receive his message. I guess that means he doesn't know if humans live in our part of the world."

"Yes," said Professor Tom, "but he leaves open the possibility that 'some other wonderful and cognizant lifeform' might be here instead. He suspects there are intelligent lifeforms that he didn't encounter."

Jeffrey was examining another part of the message. "It looks like he sent a warning before, using the same lifeless messengers. But I don't understand this part about the 'icy region near the axial point of your spinning world.""

Alex's interest in astronomy helped him with this one. "I know what that means. He's talking about the north or south pole. He must have sent warning messages to the Eskimos."

"Maybe not the Eskimos," broke in Professor Tom, "but perhaps the Tungus."

"The Eskimo's tongues?" asked Jeffrey quizzically.

Professor Tom chuckled. He explained that a huge explosion of some kind, perhaps from a large meteorite, had occurred in a desolate region of Siberia in 1908. Only a few native people of the area, known as the Tungus, had witnessed the event. If any Sassaphron Messengers had landed there, no one could have translated the warning.

"I understand that it was a devastating explosion, scarring the landscape for many miles," went on Tom. "But it was so remote, almost nobody knew about it, and it took many years before scientists found the site. I believe the cause of the explosion is still a mystery to this day."

Alex shuddered. "The message says that 'the impending impact that confronts you now is many times greater and more dangerous to you'." He had drawn their attention to the part of the message they all feared, the ominous warning.

Chapter 11. Heeding the Warning

Susan Brindley was hurrying to complete her paper work. Although her vacation had started Friday, she was in the office Monday, wrapping up loose ends. By early afternoon, she was pressing hard, anxious to get out of town and out of touch.

The phone rang. Drats! she thought, picking up the receiver.

"Susan here."

"Susan," said Carla Salvatori, the receptionist. "I know you're in a hurry, but I think it's your nephew on the phone. Will you take the call?"

Susan was frustrated. "Carla, I don't have a nephew. Take a message. Tell whoever it is that I'm on vacation."

"Susan, it's a kid. His name is Alex. He said the password is sassafras or something." Carla made a gurgling sound, her version of a chuckle.

Susan smiled, and relaxed a bit. She'd been wondering what had happened to Alex and the Sassaphron Messenger. Her case load had been too heavy to follow up.

"Put him through, Carla. Thanks."

Susan heard the click. "Hello Alex."

"Hello Agent Brindley. This is Alex. Do you remember me?"

"Yes, of course, Alex," she said in a friendly tone. "How are you doing, and how's Jeffrey?"

"We're both fine," said Alex, and paused.

"And how's the Sassaphron Messenger?" Susan asked. "I hope it's still safe in your garage."

"Yes, it's still there."

"Isn't it getting close to the deadline your parents gave you?"

"Yes it is," said Alex. Again he paused.

"Is that why you're calling?" asked Susan, growing slightly impatient.

"Not exactly," said Alex. He was normally a fountain of words, but this time, he didn't know where to start.

Susan sensed that this was more than a courtesy call. "Can I help you with something, Alex? Is there something wrong?"

"No," replied Alex. "Well, yes. It's about the Sassaphron Messenger."

"Has something happened to it?"

"No, but we've discovered something about it."

Susan was pinched for time. This wasn't a good moment to reopen a dormant case. Should she put Alex off until her return in three weeks? But there was a sense of urgency in his voice that made her hesitate to brush him off.

"Have you discovered something important about the Sassaphron Messenger, Alex?"

"Well, yes."

"Can you tell me what it is?"

Alex replied immediately. "We've deciphered the code, at least the written part."

Susan was taken aback, even astounded. Kugelbahn and his elite group of scientists and mathematicians had been unable to decipher the code, and had declared it to be a hoax. Three months later, could this kid have found the secret?

"And what does it say?" said Susan nonchalantly.

Long before the Sassaphron adventure, Jeffrey had warned Alex not to give top-secret information over the phone. Alex had never been in a position to heed this advice, not until now. "I can't tell you over the phone," he whispered. "It's too important. But can you please come over to my house?"

"Alex, I'm starting my vacation today. Can it wait until I get back?" Susan was surprised by her own curiosity; she found herself hoping Alex would say no.

"It's very important," said Alex. "It can't wait. Jeffrey is here, and also my friend Tom. Won't you please come?"

Susan frowned at the mention of Tom, yet another kid to contend with. But she was fond of Alex and had faith in his good sense. "Okay Alex, I'll come right over. It'll take me about half an hour to get there."

There was a pause, and then Alex said, "There's one condition."

"What's that?" asked Susan.

"We'll tell you what the message says on the condition that you tell us one more of your FBI adventures."

Susan smiled. "I can play that game," she said. "See you soon."

Susan would have to delay the start of her vacation again. She lived within an easy drive of her parents' lovely summer home near Sturgeon Bay on Lake Michigan. In her mid thirties and single, Susan still enjoyed a relaxing week at the lake. Her plan this year was to spend about a week with her parents, followed by a week of theater and museums in New York with her college roommate Janet. Well, her family wouldn't mind if she arrived a few hours late. After calling her mother, Susan quickly pulled a few papers from the Sassaphron file and left the office.

When Alex answered the door, Susan immediately noticed the scrapes on his face and arms. "Alex, good gracious! Whatever happened to you? You look as if you've been in a war zone!"

"I'm okay. Just a little accident. I'll tell you about it later." He invited her in.

Meeting Professor Tom was a surprise. He was a far cry from the shiny-faced teenager she had expected.

"What a pleasure it is to meet a member of the Federal Bureau of Investigation," said Tom, "and the more so because she is a charming lady." He bowed.

Susan flinched, but shook hands. He had a strong and friendly grip.

She was usually uneasy with professors. (They always used such complicated arguments and tried to play one-upsmanship.) It was clear that this agile, weather-beaten, Oxford Professor was a force to be reckoned with.

After the introductions, the four of them sat down around the glass table in the breakfast room. Gordon served them soft drinks and left them to their business.

Jeffrey described how he had discovered Professor Tom's book containing the photo with the familiar script. Professor Tom picked up the story. He described his research on the lost settlement at Sassaphron and the amazement he'd experienced when he received the writing sample from the two boys. He told how he'd worked day and night to translate the Messenger's message.

"Now tell her about your accident," Jeffrey said to Alex.

Sheepishly, Alex described what had happened.

"Alex, thank God Tom was there to save you. You must promise me never to be so careless again," exclaimed Susan. She patted his arm affectionately.

"Yes, I promise," said Alex. "Just think if both of us had been killed. The translation of the Sassaphron message would have been lost."

"I'll tell you what's a lot more important to me, Alex," said Susan. "You would have been dead, and also Professor Tom. That would have been a tragedy for your family and the rest of us. You and Tom are a lot more important than any translation."

"But you haven't heard what the message says," responded Alex. "That's why we called you. We need your help with what it says."

Susan did not know how seriously to take this matter of the message. Kugelbahn had concluded that the whole thing was a hoax. Her three companions were probably innocent dupes. She glanced at Professor Tom. Her eyes met his. For a long moment, she was riveted by his gaze. His eyes were unforgettable, the soft brown irises and deep black pupils. Without a word, messages of intense conviction and personal magnetism passed from Tom to Susan. At last, she managed to look away. A channel had been created between them, and something very compelling had traveled along that channel. There was one thing sure; Tom was convinced of the significance of the Sassaphron message. But Susan's professional instincts cautioned her to be wary. She must not get sucked in by hunches and feelings.

"Well, fellows, your story is certainly intriguing. The link with the lost settlement at Sassaphron is quite dramatic. Leaving aside the possibility of a hoax, will you please tell me what the message says? Or do you intend to keep me in suspense all afternoon?"

Alex and Jeffrey smirked at one another. Alex was about to speak, but before he could, Tom broke in. He spoke softly and earnestly. "I am convinced it is not a hoax." He briefly reviewed the facts. Only three people in the world understood the Sassaphron script well enough to decipher the Sassaphron message--Tom himself and two of his students, and some aspects of this text were probably too difficult for the students. Moreover, the technical sophistication of the engravings on the Sassaphron Messenger, and the rocketry involved, were beyond the competence of those who had worked with him on the ruins at ancient Sassaphron. As for any other human intervention--who would know the script, and why would they use it, given the low probability of anyone understanding it? Slowly and quietly, Tom made the case for extraterrestrial involvement. How else could the facts be explained? When his ten-minute monologue was done, Susan was persuaded.

"Thank you," she said. "Your analysis is very convincing."

Now it was Alex's turn to speak. "You remember the bargain we made on the phone? We're not going to tell you what the message says until you tell us another one of your FBI adventures."

She was ready. "Okay," she said. "But it's going to be short. I'm dying to hear what the Sassaphron message says, and why you think it's so important."

She found herself the center of attention. The two boys looked up at her with wide-eyed anticipation. Tom was gazing at her too. Once again, she caught a glimpse of his fawn-colored eyes.

* * * * *

Susan began her story.

"In the 1970s and '80s, before the collapse of the Soviet Union, there were laws against shipping certain types of technology to Communist countries. Companies had to get sales permits from the State Department to sell stuff like computers to countries such as the Soviet Union, or Poland, or Hungary. I was assigned to a case involving a company here in the Twin Cities. They manufactured specialized computer chips used in advanced aircraft. We'd learned from the CIA that some of these computer chips were turning up behind the Iron Curtain. The military people considered it to be a serious problem for national security. My job was to figure out how the computer chips were being smuggled abroad.

"The first part of the investigation involved tedious paperwork. I found out that the Twin Cities firm shipped most of its goods to another company in New Jersey. The Jersey company distributed the parts to makers of commercial aircraft, like Boeing, and to defense companies that produced fighter aircraft. All of this was completely legal. "But then I discovered that sometimes there were duplicate shipments from Minnesota, based on phony orders. The duplicate shipments, containing the specialized computer chips, never showed up on the inventory lists in New Jersey. The Minnesota company received payment, so their accountant had no reason to be suspicious. I had evidence that an insider in the Twin Cities was forging the orders. Someone, probably in Jersey, was intercepting the extra parts, paying the regular price to Minnesota, and selling the parts for a big profit to a foreign agent.

"I made contact with the man in charge of security at the New Jersey company. His name was Richard. I travelled to Newark, New Jersey. Richard was a friendly, easygoing guy, and good to work with. We began narrowing down the point at which the computer chips were going astray. It was a difficult and time-consuming job, with lots of false leads. At last, by process of elimination, we narrowed the drop-off point to a gas station on the highway very near the New Jersey company. Richard and I planned a sting. Because it was probably an inside job, we created cover for him, indicating that he was on vacation with his family at Disney World in Florida.

"Early one morning, before dawn, we were waiting at the gas station. Richard was in a parked car outside and I was in the convenience store attached to the gas station. Sure enough, a truck pulled in for gas. The driver disappeared into the bathroom. A stranger whom I hadn't seen before materialized from the darkness, and began unlocking the back of the truck. I noticed that the convenience store clerk had vanished. In fact, the guy unlocking the truck resembled him. I was hidden behind a display near the window, just inside the store. Although the truck was parked in shadows, I could see that the guy was unloading boxes with the logo of the Twin Cities firm. I stepped outside the door to arrest him with my gun raised. Out of the corner of my eye, I saw Richard, crouched in the shadows by his car. To my horror, he was taking aim at **me** with a handgun. In an instant, I realized that he was part of the conspiracy. I had no time to turn my gun on him. Instinctively, I dropped to the ground. There were two gun shots. The plate glass window of the store shattered a few inches from my head. I was showered with fragments of glass. I began rolling and crawling for cover, expecting to be plugged with a bullet any second. I was an easy target. But there were no more shots. When I finally had a chance to look, I saw Agent Myers from the Newark FBI office. He had fired the second shot, hitting Richard and saving me.

"I have to admit that Richard had me fooled, a mistake that nearly cost me my life. One bit of background work saved me. Although I hadn't mistrusted Richard, I was concerned that the sting would require extra resources. Unknown to Richard, several agents, including Jack Myers, were hidden in the vicinity of the gas station. Jack was positioned where he could see Richard turn the gun on me.

"After the shooting ended, we easily caught the guy who had been unloading the truck. When the shooting began, he too hit the pavement. We had handcuffs on him in no time. "Richard had visited the Twin Cities firm several times, with the excuse of making security arrangements for shipments of the computer chips. During those visits, he'd become friendly with a young woman who worked in the purchasing department. (He was young and handsome and she fell for him.) She forged the orders. Richard, who had arranged the contract with the trucking company, bribed the truck driver. All the driver had to do to get his money was to stop at the specific gas station, leave the keys in the ignition, and disappear into the bathroom for ten minutes. Richard also paid off the overnight clerk at the gas station to disguise himself and unload specific numbered packages from the truck. Richard himself collected these packages and passed them to his foreign contacts.

"Richard had stalled and diverted me as long as possible in the investigation. That's why it had been so difficult. When delay was no longer possible, he pretended to cooperate in the sting. His plan was to kill me. After all, we'd developed an excellent alibi for him in Florida. (We later discovered that someone had traveled to Florida under his name.) Fortunately, my FBI colleagues were a little faster and more accurate with their guns than he was, so I'm here to tell you the story."

"Thank goodness!" said Tom in relief. He had been listening attentively.

"Was Richard killed?" asked Jeffrey.

"Oh no," said Susan. "Myers got him in the arm. Richard actually tried to get away, but we caught him easily. He's in prison now, and he'll be there for a long time to come."

"What about the lady who made up the phony orders?" asked Alex.

"At first, she tried to argue that she'd been fooled by Richard. When that didn't wash, she confessed. Richard had seduced her and soon got her entangled in his scheme. I think she got a year or two in prison."

The boys leaned back in their chairs, satisfied with the adventure. Tom sat in silence, his eyes on Susan. He wondered why anyone would put themselves in such danger.

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Alex got up and refilled their glasses with coke and ice. The time had come to show Professor Tom's translation to Susan. Alex handed her the printout. She took it eagerly and read it carefully two or three times. For several minutes, she didn't speak while she struggled with doubt and indecision. Could this be real? Could these kids have made an historic discovery that had slipped past the best scientific minds? Or could these kids and this professor be pulling the wool over her eyes? And if the message were authentic, what then? She had no reason to disbelieve any of them, but the whole thing seemed so improbable. She decided to accept the message at face value.

Slowly and methodically, Susan asked the other three question after question. It was evident that she was a master of interrogation. At first she avoided the ominous warning, unpacking the other material as the three themselves had done.

"And this brings us to the warning, doesn't it?" Susan said. Looking at the printout in front of her, she read: "...run far away or hide in deep caves. Find protection. The attack will come from the heavens without warning." She stopped and quizzed Tom about this. Was he sure about his translation of 'heavens?' He acknowledged that some other words might fit, including 'skies,' but it was clear that the attack would come from above.

Susan moved on. "It says that the attacker is a 'hard dark clustering force cohering tightly together.' It sounds like a comet or asteroid or some such thing."

The others nodded in agreement.

"And this thing will strike the Earth near the landing site of the 'lifeless couriers." Her memory clicked. With a chill, she remembered what she had seen at the meeting at the Pentagon a year earlier. The SETI signals had been displayed as a sphere containing a crude map of the continents. North America had contained a pattern of radiating lines centered approximately on Minnesota. Was it possible that both the signals decoded by Kugelbahn's group and the mysterious Messenger were attempts by the Sassaphron alien to alert 'humankind?'

Jeffrey could restrain himself no longer. "Don't you see?" He stared at Susan's face without blinking. "It's coming straight at us. This is where the Sassaphron Messenger came. This is where the UFO sightings were made. And the asteroid thing will come with 'fearsome force and fury.' We have to do something, Susan. Otherwise we're doomed, our city is doomed, and who knows, perhaps the whole Earth is doomed. What should we do? Who should we tell?" Jeffrey's eyes were wide as saucers.

"And we're running out of time," added Alex in an urgent voice. "Just a year to do something. Just the time for the Earth to make one circle around the sun. And it's almost a year since the Messenger landed. In two weeks it'll be a year."

Susan felt hemmed in by the boys. Could this fantastic prophecy of doom be true? Susan looked at Tom, seeking the conviction she had seen earlier.

Once again, Tom spoke quietly and persuasively. While the translation certainly had some ambiguities, there was little doubt concerning the main points. How accurate the alien's prophecies were, no one could tell. But given the alien's skill in technology,

language learning, and interstellar travel, common sense demanded that the warning be taken seriously. If the warning should turn out to be authentic, immediate national or international action would be necessary. If, somehow, the warning was a hoax after all, there would be no harm in having brought it to the attention of the authorities.

No harm to you, thought Susan, but her career might be on the line. If she played a visible role in raising the Sassaphron alarm, contradicting the scientific experts, she would be taking a big chance. She might even be demoted or transferred if she were wrong, and she would surely become the laughing stock of the Bureau. She imagined the headlines and cringed--"FBI agent hoodwinked in flying saucer hoax!"

Alex had been lost in thought. He broke in. "And let's not forget the second part of the message, the strange shapes that we haven't decoded yet. The message must be referring to them when it says 'the second part is a figure that reveals the awful assailant in its strange and tortuous route around your star.' This must be a picture or map that will give an important clue about the asteroid or whatever it is."

Susan reread this part. Yes, if this warning was genuine, there was much to be done quickly, not the least of which was an attempt to decode the strange geometrical patterns.

At last, Alex looked into Susan's dark blue eyes and asked, "Do you believe us? Do you believe the message is real? Will you help us convince Dr. Kugelbahn that it's real?"

Susan was silent. She looked first at the two boys, and then at the man. All of them had such conviction. All of them were pushing hard with the invisible force of their wills. She felt the growing pressure to believe them, to join them, to raise the alarm.

"Yes," she said finally. "I believe you. I don't understand all the details of this message, or the possibilities of its origins. But I agree with you, we must bring it to Dr. Kugelbahn's attention. It is essential that he examine the Sassaphron Messenger again in light of your important discoveries."

The other three jumped up clapping. Susan was on their side. Alex and Jeffrey slapped high fives. Alex noticed that Tom reached out and touched Susan's hand.

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When Susan left Alex's house, she headed for her downtown condo. Sturgeon Bay would have to wait. Her parents were disappointed when they received Susan's call. It had happened before; delay due to a break in a big case. Susan's mother had made her daughter's favorite dessert, a lemon meringue pie. She shoved the pie to the back of the fridge and hoped it would keep fresh until Susan arrived.

Susan pondered the latest turn of events in the Sassaphron case as she drove home. It was really not a matter for FBI involvement; there was no criminal violation. She had agreed to work for a cause that her fellow agents would consider ridiculous. It would be an uphill battle; Kugelbahn had already declared the Sassaphron Messenger a hoax. How could she convince him that two kids and an old archaeology professor had scooped him in the discovery of the century? How could she convince Kugelbahn, or anyone else for that matter, that the Sassaphron Messenger carried an urgent and dire warning? How could she protect Alex, Jeffrey and this intriguing professor Tom from harsh interrogations, public ridicule or worse? For that matter, how could she protect herself?

Her opening move was to contact Kugelbahn directly. As soon as she got home, she composed a carefully worded note to Kugelbahn. Like Alex, she hung out some bait without making a full disclosure. She faxed the note to Kugelbahn, and then began reviewing all the documentation in her Sassaphron file.

Chapter 12. Twists and Turns

Monday was another frustrating day for Karl Kugelbahn. For almost a year, nothing had gone right. He recalled the short-lived period of euphoria that had followed discovery of the SETI signals. Those were days of pure joy, but things had quickly turned sour.

Karl traced the turning point of his fortunes to the decision to involve Iglehart. He should never have agreed to invite Iglehart to the meeting at the Pentagon. What a fiasco the meeting had been! That's where Iglehart had gotten the cuckoo idea for his hoax, the Sassaphron thing. When the SETI signals stopped at about the same time as the hoax, everything began to fall apart. The skeptics in the media, and even some of his scientific colleagues, called Karl's great discovery into question. They claimed that the SETI signals were also part of Iglehart's hoax. Karl remembered the stinging jibes of the newspaper headlines: "SETI Scientists Snookered by Cunning Competitor."

Just as the bad publicity subsided, Karl had been summoned to Minnesota to appear at Iglehart's court hearing. Karl enjoyed seeing his adversary squirm. At the last moment, Iglehart had pled guilty, but Karl had spent an enormous amount of time and effort in preparing for the trial. Worse, the courtroom events had rekindled the interest of the media. Once again, the reporters hounded Karl with questions about space invaders and UFO sightings.

Thankfully, he was about to escape this public-relations nightmare. He had been looking forward to the summer research workshop in Darmstadt, Germany, for a long time. It would be a relief to lecture to fellow scientists, no journalists invited. He packed his briefcase with videos and slides for his foreign lectures. Then he bundled his notebook computer into its cozy carrying case.

The whir and whistle of the fax machine grabbed his attention. Was there a last-minute glitch in his travel plans? He reached for the paper, expecting a note from his travel agent. Instead, the FBI logo caught his eye and made him wince. The fax was from Susan Brindley. Karl remembered her well--pretty face and a good figure, but altogether too pushy. The fax said that the two kids, Alex and Jeffrey, had cracked the Sassaphron code with the help of an Oxford professor. The Sassaphron message contained important information about impending danger. Brindley concluded her note by asking for Karl's urgent attention.

Anger and frustration boiled up inside Karl. His face flushed red. This was the last straw! More meddling and more flaky nonsense from those two kids and their FBI-agent friend. He cursed the day he'd given in to Brindley's plea to ship the goofy Sassaphron

contraption back to Minnesota. What a mistake that had been! He should have had the silly funnel thing destroyed! Now, there would be no end of these wacky "theories." If the contraption got into the wrong hands, there could be a disastrous public uproar.

Karl was tempted to shred the fax and pretend he'd never received it. His conscience got the better of him. The cover sheet indicated that Brindley had sent the fax from her home. It was 6:30 p.m. California time, 8:30 in Minnesota. Karl could reply to her office voice mail without having to talk to her live. After pausing to control his temper, he dialed and left a message:

"Hello, Ms. Brindley. This is Karl Kugelbahn replying to your fax. Thank you for bringing this new information to my attention. As you know, my technical staff and I conducted a thorough examination of the so-called Sassaphron Messenger. You also know that we concluded that it was a hoax. Although Iglehart denied knowledge of the Sassaphron thing, he was convicted and put in prison for his part in the scam. There is no doubt in my mind that he is the perpetrator of this hoax. I should also mention that over the past year, I have had more crackpot calls than I can count. People from all over their nightmares. I have been hassled with everything from people mistaking search lights for flying saucers to schizophrenics hearing warnings from Martians. My research has almost ground to a halt because of this nonsense.

"As you recall, my experts did not find a valid decoding of the symbols on the Sassaphron object. Of course, creative fantasies could easily generate almost any translation you want. It is even possible that the devious Iglehart might have used cunning markings that could be decoded to yield some strange story. But please! I don't have the time to return to this matter now. In fact, I'm leaving town in the morning and I will be unavailable for a month.

"Thank you. I hope you have a nice summer. Give my regards to Alex and Jeffrey. Goodbye."

Karl hung up the phone. He folded Brindley's fax and buried it in a pile of papers on his desk.

The next morning, Karl Kugelbahn boarded a jet at San Francisco Airport bound for Frankfurt, Germany.

* * * * *

By Wednesday night, two whole days after their meeting, Alex still hadn't heard from Susan. He was home alone, in case she called. His parents had taken Professor Tom for a driving tour of the lakes and parkways in the Twin Cities. Alex jumped when the phone rang. So did Pericles who was on Alex's lap. It was Susan, calling from her family's summer place on Lake Michigan. She told Alex that Dr. Kugelbahn had refused to consider the Sassaphron matter further; as far as he was concerned, it was a closed case. Susan had also contacted Folwell, the scientific chief at NASA. He had agreed with Kugelbahn. Susan said that Kugelbahn was now in Germany, and no one would give her his phone number.

Alex's heart sank. He had felt sure that Dr. Kugelbahn would be excited to hear about the translation of the Sassaphron message. Yes, he might have many questions. He might even be doubtful. But how could he refuse to read the translation?

"Now you know how all those prophets in the Old Testament felt when nobody listened to them," said Susan.

Alex smiled ruefully. Susan was right. It was one thing to uncover critical information. It was quite another thing to get the right people to listen to you.

"Susan, what should we do next?"

"I'm not sure," she said. "I'll try to reach Dr. Kugelbahn again. In the meantime, let's all think about the next step." She sounded discouraged. Alex was surprised and distressed. If Susan didn't know what to do next, who would?

Dejectedly, Alex wandered around the empty house, trying to decide what they could do or who the should talk to. At length, he sat down in front of his computer. Absentmindedly, he scrolled through listings of network addresses. At the back of his mind, he knew what he was looking for. Never having figured out exactly how to contact Michelle, the search for her telltale icon was hit or miss. He pretended to himself that he wasn't really searching for anything in particular, just doing a little net surfing.

Suddenly, there it was! Alex pounced on the icon, pointing and clicking. The familiar series of network transfers was followed by the rainbow of colors and the blue and green stripes; Alex's excitement grew. Swiftly, he negotiated the log-in protocol.

Alex began typing without waiting for a greeting. "Michelle, this is Alex. Are you there? I need to talk to you badly. I need your help."

There was a long pause followed by a spurt of gibberish on the screen. Then Alex read, "Hello, Alex, yes, I'm here. Is that really you? What a wonderful surprise to hear from you. It's been such a long time. I thought we'd never connect again."

"I keep trying to reach you," replied Alex. "I've tried at least once almost every day for three weeks since we last talked. Today was the first time that I found your icon."

Michelle's reply began with a series of question marks. "Three weeks? Don't you mean three years? When you and I last connected, you and Jeffrey were trying to decipher the Sassaphron Messenger's code. How long ago was that?"

"About three weeks ago," replied Alex. The excitement of the earlier conversation with Michelle was vivid in Alex's memory.

"Alex, you're not kidding me again are you?"

"No, why?" typed Alex.

"Well, your clock must be running out of sync with mine. I haven't been in touch with you since ninth grade."

Alex was puzzled. "We were in touch three weeks ago yesterday. That's not very long. What grade are you in now?"

She replied, "I did try to reach you many times. Once my project was over and we lost contact, I kept wondering what happened to you and the Sassaphron Messenger. After a while, I began wondering if my computer contacts with you were real, or just a dream. That all happened in eighth and ninth grade. Since it's only a couple of weeks until I graduate from high school, it's over three years since we've been in touch."

Alex was astonished. Not only had he connected to a person in the future, but her time had skipped a beat. Could time take steps or run at different rates? Intuitively, it seemed possible that two people's time could be different, but what did that really mean? He glanced out his bedroom window to reassure himself that his own world was stable. Yes, it was still summer. Yes it was dusk. He could see the first evening star twinkling in the darkening sky.

Alex couldn't decide what to say to Michelle or how to explain the time warp, so he simply asked "Are you going to college after you finish high school?"

"Yes, of course," came Michelle's response. "I'm going to Colony College. I'm hoping to major in planetospace engineering."

"I haven't heard of Colony College. What state is it in?" asked Alex.

Michelle's response began with a smily symbol. "Alex, you're so quaint. CC isn't in a state, it's in Space Colony 3. I suppose the space colonies weren't settled until after your

time. Anyway, I'm really excited about going there. I've got passage booked on the Exo-Rocket for August. It'll take a couple of weeks to get out to SC 3, and I won't be able to come home very often. Alex, I'm really happy to hear from you, but I have to go in about two minutes. Tell me how you are and how you made out with the Sassaphron Messenger. You must have done okay, or I wouldn't be here talking to you."

Alex felt dizzy following all Michelle's twists and turns in time. On the positive side, he thought, if she's there in the future, maybe we did (or will) figure out this Sassaphron thing. But if she's some sort of electronic ghost, who knows what to expect? "Michelle, I need your help. We've decoded the written part of the Sassaphron message. I now understand what you meant about the warning. But the space scientists still won't listen to us. Professor Tom from England is helping Jeffrey and me, but he's an archaeologist, not a space scientist. If the scientists don't take the warning seriously, who should we turn to?"

"Alex," replied Michelle, "It wasn't the written part that was critical. You remember I was always bad at history, but wasn't it a convict of some kind who did the calculations? I forget exactly how that worked. And I'm still afraid to tell you everything I know, in case I somehow disrupt the historical flow of events. I'd better not say any more."

A convict? A prisoner? Of course! "Michelle, do you remember if the convict's name was Edmund Iglehart?"

There was no response. The CONNECTION CLOSED message appeared. Alex clenched his fists and would have sworn, except his parents had taught him not to.

Early the next morning, Susan was awakened at the lake by a phone call from Alex. She was taken aback by his proposal: to ask for help from Edmund Iglehart. Alex would not explain his motives, but pleaded in an urgent voice. Reluctantly, Susan agreed to think about it.

After breakfast, she put on her black bikini and went down to the lake. Susan was slim and fit, a benefit of daily workouts in the FBI gym.

The shallow water near shore was warm from the hot mid-morning sun. She immersed herself with only her head above water, gently rocking to and fro in the light swells. Her toes dug into the soft, sugary sand. She gazed into the cloudless blue sky, but her concentration focused on the problem in front of her.

She had tried to contact Kugelbahn several more times. Clearly, he was deliberately avoiding her. Yes, Karl Kugelbahn was a brilliant scientist. But he was stubborn, and he could be wrong. Iglehart was also brilliant. The two men were bitter enemies. She

remembered seeing the mutual hatred when they came face to face at Iglehart's trial. Iglehart, now languishing in federal prison, must bear a terrible grudge toward Kugelbahn.

The waves from a motorboat bounced Susan up and down. Wouldn't Iglehart just love to scoop Kugelbahn in a matter of national significance? Susan began to smile, and then to chuckle. Really, Alex's suggestion was quite brilliant. How amazing that a kid should be such an astute judge of human nature! Perhaps Professor Tom was behind it all. Could that be it?

A sea gull squawked overhead, attracting Susan's attention. It dipped sharply, just low enough to graze the water and pick up something on the surface. Off it went, soaring high into the blue. Why did she keep remembering that soft, persuasive voice of Professor Tom, and those magnetic brown eyes?

Susan continued lolling about in the water for about half an hour. How relaxing. Her plan crystallized. She would try for another day or two to reach Kugelbahn. If she couldn't reach him, or if she couldn't convince him to take the new evidence seriously, it would be a simple matter to arrange a meeting with Iglehart in prison. FBI credentials were very handy at times.

Chapter 13. Visiting The Big House

On Friday, Susan phoned the federal penitentiary at Leavenworth, Kansas, to arrange a meeting with Edmund Iglehart. The appointment was set for Monday. Then she drove to the Twin Cities to join Alex, Jeffrey and Tom.

Together, they spent the weekend photographing the mysterious Sassaphron patterns that had so far eluded interpretation. Susan was glad to do this work in Alex's garage, out of the spotlight of the FBI labs.

Systematically, Susan photographed the repeating sequences, using a special FBI camera with close-up lenses. Tom supervised the operation, drawing on his experience in photographing artifacts in difficult settings. Alex and Jeffrey got Gordon and Wendy to shuttle them back and forth to the mall for film processing. The boys put the photos in albums, taking care to arrange them in proper order. They also converted the photos to digital images with Alex's scanner and computer.

By Sunday afternoon, the job was finished. The photographic record was complete and the images were transferred to floppy disks. The materials were packed in a briefcase, ready for the trip to Leavenworth.

Gordon said that they deserved a reward for their labors; why not stroll around one of the city lakes and then go to the outdoor concert at the band shell? After a sweaty day's work in the garage with no air-conditioning, everyone happily agreed. The six of them--two kids, two parents, one FBI agent and one Oxford professor--piled into the McIntosh's Ford Taurus station wagon and set off.

The chain of lakes in Minneapolis--Harriet, Calhoun and Isles--are places where the people meet, mingle and show off. In the summer, the pedestrian paths and biking paths are crowded with people. The paths meander among the lush green grass and trees, but always stay within a stone's throw of the water. This is where the citizens of Minneapolis come to escape the heat of the summer, to see their neighbors, and to wade and splash in the water.

Alex and Jeffrey skipped and chased each other for three miles around Lake Harriet. Jeffrey stopped to scare the geese by barking at them. They were not perturbed; they were used to silly humans making funny noises. Alex succeeded in scaring Jeffrey by running ahead and hiding behind a tree. When Jeffrey passed, Alex cackled like a witch and squirted him with a water pistol.

Gordon and Wendy strolled around the lake hand-in-hand. They had done it many times before. Sky Lake near their house was delightful, but there was more life, more to see, at the city lakes. After their circuit of the lake, Gordon and the two boys stripped to their swim suits and plunged into the soupy water.

Susan and Tom ambled slowly around the lake together. Many people passed them-brisk walkers, runners, roller bladers, people on bikes and a contingent from the Twin Cities unicycle club. There was even a girl hopping on a pogo stick.

Susan told Tom about life in Minneapolis, life in the Midwest, and life in the FBI. Tom told Susan about life in Oxford, and his many adventures in Greece and the Middle East. He described his exploration at the site of ancient Sassaphron and showed her the lucky charm that Alex had seen. They spoke easily and openly to one another, perhaps because they had so little in common and so much to share. Near the end of their walk, Susan tripped on the rising slope of a foot bridge. Tom quickly grasped her arm to steady her, preventing a nasty tumble on the rough planks. He held her arm longer than was required for safety. His calloused fingers caressed the back of her hand affectionately.

Susan smiled and thanked him warmly, "You've been saving a lot of people lately, haven't you?" she said.

"I'm pleased to be of service, Madam," he replied in a solemn voice, winking at her.

After the concert of trumpet fanfares and other brass music, they ate bratwursts and ice cream at a picnic table near the lake.

* * * * *

Early Monday morning, Alex, Susan and Tom flew from Minneapolis to Kansas City where Susan rented a car. (Much to his chagrin, Jeffrey couldn't come. He had to attend his grandfather's birthday party that day.) They quickly covered the 60 miles northwest to Leavenworth, passing mile after mile of wheat fields and corn fields. Susan didn't need a map; she'd driven this route before.

On the way, Alex remembered his only previous visit to a prison. He and his parents had toured Alcatraz island in San Francisco Bay, site of the infamous federal penitentiary. At Alcatraz, he had seen rows and rows of tiny dark cells, packed together and stacked on top of one another. But Alcatraz had been closed for many years and the cells were empty, except for a couple that were open for the amusement of tourists. The cells had reminded him of cages at the zoo for ferocious animals. At Leavenworth, the cages would be full of vicious murderers and thieves. Alex imagined their evil faces and monstrous burning eyes.

They were still some distance from the place when Alex spotted a large dome lofting above the flat countryside. As they approached, he saw two giant stone buildings--cell houses--flanking the dome. An enormous red-brick wall surrounded the compound. "This must be the prison," said Alex apprehensively.

"Yep, it's the Big House," said Susan.

At 2:00 p.m. they reached the guard post at the entrance to Leavenworth prison. The checkpoint was at the base of a gun tower. Susan showed her FBI badge and they were allowed to continue. Susan parked the car. They walked through steel gates to enter the administration building where the warden met them. Despite the heat, he was wearing a starched white shirt and a tie. He and Susan conferred briefly; they seemed to know one another. The warden took them to the control center where a picture ID card was made for each of the visitors. They were logged into the prison's computer. After passing through another massive steel gate, they were checked by a metal detector. It worked, beeping at Susan's concealed weapon. Alex was impressed by the respect Susan's FBI badge commanded. No one asked her to hand over the gun. From there, the warden escorted them through yet another electronically controlled steel gate. It slammed shut behind them, with an echoing finality. They were now in the heart of the prison, beneath the dome.

"He's in the cell block over there," said the warden, pointing. The warden nodded to the armed guards at a checkpoint just inside the door of the cell block.

Immediately, Alex saw the rows and rows of cells, much like he remembered them at Alcatraz. He heard the raucous shouts and hoots of many men, mingled with the sounds of radios and television. Some of the men were in the cells with the doors open. Others were milling about. All of them were behind a huge mesh of thick wire screening. They were a tough looking bunch, well decorated with scars and tattoos. Daylight filtered in through large windows high on the brown walls. The place was cavernous, and the heat stifling. Nervously, Alex stuck close to Susan.

The warden took them to a meeting room. The room was bare except for a few wooden chairs and a table. There were no windows. Five minutes later, Edmund Iglehart, in handcuffs, was ushered in by a burly guard.

"You've got half an hour. I'll wait outside and take ya back when you're done," said the guard.

"You can unlock the cuffs," said Susan to the guard. He obliged, and departed, slamming the door.

Iglehart was wearing a white T-shirt and prison-issue blue denim trousers. He was sweating heavily from the heat and appeared tense. Although he had lost some weight and was a little grayer around the temples, he looked reasonably healthy.

"Hello Dr. Iglehart," said Susan, extending her hand.

Stiffly, he took it, and said, "Hello Ms. Brindley." Turning his head to look at Alex, he said, "and this is ...Alexander, star witness for the prosecution."

Alex stood his ground and replied, "Hello Dr. Iglehart."

Susan introduced Professor Tom. The two men shook hands. Iglehart brightened slightly. "Yes, I've heard of you," he said. "I've read some of your books on the archaeology of ancient Greece."

"Have you really?" said Tom eagerly. "It flatters and surprises me to find a brilliant astronomer with interest in my work. And, I must admit, I hadn't expected to find a reader of my books in this institution."

"Well, this is an elite institution of higher learning," said Iglehart sarcastically, "one of the leading colleges of crime. We have the nation's top teachers in murder and theft."

"Let's sit down," said Susan. They pulled chairs around the small wooden table.

Iglehart had been in prison for about nine months. His lawyer had tried to have him assigned to one of the "country clubs" of the prison system. Instead, the prison authorities had sent him to the "big house," the federal penitentiary at Leavenworth.

There, he was given a cell to himself. This privilege was a double-edged sword. While he was able to keep pretty much to himself, reading, writing and fiddling with a small computer, his fellow prisoners hated him. They accused him of being a "snitch," of spying on them in return for his special status.

He had not been permitted any contact with Ruth. He had asked for permission to work with her on theoretical research. The request had been denied by the warden. Ruth was also serving time. Her two-year term was shorter than his ten year sentence. Iglehart had been notified of Susan Brindley's visit. He didn't know what she wanted. He waited for her to begin. The tic at the corner of his mouth betrayed his anxiety. The small erratic pulsations made Susan think that he was about to speak.

Susan methodically described how the Sassaphron message had been decoded. Alex and Tom added many details. Quickly, Iglehart realized that no one at the table believed the Sassaphron object was a fake.

He interrupted Susan angrily, "So now you believe what I said, that there wasn't a hoax. Right? So what am I doing in this hell hole?"

"Dr. Iglehart," Susan replied in a firm voice, "don't you remember that you were convicted of several offenses including assault with a deadly weapon, theft of nationally sensitive material, and several violations of federal security laws? And you fired a shot that could have wounded or even killed this child." She pointed at Alex.

"Yes, yes," said Iglehart gloomily, "but as bad as my punishment here is, believe it or not, the worst part was having everyone accept Kugelbahn's cockamamie story about a hoax. What rubbish! What poppycock!"

Tom chuckled appreciatively, "Two fine words there--cockamamie and poppycock. Just add the 'cacophony' out there," and he pointed to the door, referring to the noisy cell block.

Alex covered his mouth to hide his giggles.

Iglehart looked at Professor Tom quizzically. What sort of cuckoo had Brindley brought along, he wondered.

The guard came in and announced that the half hour was up. Susan asked for another half hour. The guard agreed reluctantly. Susan also asked for water. Everyone was dripping with sweat. The guard returned with a plastic pitcher of tepid water and a package of paper cups.

The trio took Iglehart through the translation of the Sassaphron message, explaining their interpretation of the meaning. Intense interest and concentration replaced stress in Iglehart's face, and the tic subsided. He was envious, but curious and excited at the same time. This could have been my story to tell, he thought. If I had executed my plan better, I would have been the first person to make sense of this extraterrestrial message. Instead, the credit goes to this carrot-top kid and this witless Englishman. Ruth and I could have worked out this message. He yearned for the glory the discovery would have brought him.

"Dr. Iglehart, we have come to ask for your help." Susan was speaking.

"My help? What help do you want from me?" He focused his concentration back on Brindley's piercing blue eyes.

"We need your help in decoding the second part of the message, the part composed of patterns, not letters. Read this excerpt from the translation again." She pointed. "It says:

'The second part is a figure that reveals the awful assailant in its strange and tortuous route around your star, and its inevitable meeting with your world soon to come. This second part may inform you if there is one among you who can master my use of graphic artistry.'

We hope that you are the one."

"Why me?" asked Iglehart, suddenly alarmed, "I will not work for that scumbag Kugelbahn on this or any other project."

Susan became tense. The extra half hour was nearing an end. The guard would be back momentarily. It was time for her ace. "Dr. Kugelbahn continues to think that the Sassaphron Messenger is *your hoax*. He has refused to take this message seriously. We have come to ask for your help. We believe that Dr. Kugelbahn is wrong and that you are the only person who can show it." She looked Iglehart in the eye, waiting for his response.

It dawned on him. They were doing an end run around Kugelbahn because he was too pigheaded to take the Sassaphron Messenger seriously. They had come to Leavenworth because Kugelbahn wouldn't listen. "All right," he said, dropping his gaze.

Tom flashed a fleeting smile of triumph at Susan, and Alex relaxed in his chair.

Iglehart still had his own cards to play. "But if I agree to help in deciphering these patterns, you must do two things for me."

Always a wheeler dealer, thought Susan, recalling Iglehart's bargaining at the Pentagon meeting. Once again, he looked nervous. The tic had gone back into action.

"Yes?" Susan said.

"Well, first, you must get me access to reasonable computing power, including a modem link to the Internet. You must arrange for me to have network access to the university computers."

"We should be able to arrange that," said Susan. "What's the second condition?"

"Well," he said fidgeting, "you must arrange for me to see my wife--for science, and for conjugal visits."

Alex had no idea what to make of this. "Why does he want jungle visits?" he whispered to Professor Tom.

"No, Alex, 'conjugal' means intimate visits with his wife."

Alex blushed.

Iglehart glared at the two of them but said nothing.

"I will see what I can do," said Susan. She jotted a few notes about Iglehart's computer request.

"Getting back to the Sassaphron Messenger," said Iglehart. "You will have to bring me detailed drawings or photos of the mysterious patterns."

"We have them already," said Alex jumping up. To Iglehart's amazement, there were photo albums and floppy disks full of exactly the information he needed. This kid is certainly on the ball, thought Iglehart with growing respect.

Iglehart flipped through page after page of photos. An idea began to take shape in his mind. "Give me a couple of days with this, and get me a computer hook-up as fast as you can. Ruth would be a big help on this." For the first time in months, his burden of despair was a little easier to bear. And what a joy it would be to beat Kugelbahn at last!

Susan was satisfied. She could tell that scientific curiosity and competitiveness were overcoming Iglehart's bitterness and despair. She credited Alex with the master strategy. Iglehart had the brains and the will to solve this problem. Like it or not, he was now a part of their team.

The meeting ended. The guard came in and handcuffed Iglehart. Gruffly, he ordered Iglehart to precede him out the door. The other three followed.

Alex immediately noticed that something was different. There were inmates bustling around in the open area right outside the door. The guard seemed surprised. He barked at the men to get back through the opening in the giant wire enclosure. Another guard shouted the same order from the checkpoint near the huge steel gate. The men paid no attention. The guards' voices were drowned out by the growing hubbub echoing through the cavernous cell block.

Alex glanced up at Susan and saw her frown. She was trying to move him and Tom toward the exit gate. But there were too many men in the way and no clear path.

Fear gripped Alex as he realized that the crowd of pushing and shoving prisoners had surrounded them and was pressing in toward them. At first, Alex thought the inmates were coming after him. Then he realized that they had another target in mind, Iglehart. A big man with a jagged scar across his cheek had somehow gotten a hammerlock on the guard escorting Iglehart. There were angry shouts from other guards, but the men ignored them. Iglehart was now the center of attention of an angry mob, but Susan, Tom and Alex were also enclosed in the trap.

Then Alex saw the heavy glass ashtray tied to the end of a makeshift rope made out of a torn sheet. A short, stout man was swinging it with deadly force at Iglehart's head.

"Duck Professor!" yelled Alex at the top of his lungs. His young voice pierced the din. Iglehart ducked a split second before the glass would have crushed his skull. The man had swung with such force that he let go. The ashtray flew over the heads of the mob and smashed to pieces on the white tile floor.

The uproar was deafening. The inmates closest to Iglehart began shoving him and the guard through the opening in the mesh. The crowd around Susan, Tom and Alex closed in on them quickly, evidently intent on taking them hostage. Big rough hands with black finger nails stretched out to grab Alex. He tried to shrink back but had no place to go. The hands closed around his neck.

Then there was a flash, a loud crack and smoke, followed by the sound of glass hitting the tile. Susan stood in the midst of the melee, with her gun raised. A man lunged at her from behind to knock the weapon from her hand. Tom was too quick. He neatly stuck out his foot. The assailant tripped and tumbled to the floor.

Susan shouted in a loud and commanding voice. "Back off or I'll shoot to kill. Move clear of the kid." Quickly, the crowd melted away to nothing, leaving Iglehart and his escort, and the three visitors alone in the open area.

Immediately, several guards swarmed around them. The steel gate opened and a large contingent of armed guards came in, followed by the warden. In a few moments, cell doors began slamming shut up and down the rows of cages. The prisoners had been ordered into a lock up.

The warden led the three visitors out of the cell block. Susan was shaking, the sweat pouring off her forehead. Alex was trembling with fear, but tried to appear brave. Tom walked between them, an arm around each of their shoulders.

"Good work, chums," he said quietly. "That was a close call."

"They were certainly anxious to get Iglehart," said Susan. "Alex, you saved his life. And they almost got us too."

"If you hadn't used your gun," said the warden, "we'd have a major hostage problem on our hands right now. I guess we made the right decision in letting you carry your weapon past the metal detector."

"I'm sure they thought I was an easy mark," said Susan. "Can you imagine what they'd do to a woman FBI agent in this place?" She shuddered. "I bet they were surprised when I pulled a gun on them."

"You're lucky," said the warden. "Sometimes even guns aren't enough to control them."

Alex could hardly speak, but he had to ask his question. In a broken voice, he said to Susan, "Who...who did you shoot?"

"Nobody," said Susan. "It was a warning shot into the air. It hit one of those big windows." She smiled reassuringly down at Alex.

He relaxed, visibly relieved. "Why were they after Iglehart?"

The warden answered. "They think he's a snitch, a spy for the prison authorities. That's why they made a move on him."

Alex asked, "Why didn't the other guards come to help us?"

The warden said, "They couldn't do much because the prisoners had all of you surrounded. They couldn't even see where you were. Those men are a lot bigger than you are; they had you screened. The guards feared for your safety, for your lives. Agent Brindley saved you because she was able to disperse the mob from within."

"How did they get out there in the first place?" asked Tom.

The warden frowned. "That I don't know. Someone left the door to the cage unlocked. We'll have to conduct an investigation."

The warden took them to his carpeted office. Someone produced soft drinks and popcorn. A few minutes later, a lieutenant brought word that Iglehart was unharmed and had been transferred to a separate wing of the prison.

Tom and Alex waited while Susan met privately with the warden. She described the details of the disturbance. Then she told the warden what they needed Iglehart to do, and the conditions laid down by him.

At about 5:00 p.m., Susan and her two companions drove back out through the entrance of Leavenworth Penitentiary. Fear gnawed at them all, but as the miles peeled away, they relaxed. Alex couldn't wait to tell Jeffrey what had happened. Late that night, their flight from Kansas City touched down in the Twin Cities.

Alex dozed during the flight. He awoke with a startle when the plane landed. Where was he? What had happened? The bright lights on the runway came into focus, replacing the nightmarish images of demonic figures with ghastly faces. The reality of the events at Leavenworth flooded back into consciousness. Yes, they had made a narrow escape. But no, the danger was not finished. The Sassaphron warning remained among them, its ominous mystery still unresolved, still casting a dark shadow ahead.

Chapter 14. The Messenger's Message: Part Two

The next day, Edmund Iglehart was transferred from the big house at Leavenworth to a federal prison in Rochester Minnesota. A couple of days later, he was given access to a computer and a modem. He was permitted to reopen his computer account at the University. These arrangements gave him network access to specialized astronomical software running on a powerful mainframe computer.

After completing arrangements for Iglehart's move, Susan returned to Lake Michigan. Alex and Tom awaited word in the Twin Cities. Jeffrey joined the vigil.

They didn't have to wait long. On Friday, just four days after the traumatic visit to Leavenworth, and a scant 36 hours after Iglehart began his computer analysis, Alex received this e-mail message:

"To Agent Susan Brindley, Care of Alex McIntosh: I have succeeded in decoding the Sassaphron patterns. Come at once. The matter is of utmost urgency. Bring your friends if you must.

--E. Iglehart, PHD and CON."

Alex read the note for a second time. The letters CON caught his attention. What kind of a degree was that? Then he remembered Michelle's reference to "a convict." More of Iglehart's sarcasm, thought Alex.

Alex showed the message to Professor Tom and Jeffrey.

"Let's call Susan right away!" said Jeffrey excitedly.

Alex got Susan's mother on the phone. She quickly fetched her daughter from the shallows at the edge of the lake. Dripping wet, Susan took the call.

After hearing the news, Susan dressed quickly. Half an hour later, she was on the road to Rochester, Minnesota. She swung through the Twin Cities to pick up her three friends. The two boys sat in the back seat. Professor Tom sat beside Susan in the front.

The boys tried to guess what Iglehart had found.

"He's decoded the rest of the message," said Jeffrey. "I bet I know what it is."

"Close your eyes and tell me what you see in your crystal ball," said Alex mockingly.

Jeffrey closed his eyes and began speaking in a singsong voice, his impression of a fortune teller. "I am looking into the distant past. I am seeing huge beasts, with giant scales. They look like lizards, but they are bigger than elephants or woolly mammoths..."

"Okay," said Alex. "So you see dinosaurs. That's in the past. What's in the future?"

"Yes, yes," continued Jeffrey, with a smirk at the corner of his mouth, "Yes, they are dinosaurs. But now I see a huge black cloud covering the land. Everything is cold and dark. The dinosaurs are falling down. They are lying down to die. I see all this."

Irritated by this fairy tale, Alex said rudely, "Jeffrey, please shut up!"

It was Jeffrey's turn to be annoyed. "Alex, it's all true. It happened 65 million years ago. A huge meteorite hit the Earth. It kicked up a huge amount of dust and smoke. The dinosaurs died off because it got cold and dark."

"Could history repeat itself?" asked Alex, now interested in Jeffrey's story.

"Not exactly, Alex," said Jeffrey. "How many dinosaurs have you seen walking around here in the past week?"

Alex blushed. "I mean, could a meteorite hit us again, and cause all the people in the world to die off?"

"I guess it's possible," said Jeffrey. "Maybe the complicated Sassaphron patterns are pictures of dinosaur DNA: the Sassaphron way of sending a warning to us. I bet it's something like that."

Alex was doubtful but didn't have a better idea.

As they approached Rochester, there were lots of signs for the famed Mayo clinic, but very few for the federal prison. This didn't bother Susan; she knew the route. It was after dark when they arrived at the prison. The parking lot was almost empty.

Alex had been told that many of the prisoners in this place had medical problems. He wondered if it would be more like a hospital than a prison. The visitors were ushered into a small conference room in the administrative block, far away from the prisoners. Alex spotted a table in the corner with a computer on it.

A guard brought Iglehart. There were no handcuffs this time. Under his arm, he carried a large portfolio. Alex assumed that it contained photos or printouts. Iglehart was wearing

a University T-shirt and blue jeans. He was bright and cheerful. Alex had never seen him so upbeat. Following a brief greeting, he went straight to the computer.

When Iglehart had first seen the pictures of the Sassaphron patterns at Leavenworth, an idea had taken root. The images reminded him of what he had seen at the Pentagon meeting. He recalled how the mathematician, Marian Kilmer, had discovered that the SETI signals from space could be interpreted as a solid shape, a relief map of the Earth. Could the strange patterns on the Sassaphron Messenger, lying between the written symbols, also be reconstructed into a meaningful three-dimensional shape?

His hunch had been right. If you laid out the spiraling Sassaphron patterns in a long series, they formed a waveform that was strikingly similar to the SETI signals. Iglehart used the same reconstruction method Marian Kilmer had described.

"I can't understand why Kugelbahn missed this," said Iglehart, gloating at his rival's oversight. "Kilmer would've noticed the similarity in two seconds."

"When he saw the Greek letters and other human-looking lettering, he was convinced that the Sassaphron Messenger was a hoax," said Susan. "I don't think Kilmer ever saw the Sassaphron Messenger."

"Truly criminal neglect!" exclaimed Iglehart.

"That's the pot calling the kettle black," chimed in Jeffrey.

Alex whispered, "Shut up!" and then spoke up, unable to wait any longer. "Dr. Iglehart, you've told us *how* you decoded the Sassaphron patterns. But please tell us *what* they show. Is it a model of the Earth like you described from the SETI signals?"

"Or is it a dinosaur?" said Jeffrey, eager to register his guess before the answer was given.

Alex laughed, but Tom said seriously, "Nothing would surprise me in this affair."

"It's neither the Earth nor a dinosaur," said Iglehart. It's a very detailed three-dimensional model of the Solar System, including the Sun, Earth, moon and all the other planets. I'll use my astronomy software package to show you the model the Sassaphrons have sent us." He turned to the computer and showed them a depiction of the sun with planets moving around it.

The four visitors watched Iglehart's show, but they did not understand it.

Alex voiced their confusion. "Why did the Sassaphron's send us a model of our own Solar System? What help is that? And what's so urgent?"

"That's the sixty-four-thousand-dollar question," said Iglehart triumphantly, "and I have the answer." His finger clicked on a key. A little red dot appeared in the graphical image. It too was moving, but in a plane quite different from those of the planets. As they watched the computer simulation, the red dot approached closer and closer to the Earth. At last, it made contact with the Earth, the point of intersection occurring somewhere in the northern hemisphere.

"Let me show you that again at a magnified scale," said Iglehart. He zoomed up the image of the simulated Earth on the screen. Once again, the red dot approached and collided with the Earth. This time, they could see that the impact occurred near the middle of North America.

"Please explain to us what the red dot is, and what this means," said Susan.

Iglehart pushed his chair back and stood up. He began pacing back and forth in the small conference room. "They've been very nice to us," he said. "They've sent us an exact orbit of the object that will strike the Earth. The orbit is so precisely defined that we can estimate the time and place where the collision will occur. By computing the elements of the orbit, I've been able to estimate the mass and energy of this 'hard dark clustering force."" He paused.

Everyone remembered the phrase from Professor Tom's translation of the Sassaphron message. They waited anxiously for him to continue. Unable to contain himself, Jeffrey jumped to his feet and began bouncing up and down on his toes. "Tell us when and where and how big. Tell us now!"

Iglehart responded. "Judging from its mass, it must be an asteroid or large comet head, probably about ten miles in diameter. Moderately small as asteroids go. But it's travelling at high speed. It's at least as large and dangerous as the meteorite that wiped out the dinosaurs. Is that what you wanted to hear, Mr. Jeffrey?" There was a hint of malice in his voice.

Jeffrey's nightmare was coming true. He wanted to scream in panic, but he struggled to maintain his composure.

"When and where?" asked Tom. "I think I know the answer to the 'where' question."

"It's a little difficult to tell because their model has some distortions in the Earth's surface. We saw that also in the map Kilmer showed at the Pentagon. Correcting for that with accurate data on latitude and longitude, and given the detailed orbit through the Solar System, it's clear that the impact point is almost precisely the Twin Cities of Minneapolis and St. Paul. It's a very strange orbit for an asteroid, travelling roughly south to north and striking the Earth's surface at a fairly oblique angle."

"Will it only affect a ten-mile area?" asked Susan.

"Much more," said Iglehart. The crater itself will be larger than that. There will be devastation for miles around. Debris will be thrown up into the atmosphere. Much of it may go into orbit around the entire Earth. It could be truly catastrophic. This is going to be a big one!"

"When?" asked Tom.

Iglehart enjoyed the suspense. "Well, the good news is that the object is close enough that we should be able to see it coming with a telescope, now that we know where to look. In fact, I'm surprised that it hasn't been seen already. It's bad luck that nobody's looked in the right place. The bad news is that the catastrophe is scheduled for two weeks from Monday night, just after dark. Just seventeen days."

Everyone gasped. It was like an electric shock, sudden and intense. Horror-stricken, they could hardly believe their ears. It was like hearing from a doctor that you only have seventeen days to live. Susan felt sweat break out on her face and neck. Her ears throbbed. She struggled to hold back panic. Alex sat in rigid silence, trying to comprehend what he had just heard. Jeffrey put his hands over his face and burst into uncontrollable tears. Iglehart impassively observed the effect of his revelations on his visitors.

"How can you be so sure of the timing?" asked Tom.

"The positions of the planets in their orbits around the Sun put a time stamp on the model," said Iglehart. "The positions of the planets are exact relative to one another, indicating that the Sassaphrons know their astronomy. And the relative positions make it clear that they are telling us about *now*. The model locates the impact point precisely in place and in time."

"Can anything be done to prevent it?" asked Tom.

"I doubt it, unless the Defense Department has some secret Star Wars shield. Perhaps they can loft some A bombs at this thing and knock it off course. I don't even know if that would work. If we can locate the thing visually and confirm my calculations, it may be possible to try something like that. Otherwise, evacuation of the entire Twin Cities area and surroundings is the only course of action. Didn't the message say something about fleeing or hiding in deep holes? That's probably good advice."

Then Alex spoke. "Maybe this is another hoax. Your way of getting even with us. You probably hate us. You're trying to get revenge." His voice was small and weak. He didn't believe his own words, but he wanted to find an escape from this dreadful danger. Deep down inside, he knew that Iglehart was telling the truth.

Iglehart shrugged. He was still pacing, playing the role of a professor lecturing to a class. "I wouldn't mind a little revenge, but this is a lot more than I would bargain for. It's going to be Nature's revenge on a grand scale."

Susan stood up. It was time for her to take the floor. "We have no time to lose," she said. "Dr. Iglehart, this is a matter of national emergency. I trust you will cooperate in working with Dr. Kugelbahn or whomever else becomes involved?"

Iglehart hesitated. Susan could see what was coming and took pre-emptive action. "I have already made arrangements with the prison authorities for you and Ruth to have conjugal visits. I will see to it that the visits begin as soon as possible."

"Thank you," said Iglehart stiffly.

Jeffrey had stopped crying. He whispered to Alex, "What was that? 'Conjuring' visits? Is it something to do with magic?"

"Shh," whispered Alex. "I'll give you the scoop later."

Susan drove the boys and Professor Tom back to the Twin Cities. She dropped them off at Alex's house a few minutes after midnight. The full moon was bright and the air steamy warm.

"Keep everything you heard tonight absolutely quiet," instructed Susan. "I'll be back here early tomorrow morning. Sleep tight."

The boys ran inside. Tom lingered behind.

"I should go in and explain to Alex's parents," said Susan. "The kids may be upset."

"I'll explain the situation to Gordon and Wendy," said Tom.

"Thanks," said Susan. "I have to get home and make some calls." In the moonlight, her face was pale. Her lips were pressed tight with stress.

Tom took her hand and held it between his two rough hands. He leaned over and kissed her gently on the lips. She relaxed a bit and smiled at him. Then she withdrew her hand

from his grasp and got into her car. "Good night, Tom," she said softly, blowing him a kiss. Then she drove away.

Susan reached her office at about 1:00 am. It was time to use the "Alex strategy" again. Because she could not reach Kugelbahn herself, she would have to go through other channels. Colonel Thomas Rippon had chaired the ill-fated Pentagon meeting. Susan knew that he was still in charge of security issues related to SETI signals. She reached him on a secured telephone line. It didn't take long to convince him of the imminent danger.

Rippon agreed to get Kugelbahn's staff at Berkeley into action immediately. Susan was confident that Kugelbahn would return from Germany to lead the investigation as soon as he learned that Iglehart might upstage him.

* * * * *

What was that knocking sound? What was going on? Whose voice was calling?

"Herr Kugelbahn. Herr Kugelbahn!" The knocking continued.

Karl sat up in bed. It was still dark. His alarm clock said 2:27. Could it be a fire? He jumped out of bed. It sounded like his landlady, Frau Fischer.

"Ja," he called back, clearing his throat. Speaking German, he yelled, "What is it? What's wrong?"

She shouted back that there was a man downstairs in the dining room who demanded to see him urgently. "He refuses to leave until he sees you. He says he'll come up here and get you if you don't come down. He's an American, a military man. He must be important; he has lots of stripes. Come downstairs please Herr Kugelbahn."

Karl dressed quickly and went downstairs. There wasn't much light in the boardinghouse.

The officer introduced himself. He had come on behalf of Colonel Thomas Rippon of military intelligence. The visitor outlined the "urgent" news. Karl was astounded and annoyed. More about the Sassaphron thing! Would he never get rid of this albatross? Worse yet, his nemesis Iglehart was back in the act. Karl had hoped that Iglehart would be warehoused at Leavenworth for years.

The officer told Karl about Iglehart's analysis of the Sassaphron patterns and his prediction of imminent disaster.

"This is incredible," exploded Karl angrily. "This man, this convicted criminal, continues to harass and mislead us. He is now trying to panic us all with a doomsday scenario. If there was an asteroid or comet of this size so close to the Earth, someone would certainly have noticed it by now." But what if they hadn't, he wondered. There was a seed of doubt. Could Iglehart be right?

Kugelbahn learned that his staff had already agreed to use the Berkeley telescopes to look for the dangerous object. Marian Kilmer had agreed to check Iglehart's calculations. It sounded to Karl as if Rippon had simply hijacked his entire research team to investigate Iglehart's cock-and-bull story.

"This is a matter of national security," the officer said, looking straight into Karl's face. "Colonel Rippon wants you to return to California immediately to head up the investigation. We have a military jet waiting for you, scheduled to leave in one hour. Colonel Rippon realizes that you and Edmund Iglehart are rivals. He expects that both of you will put your differences aside. If you refuse to return to Berkeley immediately, you will be replaced as director, and we will proceed without you."

Karl pondered this ultimatum. In the semi-darkness, his conscience gradually got the better of him. Despite his antagonism toward Iglehart, he decided to return to Berkeley to supervise the search.

An hour later, he boarded a military jet at the air force base near Frankfurt. Dawn was breaking on the eastern horizon.

Chapter 15. Unseen Danger

Jeffrey woke up early the next morning. Sunlight was streaming into the bedroom. The McIntosh house was quiet. He jumped out of bed and tiptoed to the window. He was surprised to see a man in the backyard.

"Alex, wake up," he called quietly. "There's a guy prowling around in your backyard."

Alex yawned, stretched, and slid out of bed. He tottered sleepily over to the window.

"Wait a minute," said Alex in surprise. "I know him. That's Tim, the policeman. He's one of the guys that was here the day after the Sassaphron Messenger landed. Remember? We took him coffee, and he let us go past the ropes? He's a cool dude. He also came when I had my bike accident."

"I remember him now," said Jeffrey. "I didn't recognize him in street clothes."

"I wonder why he's here now. Come on, let's see what's up," said Alex. They pulled on their clothes and ran downstairs.

"Hey, Red, what's up?" called the friendly policeman as the two boys tumbled out the back door. "Hope you're feeling better after that Evel Knievel bicycle stunt the other day."

"Hi Tim," called Alex. "I'm feeling fine, thanks. I haven't done any biking since the accident. But what are you doing here?"

"Guarding you guys," the man said.

"Guarding us from what?" asked the boys in unison.

Tim shook his head. "Nope, you've got it backwards. Not guarding *you* from something. Guarding the *rest of the world* from you."

The boys were confused. "What do you mean, Tim?" asked Alex.

"I've got orders to keep you here. Can't let you go anyplace or talk to anybody. My partner's out front." He pointed through the house.

"What's this all about?" asked Alex in amazement.

"Beats me," said Tim. "They just said to make sure you stay here, and to be nice to you."

"What about me?" asked Jeffrey. "Am I under arrest too?"

"Yep, if that's what you want to call it."

"Do my parents know about this?" asked Alex.

"They will soon," said Tim, pointing to a car pulling up. "That's the FBI."

The boys recognized Susan's car. They ran to meet her. After a few steps, Alex paused and turned back. "Tim, can I get you a cup of coffee?"

The policeman smiled, "Sure, that would be mighty fine, Red. Thanks. But I'm not going to let you get past me this time, okay?"

Alex promised to be back soon. First, he had to talk to Susan.

At Susan's request, Alex roused the grownups. Everyone gathered in the living room to hear what she had to say. Gordon, Wendy and Professor Tom were still in pajamas. Alex noticed that Professor Tom was slightly embarrassed when he caught sight of Susan. Gordon clicked on the coffee maker. It spluttered and filled the air with an almond aroma.

Susan told about her phone conversation with Colonel Rippon. After hearing about the danger, Rippon had contacted important government people. They had decided that the threat must be kept secret. A leak to the public could easily cause mass panic. Rippon's boss, the chief of the National Security Agency, called the President at the White House, waking him up before dawn on Saturday morning.

After learning about the situation, the President signed an executive order placing everyone knowledgeable about the affair in protective custody.

"I'm sorry," said Susan. "I tried to convince Colonel Rippon that you folks are entirely trustworthy, but they don't want to take any chances. That's why your phone has been disconnected and why you won't be permitted to leave your property. I will check on you frequently. The police guards will be in radio contact with headquarters if you need anything."

"Does it mean I can't go home?" asked Jeffrey in suspense. He wasn't sure what answer he was hoping for.

"Jeffrey, your family is under the same type of protective custody. I can take you home whenever you want. And you can come back here later if you want."

Jeffrey decided to stay with Alex, except for daily visits to see his family.

"We're under arrest," said Alex, "but the prison is a lot nicer than Leavenworth or even Rochester."

This silver lining didn't wash with Wendy. She was upset. "I have appointments, and patients to see at the hospital. I can't just drop out of sight and leave them hanging. And what about groceries? We don't have much food in the house.

Susan promised to take them on grocery errands every day.

She helped Gordon and Wendy concoct a story to cover their absences from work; they had been called out of town unexpectedly to be with a dying family member. She came up with another story to satisfy the curiosity of the neighbors; police protection around the McIntosh home was necessary because of anonymous threats against the family.

A cellular phone rang in Susan's purse. She stepped into the next room to take the call. Gordon poured coffee for the adults. Susan reappeared. She handed the phone to Alex.

"Who is it?" he whispered.

"It's my big boss. She wants to talk to you."

It was the Attorney General of the United States. She had been briefed on the key roles played by Alex and Jeffrey in bringing the Sassaphron warning to light. She thanked them. She apologized for the inconvenience of the protective custody. Alex said he didn't mind. (If truth be told, he was enjoying the special attention.) The Attorney General spoke to Jeffrey. Then she explained the government's position to Gordon and Wendy.

While the phone was being passed from hand to hand, Alex suddenly remembered Tim. He filled a mug with coffee. He put the mug and a granola bar on a serving tray. Just like a year earlier, he carried breakfast out to the guard.

Tim took a whiff of the coffee. "Red, what'd you lace this with? You're not trying to put me to sleep, are you?" The man was teasing.

"My Dad said it was amaretto flavored, or something."

Tim took a second whiff, more appreciative this time. "I guess I can handle it," he said. "Thanks kid. When you're done with the FBI, come on out and we'll play some catch."

"Okay," said Alex.

He ran back into the house. Susan had settled down in Gordon's study. She was busy talking on her cellular phone.

The boys went up to Alex's room and switched on the computer. Not knowing what to do, they glanced through some of the digital images of the Sassaphron patterns.

"Alex, those patterns hold the key to our survival," said Jeffrey in a dramatic tone.

Alex realized it might be true. Instead of responding to Jeffrey, he loaded his communications software.

"Look, Jeffrey," he said. "My modem is still connected. They must have forgotten to cut my private telephone line."

"You're right," said Jeffrey. He rubbed his hands together gleefully. "Just think, Alex, we can bust out of this jail electronically whenever we want. If we feel like it, we can send a message telling everything we know to the whole world!" He stretched his arms over his head in a gesture of power.

"Boys," came a voice from the door. "Don't let me down." It was Susan.

They were ashamed and embarrassed. They looked at her, not knowing what to say. Susan knew about Alex's phone line. She had deliberately kept quiet about it. Somehow, these kids used the computer and network to think. They had come up with some of the most critical clues in the case. How or what they did, she wasn't sure. Whatever it was, this was not the time to stop.

After a long pause, Alex said. "Susan, you can trust us. I promise. You won't cut off my phone line will you?"

She eyed one boy and then the other. "No," she said at last. "But keep it quiet. And I forbid you to tell anyone outside this house what you know. That's an order on the authority of the President. Okay guys?"

They nodded. She headed back downstairs.

The boys turned off the computer and went outside to play catch with Tim.

There was very little news for a couple of days. Susan reported that Kugelbahn had returned from Germany. He was supervising a telescope search of the sky for the asteroid or comet. Astronomers in California, Hawaii and Chile were taking part. Iglehart's calculations indicated that the object would approach the Earth from the southern sky, so the Chilean astronomers had the best angle of view. A team of nuclear scientists at Los Alamos Laboratory were studying the possibility of smashing an object in space with nuclear weapons.

Meanwhile, Gordon and Wendy prepared for evacuation. They got all their papers in order. They made lists of items to take and items to leave behind. But where would they go? Gordon's brother David lived in Thunder Bay, Canada, on the northern shore of Lake Superior. The McIntosh family's evacuation plan involved travelling to Thunder Bay.

Professor Tom's evacuation plan was simple; it amounted to zipping his suitcase and leaving town.

Professor Tom kept busy writing and studying. He spent many hours in the garage, filling notebooks with details of the engraved script on the Sassaphron Messenger. When he needed a break, he thumbed through a few pages of a dissertation he'd brought with him. Alex noticed that he scribbled many notes in the margin. While he worked, Professor Tom listened to cassettes. He loved Middle Eastern music. Alex listened and grew fond of it. To his ear, the music was mournful, mysterious and timeless. Professor Tom introduced Alex to belly dancing music. Alex enjoyed its sensual, rhythmic complexity, especially the ching, ching, ching of the finger cymbals.

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Susan brought the stunning news on Tuesday morning, three days into the vigil. After three nights of nonstop searching with powerful telescopes at three observatories around the world, no dangerous object had been sighted. Given the predicted size and proximity to Earth, there was no doubt that it should be visible through the telescopes.

Susan reported that the President had reduced the level of military alert from red to yellow. The telescope search would continue for two more nights. If nothing turned up, the emergency would be canceled and the period of protective custody would end.

Alex was surprised by the reaction to this news. Why was everyone so glum? Shouldn't they be jumping for joy? Didn't this mean that the impending danger had vanished, had never really existed?

"Maybe the Sassaphrons got it all wrong," said Jeffrey, doubtfully.

"But what if Iglehart and Kugelbahn have it wrong instead?" asked Alex. "What if the Sassaphron Messenger is right and we've just screwed up the message?"

Professor Tom had another idea. "It probably took the Messenger many years to reach us from its home planet. Perhaps in the intervening time, the orbit of the 'dark clustering force' changed. Maybe it hit something else or changed course for some reason."

Everyone liked this idea. Professor Tom was such a wise man.

Alex and Jeffrey went upstairs to discuss the latest events. They remained dissatisfied.

"Susan's still worried. I could tell," said Jeffrey. "There's got to be something out there, and its coming right at us. Why can't they see it? Maybe Kugelbahn isn't trying hard enough."

Alex was net surfing on the computer, only half listening to Jeffrey. "Yes!" he suddenly exclaimed triumphantly. Jeffrey looked. Alex's hand dragged the mouse and clicked. There was a long sequence of automatic network transfers.

"Alex, have you found Michelle again?" Jeffrey asked excitedly.

"I think so," said Alex, waiting for the connect signal. At last it came. Quickly, he stepped through the familiar log-in protocol.

This time, he paused, to see if she would recognize him before he typed a greeting.

Soon, her words began painting across the screen. "For goodness sakes! It can't be Alex, is it? After all these years? Is it really you, Alex?"

"Michelle, yes, of course it's me. Jeffrey's here too. I'm glad we've reached you. You always seem to be there when we need your help."

"You're such a dear, Alex."

Jeffrey hooted at this. Michelle went on: "It's so amazing to hear from you out of the blue after so long. How many years has it been? At least 20?"

Alex was surprised but accepted that their mysterious communication channel had played another time trick on him. "Michelle, when we talked last, you were almost graduating, and getting ready to go to college in the space colony. Was that a long time ago for you, and where are you now?"

"Yes, I did go to college in Space Colony 3. Then I came back to Minnephron. I've lived here ever since. I tried to connect with you from SC 3 and also when I got back here. Long ago, I gave up, but I always hoped you would somehow find me.

"After I graduated from college, I worked for an engineering company that builds guidance computers for interplanetary vehicles. But guess what? I'm now in training to join a colony expedition to Mars. We'll be heading there in about a year. It'll be the first permanent human colony on Mars. Isn't it exciting?

Alex, did you go to college and get married? What are you doing now? I'm dying to know what role you ended up playing with the Sassaphron Messenger?"

Jeffrey was hanging over Alex's shoulder. "She must be nuts," he said.

Alex shook him off angrily. "Let me handle this," he said.

"Michelle, it's only about two weeks in my time since I talked to you last. I haven't been to college yet, but I hope to go--if the Sassaphron disaster doesn't swallow me first. Will you be the first people ever to travel to Mars? Please help me with the Sassaphron mystery. We have a problem. Professor Iglehart, the convict, has decoded the part of the message that shows the orbit of a dangerous object in space on collision course with the Earth. But the scientists can't see it through their telescopes. They've been looking for several nights and they don't see anything. They're getting ready to give up. Why can't they see it? Did the Sassaphrons make a mistake?"

"Don't be silly," came Michelle's reply. "The Sassaphron Messenger made no mistake. Why should you expect to see something? Nobody can see beyond the event horizon. As for Mars, lots of explorers have been there since the 21st century, but ours will be the first permanent settlement. It's really exciting. It's like the pilgrims ..."

The communication halted. The dreaded CONNECTION CLOSED message appeared. Frustrated, Alex tried to reconnect, but could not re-establish the link.

"That's the explanation, Alex! We have to get in touch with Susan instantly." Jeffrey was burning with urgency. He grabbed Alex's arm and began pulling. Alex tipped off his chair and fell heavily on the floor.

"Jeffrey, you dork!" he yelled, picking himself up. "Don't grab me like that. I'll bust you one in the nose the next time you do that. Now, what explanation are you talking about?"

"That's why nobody can see the object coming. It's a black hole!"

"A black hole? Jeffrey, you must have a screw loose."

Jeffrey ignored this slur and went on. "You can't see it because it swallows the light. That's why Michelle said you couldn't see beyond the event horizon. And that must be why the Sassaphron Messenger said it was 'dark'. Alex, come on! We've got to tell Susan."

Alex had to admit that Jeffrey knew more about fanciful things, such as black holes, than he did. They ran downstairs. Susan was not around, but they found Tim on patrol outside.

"Tim, will you please call Susan on your police radio?" asked Alex. "We have something urgent to tell her."

"Anything you say, Red," answered Tim obligingly.

A few minutes later, Susan had a new theory to present to Edmund Iglehart--the "black hole" theory. Where did these kids get their ideas?

The failure of the astronomers to see anything had left Susan with nagging doubts. Now the kids had a way of explaining the failure. But what could a black hole do? How dangerous was it?

Without delay, she dialed the prison in Rochester. At first, Iglehart was skeptical about the black hole theory. He told Susan that black holes were the burnout remnants of massive stars that had used up their nuclear fuel and had collapsed under their own gravitational force. Though the object hurtling toward them was large enough to inflict enormous damage, his calculations indicated that it was nowhere near the mass of one of these stellar cinders.

"Just a minute, now," he said over the phone. There was a long pause. "Have you heard of Stephen Hawking, the famous theoretical physicist?"

Susan had heard of him. She knew his story. He had succeeded as a genius in his field, despite severe disability from Lou Gehrig's disease. "Yes, I've heard of him, but what's he got to do with black holes?"

"Well," Iglehart went on. "He has a theory that black holes can be small. Big black holes can radiate away some of their mass as energy and can get smaller. If he's right, the thing coming at us could be a midget black hole. If so, there is only one way to detect it. We must look for its gravitational effects on nearby bodies in space. I will work on that problem right away. I'll figure out whether there would be a noticeable effect on the Moon's motion around the Earth."

"What if it is a black hole? How dangerous is it?" asked Susan.

Iglehart wasn't sure. He remembered that some scientists thought that a black hole had caused the devastating explosion in Siberia in 1908. "No one ever proved it was due to a black hole, but they've never proven anything else either."

Alex and Jeffrey didn't hear back from Susan that day.

The days were slipping by on the calendar. Everyone in the house was on edge. What if the calculations were a little off and the doomsday object arrived even sooner than expected? When would the reality of the danger be decided once and for all?

Wendy and Gordon grumbled while they packed for the evacuation. How long would they be confined?

"Why don't we evacuate immediately?" demanded Wendy. "We're not getting anything done sitting around the house, waiting for lightning to strike. If something's coming, let's get out now."

Gordon was less worried. When the word came that the astronomers couldn't see a threatening object, he was ready to declare a false alarm and return to everyday activities.

Professor Tom had faith in the Sassaphron Messenger. He had to believe in an intelligent being that had reached Earth 2600 years before, had figured out human language and writing, and had watched over the interests of humankind for centuries. The wisdom of such a being must exceed the skills and instruments of human scientists. The threat was surely there. But perhaps some unforeseen agent had diverted the menacing object away from the Earth.

Susan visited Iglehart in Rochester early Wednesday morning. Working all night, he had estimated that a black hole of the right mass was possible. The strange thing about black holes was their enormous density, all the mass crunched into a tiny volume. If the thing out there was really a black hole having the mass of a 10-mile diameter asteroid, it would be no larger than a pea and probably much smaller. Despite its tiny size, its enormous energy could produce a giant shock wave when it encountered the Earth's atmosphere.

Iglehart had also figured out that a body of this mass at its current distance would produce a tiny but measurable effect on the orbit of the moon around the Earth. His computer wasn't powerful enough to give a detailed prediction, but he was sure it could be done. He needed additional data on the moon's orbit, and some mathematical help from Marian Kilmer. Immediately, Susan called Colonel Rippon in Washington. Rippon in turn called Kugelbahn. On the authority of the President, Rippon ordered Kugelbahn to furnish Iglehart with the data and computer power to do a precise calculation. Kugelbahn complained bitterly but knew he had no choice. The black hole theory seemed wacky to him, but he would have to submit to the president's orders.

Susan received authorization from the Attorney General to take Iglehart to the SETI lab in Berkeley, California.

Alex received a call from Susan just before she and Iglehart boarded a plane for San Francisco. She updated Alex and promised to call again the next day from California.

After dark that evening, the two boys and Professor Tom stood outside on the dewy grass looking up into the clear sky. The moon was bright, just a little past its full phase.

"Nothing unusual about the moon tonight," said Alex. Everyone had in mind Iglehart's test of the black hole theory.

"You'd never be able to see the effect," scoffed Jeffrey.

"I know, you dummy," said Alex irritably. Then he looked up at his older friend, standing in the shadows beside him. "Professor Tom, is it possible to see Mars with the naked eye?"

"Yes," Tom said, "but I'm not sure if it's visible tonight, or where to look. It's pretty faint. It looks red. Why do you ask?"

"I'm just wondering if people will ever go to Mars. Do you think they'll go there and set up colonies?"

"I expect so," said Tom. "If we survive long enough on Earth."

"How soon do you think that will be? How long until people settle on Mars?"

"I really have no idea," said Tom. "It took a long time for the Europeans to settle North America to any degree after Columbus discovered it; much longer if you count the Viking explorers. I'd guess humans will set foot on Mars within 50 years, but it'll take a lot longer before there's a settlement there. None of us will be among the colonists, I daresay."

"I bet you're wrong," said Jeffrey. "I bet that we'll at least know one of the colonists."

Tom didn't understand what Jeffrey was driving at. "It's possible," he said. "Technology could advance quickly. Your children or your children's children might settle there. Especially if there is a threat to life on Earth."

"A threat like the one we're facing now?" asked Alex.

"I hope we'll be able to survive this one," said Tom. "We can run and hide in caves, like the Messenger told us, but we can't flee our mother planet just yet."

Silently, the three of them stood together, arm in arm, their faces uplifted to the night sky.

Chapter 16. Confrontation or Cooperation

Susan Brindley and Edmund Iglehart took an evening flight from Minneapolis, landing in San Francisco at about 11 o'clock at night. An FBI agent from the San Francisco office, named Phil, came aboard the plane. Phil was a broad-shouldered, muscular fellow with bulging biceps. He greeted them warmly and shook hands with both of them. After conferring briefly with Susan, Phil turned to Iglehart.

"There's somebody here I think you'd like to see."

Susan and Ed followed Phil off the plane into the gate area. There, waiting for them, was Ruth. Ed was overjoyed and bewildered. He couldn't believe his eyes. He stopped for a moment. Then, hastily and awkwardly, he stepped over the velvet rope that divided the walkway from the waiting area and strode toward Ruth. Looking back, he smiled gratefully at Susan. He took Ruth in his arms and hugged her.

Susan couldn't remember seeing either one of them express emotional tenderness before. The months in prison had left them a little less prickly and a little more fragile.

Ruth had come on an earlier flight from the east, escorted by an FBI agent named Melissa. Colonel Rippon had agreed with Susan that Ruth's computer skills might prove critical. Iglehart's morale would certainly be boosted by her presence.

The three FBI agents and two convicted scientists collected the baggage and headed for the parking garage. Ruth and Ed had not seen each other since the end of the trial. They exchanged a few words on their experiences in prison. Ruth had been held at a minimum security women's prison, a far cry from the Big House at Leavenworth. Ed did not want to talk about his ghastly experience. Within a few minutes of their reunion, they dropped the subject of prison life and turned to the scientific challenge at hand. Walking arm-inarm to the car, Ed briefed Ruth on the current state of affairs regarding the Sassaphron Messenger.

Melissa took the wheel of the car. Susan sat beside her. Phil sat in the back with Ed and Ruth.

"I suppose you're both pretty tired," said Phil. "How about a little sleep, and then we'll take you to Dr. Kugelbahn's lab first thing in the morning? We have reservations for you in Berkeley, near the lab."

"No," said Ed firmly. "Let's go straight to Kugelbahn's lab. This is an emergency situation. There's no time to lose. We can get some sleep once the computers are crunching on the orbital calculations. Don't you agree, Ruth?"

Ruth agreed.

This was what Susan wanted to hear. Off they went. Traffic was light. Melissa didn't pay much attention to the speed limit. They sailed up highway 101, and then crossed the Bay Bridge between San Francisco and Oakland. The cool night air whistled through the windows, open just a crack. Ed began shivering. He had forgotten that San Francisco is cold, even in midsummer. His windbreaker was too lightweight. He looked out on the watery blackness of San Francisco Bay. He could see a couple of lights far away on the water. Could that be Alcatraz? He shivered again. He had heard the famous story of the Alcatraz inmates who had escaped and tried to swim to freedom in the dangerous waters. They had never been heard of again, but nobody knew for sure whether they had lived or died.

About half an hour after midnight, they arrived in Berkeley. The car slowed down and groaned its way up the steep hill from Strawberry Canyon. A few minutes later, they reached the SETI Lab. It was east of the university campus, perched high in the Berkeley hills. The night was clear. Stars were visible overhead. The lights of San Francisco were visible to the west. Golden Gate Bridge could be seen snaking its way north from the city.

Susan had gambled in bringing Iglehart and Kugelbahn together. She had goaded both of them into action by pitting them against one another. Now they had to cooperate. If there was confrontation the whole investigation could fall apart.

The car stopped in a small open area in front of a wood-frame building that housed the laboratory. Next to the lab was a grove of eucalyptus trees. Susan smelled the leaves when she got out of the car.

Karl Kugelbahn came out to meet them. Susan couldn't see his face in the shadows. He was polite and businesslike. "Hello Agent Brindley. I'm glad you and your friends have arrived safely. I hope you had a good flight from Minnesota."

Ed and Ruth got out of the back seat on the far side of the car. Kugelbahn turned to them and made an awkward little speech. "Dr. Iglehart and Dr. Geiger. Welcome to Berkeley, and to my laboratory. I had not expected to see you here after our last meeting in court. I hope you will find the facilities here more hospitable than those you have left behind. Since the president has sent you here without consulting me, I am prepared to work with you." He did not wait for a reply or offer to shake hands. "Please follow me." He turned on his heel and headed for the door.

Susan's heart sank. This was not a good beginning.

"Wait!" said Iglehart in a distressed tone.

Susan was tense. This would be the decisive moment. Would it be confrontation or cooperation?

Kugelbahn stopped and turned to face his adversary.

Even in the shadows, Susan could see that Iglehart was nervous. His facial tic was pulsating rapidly. "Karl," he said in a quiet voice. "Please listen to me before we go inside. I first learned about the SETI signals from you at the Pentagon. That seems like such a long time ago now. We couldn't agree then on working together. I was stubborn and hostile. I went home. Ruth and I chose our own course of action. We made some terrible mistakes. Both of us have paid dearly for those mistakes and will continue to pay for the rest of our lives. We have both suffered. I have had a lot of time to think about my actions. I am sorry for the way I acted toward you. There may still be a chance to make amends. The last chapter has not yet been written in the Sassaphron affair. We may all be facing a disaster of unprecedented proportions. Thousands, even millions, of lives may be at stake. We must work together. Ruth and I are here to work with you and your staff. There is no time to lose. For a short time at least, let's bury our differences and cooperate as colleagues. Please!"

Susan was amazed. She had never imagined that Ed could be apologetic or even conciliatory. (It crossed her mind that Ed's attitude might have a self-serving motive; the lab at Berkeley was certainly a nicer place to be than Leavenworth or even Rochester.)

Kugelbahn was also surprised. Susan waited anxiously for his response. Finally, he spoke.

"Dr. Iglehart, I am glad to hear you say that. The time has come to put our differences aside in the interests of science and the nation. I agree with you that it is time for us to cooperate as colleagues." He stepped forward. The two men shook hands. Ruth stepped forward from the shadows and shook hands too. Then they all followed Karl into the laboratory. Phil carried Iglehart's bulging briefcase.

The SETI Lab's radio telescopes were located some distance away in open fields. Signals received by the telescopes were transmitted by cable to the lab for analysis. The lab was a command center. It contained small offices for the scientists, space for the supercomputers, a photographic room, a machine shop, and conference rooms. In the main computer room, one wall was covered with a bank of video monitors. All of

monitors showed flickering green traces, representing the meaningless radio static from space. The computers analyzed these signals in search of signs of intelligence.

Karl struggled to contain his resentment at having Iglehart in his lab. Ever since the SETI signals had stopped, Karl and his staff had worked feverishly to restore contact. They had failed. Now, Edmund Iglehart was spreading out photos and computer sketches on a conference table in his lab. Could it be true that the SETI signals had entered his lab once again, not as squiggly traces from the radio telescopes, but as materials in the briefcase of a prison convict? Karl glanced at the photos. The patterns reminded him of the markings on the strange, conical Sassaphron object that he had declared to be a hoax.

The SETI scientists gathered around the conference table where Ed and Ruth were arranging notebooks, computer drawings and dozens of photos. The photos were still in the albums prepared by Alex and Jeffrey. Soon, the ice was broken, and the scientists were deep in conversation.

Everyone was familiar with the general issues. Ed reviewed how he had used Marian Kilmer's method to interpret the geometrical patterns on the Sassaphron Messenger. He showed his calculation of the path of the menacing object. Marian Kilmer confirmed that Iglehart's calculations were consistent with the method she'd used in interpreting the original radio signals. Karl described the unsuccessful telescope search for an asteroid or comet.

Finally, Iglehart presented the black-hole scenario. A black hole would not be visible in a telescope. Light energy could not escape the dense body's enormous gravitational force. The easiest way to verify its presence would be to detect its gravitational pull. Ed showed that the black hole should produce a gravitational wobble in the motion of the moon around the Earth.

The group decided on a two-step strategy. First, they would run a precise gravitational simulation on a super-computer. The program would generate a prediction of the tiny wobble in the moon's motion. The calculation would take several hours of computing time. Ruth suggested some clever shortcuts. The second step would be to use a telescope to look for the predicted wobble in the moon's motion. Karl would arrange for use of the Hubble Space Telescope in orbit around the Earth. The Hubble would yield the highest accuracy and would not have to contend with cloudy skies.

Three hours later, the software was ready for number crunching. There was no more that Ed and Ruth could do until the simulation was complete. They were exhausted.

At about 4 a.m., the three FBI agents escorted Ed and Ruth into the Claremont Hotel in Berkeley. It was a stylish place, close to the SETI lab. The night clerk was expecting

them. Because Ed and Ruth were still in Federal custody, Susan accompanied them to their room. The bellman brought a chair for her, and she stationed herself in the hallway.

Ed and Ruth entered the plush hotel room. They were startled by the elegant draperies and furniture. They had forgotten what luxury was like. Both noticed the king-size bed and colorful quilt. "Not a bad cell for a conjugal visit," said Ruth.

* * * * * *

It was just past noon on Thursday when Alex next heard from Susan. He took the call on Tim's cellular phone. She was calling from Berkeley and sounded very tired. Apparently, she'd been up all night.

Susan reported that the computer simulation was complete. Sure enough, Iglehart was right. It would be possible to detect a gravitational wobble in the moon's orbit if there really was a black hole coming. According to Iglehart's estimate, the black hole would reach the Earth in eleven days. Its gravitational effects would grow stronger by the day. The initial effects should already be detectable, given a few hours' observation of the moon's motion. The astronomers should have a definitive answer within 24 hours. Until then, Alex's family (Jeffrey's too) would remain in protective custody.

As they had done many times before, the boys lay awake Thursday night talking about the events in the Sassaphron adventure. After a while, the conversation lapsed. Jeffrey thought Alex was asleep.

"We'll soon know if she's for real," said Alex.

"Who?" asked Jeffrey.

"Michelle, of course" said Alex. "We now know there's no comet or asteroid coming at us. If there's no black hole either, then there's no Michelle."

"How can you say that? How can you not believe in Michelle?" asked Jeffrey in surprise. "After all the times we've talked to her? Didn't she tell us about the 'catacombs,' and the 'convict' and all the other clues?"

"It's still possible that somebody's tricking us. Maybe those clues were lucky guesses, or just us wanting to believe."

"Don't you want Michelle to be real?" asked Jeffrey. "Why are you always doubting her?"

"I don't know," said Alex. "I want her to be real because she's our friend. I don't want to find out that our friend is a hoax."

"She's no hoax," scoffed Jeffrey. "What's so big about communicating with someone in the future anyway? Before Marconi or Alexander Graham Bell, people didn't believe you could talk across the country or across the ocean by speaking into a microphone. Communicating over time isn't that much different."

Alex wasn't convinced. In a way, Michelle was like a mysterious guardian angel. He wanted to feel close to her, but the separation between them lay outside his understanding.

Do I want the black hole to be real or not, he wondered. I want Michelle to be real, but then the black hole is real too and we're in danger. If there is no black hole, then Michelle is probably a fake, and I will have lost a friend. Alex lay awake pondering this strange dilemma. Pericles jumped on the bed beside him and began purring. Soon, the boy and his cat were asleep.

* * * * *

Alex was the first to hear the pebbles rattle off the window pane. It was still dark, 3:15 a.m. according to his glowing wrist watch. Another barrage hit the window. Then he saw a flashlight crisscross his ceiling. Somebody was on the ground below his window, trying to get his attention.

"What is it?" whispered Jeffrey who was now awake too.

"I don't know," whispered Alex. He crept to the window and cautiously peered out. The window was open. He heard a low voice calling. "Red, wake up!"

"It's Tim," said Alex to Jeffrey. "Tim, what do you want?" he called softly.

"Red, come on downstairs double quick and take a call from Agent Brindley. It's urgent. She wants to talk to you first, and then your parents. Don't waste time getting dressed. Come as you are. I hope you're decent."

"I'll come too," whispered Jeffrey.

The boys scrambled downstairs in the darkness, through the kitchen and out the back door. The yard light was on. Tim was there, holding the flip phone out to Alex. "Red, she's on the line waiting."

Alex took the phone. "Hi Susan. It's me, Alex."

"Hi Alex. The black hole is for real. They've detected the wobble in the moon's orbit. The scientists all agree that the danger is real."

Alex experienced a rush of two strong emotions, vindication and fear. He whispered to Jeffrey, "The black hole is for real and Michelle lives!"

Susan was still talking. "They found the wobble quicker and more easily than expected. The wobble is much bigger than expected. That means there's a big problem! The black hole is a lot closer than we thought. The path Iglehart charted is correct, but his timing is wrong. Nobody knows where the mistake was made. Maybe the Sassaphrons were off a bit. According to the latest computer projections, the black hole will strike the Earth in about 45 hours, just past midnight, Sunday morning, Minnesota time. Alex, we're in a crisis situation. You and your family and Professor Tom have to get out!"

Alex began to panic. What could he do? What could anyone do? "Can't they blast it out of the sky with atomic bombs?" he asked. His voice was quivering.

"No," said Susan. "It's too late to launch rockets to destroy it. According to the comet busters at Los Alamos labs, atom bombs wouldn't work against a black hole anyway. It's too concentrated, too dense. In fact, according to Dr. Iglehart, it will probably go right through the Earth like a bullet through butter, and come out again in the Arctic Ocean, north of Russia. They're going to alert the cosmonauts on the Russian space station to watch for an explosion over the Arctic ocean."

"Where is it going to hit the Earth?" asked Alex.

"It's going to hit just south of the Twin Cities area. All of you must evacuate to save your lives. No one knows for sure how much damage the shock wave will do. There will be tremendous damage for miles and miles around the impact site. No one can tell what the long-term consequences will be for the entire world."

"Susan, what about everyone who lives here? What will happen to them?"

"Alex, thanks to you and Jeffrey and Tom, we have some warning. A plan is already going into effect to evacuate the Twin Cities, beginning at dawn. We will evacuate everyone within 100 miles of the impact point. That will include the entire Twin Cities and many other smaller communities. If you turn on your radio, you'll hear news reports of major military movements in your area. The National Guard and other military units have already gone into action." Susan paused. "Alex, are you still there?"

"Yes," said Alex. Everything was so peaceful and quiet. He could hear the crickets chirping. It seemed impossible that disaster was about to strike.

"The President has ordered that your family, Jeffrey's family and Professor Tom be escorted out of the city before the public evacuation begins. One of my FBI coworkers is alerting Jeffrey's family right now. You and your family must get ready to leave in 20 minutes. I'm glad you've already prepared for your departure. Now I've got to talk to your parents." Alex caught sight of several vehicles pulling up on the street in front of the house.

At this moment, Gordon and Wendy appeared in their pajamas. They'd been awakened by Tim. Alex handed the phone to Gordon. The boys ran into the house.

"Professor Tom," Alex shouted, bursting into his room. "It's time to evacuate. It's an emergency. We're leaving in less than 20 minutes."

Tom was out of bed quickly, jamming his few possessions into his travel bag. He had half expected that the evacuation order would come with little notice.

"Jeffrey, you get the computer ready. I have to find Pericles," said Alex. He ran through the house, checking the cat's favorite places.

"Alex," shouted Jeffrey from the bed room. "Pericles is on your pillow."

Alex ran upstairs and put the cat in a wicker basket. After dressing quickly, he loaded Pericles into the car. Then, the boys carried the computer downstairs and stowed it in its preassigned spot in the station wagon. Wendy had worked out a detailed plan; most items were already in the car.

Prior to leaving, Gordon and Wendy ran through the house, check lists in hand. They closed all the windows, turned off the water, gas and electricity, and locked the doors.

It was time to leave. Everyone began piling into the car: everyone, that is, except Professor Tom. Alex could see him at the end of the driveway looking up and down the street in a state of agitation.

"Tom," called Gordon sharply, "it's time to get in the car. We've got to leave!"

"Where's the truck to take the Messenger?" shouted Tom.

The FBI was supposed to move the Sassaphron Messenger as part of the evacuation plan. Gordon jumped out of the car. He asked Tim about the truck. The evacuation order had come suddenly. Nobody had made arrangements for a truck.

"I'll stay behind and try to save the Messenger," said Tom.

"You *can't* stay" said Gordon. "You've got to come with us. It's not safe to stay. We'll have to leave the Messenger here." By now, everyone was out of the car, gathered around Professor Tom.

"I can't leave the Messenger," said Tom. "I must try to save it. It's one of the most precious gifts of all time. It's my duty as an archaeologist to try to save it. I'll find someone in the neighborhood with a truck, or get help from the police."

They pleaded and argued, but Tom would not budge.

They were already late. The rest of them would have to leave without Tom. Wendy gave him the keys to get back into the house. With a terrible sinking feeling, Alex headed for the car.

"Alex," said Tom, catching up. "Please give this to Susan." He handed Alex something in the dark. It was the lucky charm from ancient Sassaphron, still on the gold chain.

"Professor Tom, you'll need this," protested Alex. "You'll need all the luck you can get."

"I'd rather Susan have it," said Tom. "Please take good care of it Alex. Now get in the car. I've already delayed you too much."

At 4:02 a.m., the Ford Taurus backed out of the driveway. The car contained two adults, two kids, one cat, one computer, important family papers, food and water, medical supplies, and a few small suitcases. One police car nudged ahead of them and another behind. Tim was at the wheel of the lead vehicle.

Their headlights swept across the darkened house when the car turned onto the street. Alex saw Professor Tom on the front steps waving goodbye. He also saw the curtains drawn across the garage windows. The Sassaphron Messenger waited silently inside. Alex remembered its tribute to the wonders of life on Earth. He also remembered its shrill warning, "...*run far away or hide in deep caves*." At last, the time had come to heed the warning. They would run, leaving the Messenger and their friend behind. There was a lump in Alex's throat. "Please, please save them both!" he said silently.

The little caravan set off down the street.

Chapter 17. Run Far Away or Hide in Deep Caves

Dawn was breaking when the little caravan reached the freeway entrance. It was clear that the evacuation was beginning. A national guard truck blocked their access to the interstate. Tim jumped out of the front car. After he exchanged a few words with the national guardsman, the little group was waved on. A moment or two later, they were on I-35 heading north.

Alex saw military vehicles controlling every entrance and exit ramp. The traffic was heavy and growing by the moment.

Wendy switched on the car radio. The announcer was describing procedures for the evacuation of a large area of Minnesota and a part of Wisconsin. The area included the entire Twin Cities metropolitan region. The announcer kept referring ominously to "ground zero," located just south of the Twin Cities. Everyone within a radius of one-hundred miles of ground zero should evacuate. Those in a ring from one-hundred to two-hundred miles, including Duluth and several other cities, should evacuate if possible, or seek cover in tornado shelters.

All entrances and exits to interstate highways leaving the danger zone would be monitored by the authorities. Vehicles would be allowed on the interstates only if they were roadworthy. Vehicles must not be overloaded; passengers and their belongings should be secured safely. No trailers would be permitted. Once given access to the interstate, vehicles would not be allowed to exit until they cleared the danger zone. Buses and military trucks would be used to transport people who could not evacuate by car. Police and fire department vehicles had begun circulating through the neighborhoods, announcing the evacuation over loud speakers. Schools, churches and major intersections were designated as collection points for evacuees. People were encouraged to help disabled or elderly neighbors. Phones were to be used only for planning the evacuation. The Twin Cities region was divided into several zones. People living in those zones were instructed to depart by specified routes to the north, east, south and west.

The orange sun was shining brightly above the eastern horizon by the time the little caravan reached the northern suburbs. Alex could see lines of cars forming at every entrance ramp.

The radio announcer described why the evacuation was necessary and why it must be done quickly. Astronomers had discovered a large and dangerous astronomical body on a collision course with the Earth. The collision was likely to do tremendous damage in the immediate region of the impact, and possibly in a much wider area.

A network news bulletin followed. "Details are sketchy concerning the exact nature of the astronomical body," a national reporter said. "The president will soon address the nation and will clarify the nature of the threat. Informed sources have told CBS News that the danger is of natural origins, and not a military threat or alien invasion. Our sources indicate that it is not an asteroid or comet but poses a danger similar to that of a major asteroid impact. A scientist affiliated with the SETI project at Berkeley has told CBS News that the impact will occur early Sunday morning, just after midnight. It will come from nearly due south, at a sky elevation of about 30 degrees above the horizon. The object will be traveling at a very high speed, about 20 miles per second, nearly 100 times the speed of sound. An unconfirmed report indicates that the astronomical body is a black hole, a super-dense, invisible object, capable of producing a devastating shock wave as it passes through the atmosphere. Although the explosive energy is expected to be equivalent to a nuclear blast, scientists say that there will be no radioactive fallout."

The traffic on the interstate became heavy. Eventually, they came to a complete halt. The southbound lanes into the city carried many buses and trucks coming to pick up people.

Everyone in the car was anxious about the delay. "There's no need to panic," said Gordon, trying to reassure the others. "We've got lots of time to get out of here." Sure enough, traffic began to move forward slowly. They passed an entrance ramp that had caused the bottleneck. The long line of waiting cars stretched out of sight.

They listened to the president's brief speech about a national emergency. He spoke in vague terms about the imminent threat from space, and how the Twin Cities area was being evacuated as a precaution. His words implied uncertainty about the origin and severity of the threat.

"He should have spoken more forcefully than that," grumbled Gordon. "Some people may think it's a false alarm. Some people might just hang around to watch. If it really is a black hole, there won't be much to see. They'll never know what hit them."

Alex ignored the radio. He was deep in thought. He gazed out the window at the green countryside and the cloudless blue sky. Could this peaceful scene really be devastated in the twinkling of an eye? Did such a sudden disaster strike 65 million years ago, killing all the dinosaurs? Was it like this in ancient Sassaphron, 2600 years ago? Was it a beautiful summer day in Hiroshima before the atom bomb exploded?

Wendy was pushing buttons on the radio, looking for more news. Most of the stations were carrying the same civil defense announcements. One station had an enthusiastic preacher. He was obviously enjoying his unique opportunity to preach about God's

wrath: "God will visit his revenge on the sinful. Just as fire and brimstone rained down upon Sodom and Gomorrah, so too will fire destroy the wicked of today."

Wendy switched off the radio.

"Is it true?" asked Jeffrey anxiously from the back seat. "Is God punishing us because of our evil ways?"

"No, that's not the way I look at," said Gordon. "If you want a biblical interpretation, I'd compare the Sassaphron Messenger's warning with the Old Testament story of Joseph and the Pharaoh's strange dream. Do you remember Joseph, the guy with the coat of many colors? The Pharaoh dreamt that seven lean cattle ate seven fat cattle. They asked Joseph what the dream meant. He interpreted the dream as a warning that there would be seven years of plenty followed by seven years of famine. Precautions were taken to harvest and store the extra grain during the years of plenty. Because the warning was heeded, many lives were saved. The Sassaphron Messenger's warning may also save many lives."

It took them six hours to reach Duluth, normally a three hour drive. The Duluth radio station reported that some people were boarding up their windows, but preparing to wait out the danger in their homes. Others were fleeing to safety further from ground zero.

Gordon pulled into a gas station just south of town. Gas supplies were short. Gordon bought ten gallons at an inflated price, just enough to get them to Thunder Bay. Alex overheard two men arguing. One said the disaster would be like a tornado, severe but only lasting a few seconds. The other man disagreed. He thought it would be more like a forest fire. It would be foolish to wait it out; everyone had better get out as fast and as far as they could.

Everything was sold out at the quick stop. "It's a good thing I packed food and drinks," said Wendy. She handed out sandwiches and passed around a water bottle. There was enough for Tim and the other police officers. Everyone was grateful.

It took them two hours to get through the stop-and-go traffic around Duluth. Once past Duluth, their police escort left them, except for Tim who promised to go all the way to Thunder Bay. "Agent Brindley's orders," he said. They joined a heavy stream of traffic following the north shore of Lake Superior toward Canada.

Radio reports indicated that the evacuation of the Twin Cities was going smoothly. The citizens were cooperating with the authorities and helping one another. A reporter described how nurses and paramedics were assisting patients in a major hospital onto army trucks bound for North Dakota.

"Maybe Professor Tom has found a way to save the Sassaphron Messenger and he's on one of those trucks," said Alex hopefully.

"Maybe," said Gordon. Alex could hear the note of doubt in his voice.

It was early evening when they reached the U.S.-Canadian border crossing at Pigeon River. The Canadian border post had been reinforced with extra personnel to handle the people fleeing from the danger zone. The sympathetic customs lady asked a few quick questions. She put a special stamp in their passports and gave them directions to a red cross shelter in Thunder Bay. Gordon told her that they were heading for his brother's home. Off they went.

At sunset on Friday evening, the exhausted group reached the home of Gordon's brother and his wife, David and Penny. They lived in a secluded house, twenty miles outside of Thunder Bay. Their house had large picture windows that provided a magnificent view of Lake Superior.

Jeffrey had been close to tears throughout the journey. He had been told that his parents and grandfather would be escorted to safety, but he had not been in touch with them. Alex and Wendy had tried hard to comfort him during the drive. To Jeffrey's immense relief, his family were waiting with David and Penny.

During the joyous greetings and happy chatter that marked the end of the stressful drive, Alex noticed that Tim was preparing to leave. "Tim, where are you going?" asked Alex.

"Now that you and your family are safe here, Red, I'm going back to the Twins Cities to help with the evacuation." He showed Alex his police badge with a signature stamp across it. "This is my ticket back into the danger zone. I might even be able to help Professor Tom."

Gordon offered to join him.

"No. You all have to stay here. It's Agent Brindley's orders, and she got 'em straight from the President. He wants you folks safe."

"Wait," said Alex. He ran into the house. With Penny's help, he filled a big thermos cup with steaming coffee. He threw some fruit and pretzels in a bag and brought the goodies out to Tim.

Tim smiled. Alex hugged the big man.

"Good luck Tim, and thanks for everything."

"Glad to be of help, Red, and thanks for the caffeine." Then Tim was off, heading back into the danger zone.

Susan had phoned David and Penny several times prior to the group's arrival. Now she called again and was relieved to hear that they had made it safely. She already knew that Tom had stayed behind. The phone lines into the Twin Cities were jammed, or out of service, and she had been unable to get in touch with Tom. Alex could tell that she was worried about him. Alex checked his pocket to make sure Professor Tom's lucky charm was safe.

Susan told Alex, "Kugelbahn is getting along extremely well with Iglehart and Ruth. The three of them are working together to narrow down the exact time and location of the impact. The estimated impact will occur at 12:14 a.m., your time, Sunday morning. All kinds of special measures are being taken nationwide to protect vital systems. It's almost like the preparations for a nuclear attack."

Everyone was exhausted and ready for bed. Alex and Jeffrey unrolled sleeping bags on the living room floor. It was close to midnight, just a little over twenty-four hours to go. The boys crawled into their bags.

"Alex," whispered Jeffrey. "Do you think we've run far enough? Do you think we're safe here?"

"Yes," said Alex. "We're more than 300 miles from ground zero. If we're not safe here, nobody's safe." He tried to speak with confidence despite his own fear.

"Alex, do you think the black hole will come? Or is all of this just a bad dream?"

"We both know that it has to be real, because the Sassaphron Messenger is real, and so is Michelle. Now I believe everything, don't you?"

"Yes, I do." said Jeffrey.

Both boys felt a sense of relief they couldn't explain. At last, the world knew what they knew. They had played their part, done their best. They fell fast asleep.

The evacuation of the Twin Cities continued all Friday night and into Saturday. No one knew for sure what would happen. Some predicted that the end of the World was at hand. Others suspected nothing would happen, and that the whole thing was a sinister government plot. There was a rumor that the threat came from a nuclear weapon in space, launched into orbit years before by the Soviets, and now out of control.

By early evening on Saturday, virtually the entire population of the Twin Cities and surrounding areas had been evacuated. More than three million people had fled by car, motorcycle, bus, truck, train and airplane. A few people had even departed by bicycle. A tiny number refused to go. Police and national guardsmen still patrolled the city, urging the holdouts to leave. At 9 p.m. Saturday night, even these guardians of the city began their final withdrawal, departing by helicopter from the airport and other designated locations. The city stood deserted and silent, awaiting its fate. The summer twilight faded into darkness.

* * * * * *

And at last, the time came for the prophecy of the Sassaphron Messenger to be fulfilled.

Alex and his friends and family gathered in the darkness on the high bluff overlooking Lake Superior. The summer night was mild and still, not even a cool breeze off the water. The lake was dark; all the freight carriers had gone to port as a precaution. Small waves gurgled over the rocks at the foot of the bluff.

Thousands of stars twinkled in the clear sky overhead. The little group stood, watching and waiting, looking south across the black lake, their faces slightly uplifted. What sign would there be? What would they see or hear or feel? Might the disaster strike silently, invisibly? Were they too far away to experience the event? Or would the disaster be of such proportions that they too would be swallowed by its fury? They did not know, and so they waited.

Gordon noticed that Alex was searching for something in the night sky in a direction different from the others. He followed his son's gaze. Leaning over, he said quietly, "Are you looking for the constellation Gemini?"

"Yes," said Alex in surprise. "That's the home of the Sassaphron Messenger. It came from the direction of Castor and Pollux. I'm still not sure where to find them."

Gordon pointed. "First find the Big Dipper. There's its handle, and there's its bowl. Now follow a line out from the lower two stars of the bowl. See?"

Alex followed his father's finger.

Gordon pointed to two bright stars. "Those two are Castor and Pollux I believe. Pollux is the brighter one."

"Somebody there sent us the warning," said Alex. "I keep hoping, half expecting, that they'll send another message, canceling the warning."

"It's too late for that now," said Gordon sadly.

Alex glanced at the glowing face of his watch. It read 12:10 a.m. Just four minutes to go.

Just like when the Sassaphron Messenger came, Jeffrey was the first to spot the glow in the sky. This time, it was blue instead of red. "Look," he cried, pointing. The others soon saw it too: a faint blue trace in the dark sky, growing by the second in brightness and size. As it intensified, its hue became a deep blue-violet. Then the bluish trail in the sky was joined by a terrifying orange-red glow that seemed to rise from the horizon, expanding and diffusing as it climbed.

"That's the fireball," said Gordon, as the orange glow turned yellow and white.

The fireball continued to grow like some luminescent mushroom in the sky. For seconds, even minutes, it boiled upward and outward in the distant silent night.

No one knew how long it was before the blast hit. It came suddenly, enveloping them with no warning. They were all thrown to the ground by a horrifying blast of hot scorching air, as if the door of a mighty blast furnace had been thrown open in their faces. A deafening roar swept across them. Alex heard the house's huge picture windows shatter. The lights in the house went out. As everyone lay on the ground in the scorching heat, arms covering their heads, they felt the earth lurch and tremble. It must be an earthquake, thought Alex, caused by the impact of the black hole.

"Alex, where are you?" It was Wendy. She was groping in the blackness for her son. Her voice was hard to hear over the rumbling of the earth and the roar of the wind. Leaves and other debris were flying through the air, pelting them, but at least the trees had not caught on fire.

"I'm here Mom. I'm okay. Are you and Dad okay?" He could just make out the forms of his kneeling parents in the eerie glow from the distant fireball.

His parents were all right, but what about Jeffrey? "Jeffrey, are you okay?" shouted Alex.

There was no answer from Jeffrey. The boy's parents were calling their son's name as well.

Gordon and David were on their feet now with flashlights. The rumbling sounds continued, pulsing like deep growls across the lake. The beams of the flashlights

crisscrossed the ground until they located Jeffrey. He was lying face down, motionless. Jeffrey's parents and Alex were at his side in an instant.

"Jeffrey, can you hear me?" shouted Alex in panic, trying to make himself heard over the persisting noise.

Jeffrey's Dad rolled his son onto his back. Wendy was there, checking Jeffrey's pulse. The boy's eyes were closed. Alex was terrified. Was his friend dead? The ground continued to shake beneath them.

The eerie glow from the fireball had diffused into large iridescent clouds hanging high in the sky above the southern horizon--wisps of red, orange, green, blue and purple.

"Jeffrey, please speak to me!" cried Alex in his friend's ear.

Jeffrey opened his eyes just as Wendy was about to begin mouth-to-mouth resuscitation. He looked into the flashlights and blinked, "Am I in Heaven or is this a dream?"

"Sorry, buddy" said his Dad, relieved that his son was conscious. "It's no Heaven. Just a waking nightmare."

Jeffrey was suffering mainly from extreme fright. Like the others, he had been knocked flat by the blast wave. Miraculously, none of them was seriously injured. Although the house was still standing, most of the windows had been broken. Inside the house, there were pieces of broken glass and china everywhere. The place was in a shambles. Cautiously, Gordon and David picked their way through the rubble while the others waited outside.

For safety, they decided to spend the rest of the night out of doors. Gordon and David found coats and blankets for warmth. The hot air that had accompanied the blast wave had subsided, but the fading glow from the diffusing fireball hung high in the sky to the south.

Alex and company huddled together through the night, listening to the radio, trying to piece together what had happened. The first sketchy reports indicated that the fireball could be seen for hundreds of miles in all directions. Earthquake tremors were measured around the world. In Duluth, many buildings were damaged and the hot blast wave touched off several fires. Power was lost to an enormous area of the Midwest.

As the night wore on, the acrid smell of ash began to fill the air. Slowly, the iridescence in the sky faded. Alex noticed that no stars were visible. With power cut, and their flashlights off to conserve the batteries, the hot, black, smoky darkness covered them like a blanket.

Late in the night, they heard a roar approaching from across the lake. It grew and grew, like a railroad train bearing down on them. In fear, they all fell flat on the ground. A mighty wave of water crashed against the high bluff. Cold lake water poured across them, and then subsided without harming them. The high bluff had saved them from the brunt of the tidal wave.

A short time later, there came an ominous dawn. A listless glow appeared on the eastern horizon but one too weak to grow into daylight. The sky overhead remained dark all day. Debris from the blast and smoke from the fires it had started formed high black clouds that covered the sky. The radio reported that highly acidic rain was falling in some areas not far from ground zero.

In time, the scope of the great disaster became apparent. The first aerial pictures showed a scene of utter devastation. The Twin Cities and surrounding areas were completely leveled. Virtually nothing withstood the enormous shock wave. Huge skyscrapers crumpled into piles of mangled concrete and twisted steel. Bridges collapsed into the rivers. Trees and houses were flattened by the blast and scorched by the heat of the fireball. Smoke billowed from many fires that burned out of control for days. The once green city turned to black.

Initial estimates rated the explosion at more than a thousand times the energy of the atomic bomb dropped on Hiroshima. As predicted, ground zero was slightly south of the Twin Cities. Pictures revealed the formation of a large crater in the vicinity of ground zero, several miles in diameter, which included a portion of the Twin Cities. This crater was already filling with water, probably diverted through newly formed channels from the Mississippi river and its tributaries. A radio reporter wryly commented that the City of Lakes was rapidly becoming a lake. The former residents of the Twin Cities soon realized that their homes were gone forever and so was their city.

One strange report caught Alex's attention. Just a few minutes after the catastrophic impact in Minnesota, Russian cosmonauts observed a fireball in the sky above the Arctic Ocean north of Russia. It was accompanied by an enormous plume of steam that shot miles into the upper atmosphere. Alex remembered that Iglehart had predicted just this behavior from the black hole: entrance and exit through the Earth like a bullet passing through butter.

Despite the devastation, a miracle had happened. Three million or more people had escaped and survived. Their homes were lost but their lives were saved. The Sassaphron Messenger had brought warning. Thanks to a couple of kids and their friends, the warning had been heeded.

Chapter 18. Minnephron

The clouds of smoke and dust spread eastward from Minnesota to cover the entire eastern seaboard of the United States. In New York, Washington, and all the other cities, people went about their activities under murky, dark skies. Occasionally, the sun peeked through, with a bloody red glow. No one knew how long the atmospheric pollution would last, nor how harmful it would be. Scientists argued gloomily about the bad effects of the dust clouds on worldwide weather. Everyone was concerned about the Fall harvest.

Alex and Jeffrey were invited to Washington as guests of the President.

One week to the day after the great disaster, they took a limousine from the Washington Hilton to the White House. They were accompanied by two secret Service agents.

One of the agents said sympathetically, "I'm sure sorry if you fellas lost any friends or relatives out there in the disaster."

"We've got two good friends unaccounted for," said Alex sadly. Although most of their friends had turned up safely, Tim and Professor Tom were still missing. Not even Susan, with her network of police contacts, could locate them. Hope was fading fast as the days passed without any word.

The Secret Service agents checked the boys with a metal detector and then escorted them through the gate into the White House grounds. A few minutes later, they reached the Rose Garden. They walked past a magnificent magnolia tree and rose beds bright with white and Burgundy blossoms. Immediately, they encountered TV cameras and newspaper photographers.

Susan was there and ran over to meet them. She hugged both boys. "I was so worried about you all," she said. "Thank God you got out in time. You're national heroes now. Just look at all the media!"

Alex self-consciously straightened his polka dot tie. He'd never been a celebrity before, and hadn't expected to be on TV.

Susan said, "Come with me. We have to join the others in a receiving line to meet the President and the other dignitaries."

"Wait a minute," said Alex. He fumbled in his pocket. "Professor Tom asked me to give this to you." He handed her the lucky charm on the gold chain.

She recognized it immediately. Alex saw tears in her eyes. She put the chain around her neck. The ancient, small keepsake from Sassaphron hung between the lapels of her jacket. "He was such a good man," she whispered.

Susan took the boys by the hand and led them across the wide expanse of lush green grass. They came to a roped off area. Karl Kugelbahn was there and so were Edmund Iglehart and Ruth Geiger. The three scientists greeted the boys warmly. Alex was glad that they had little time to talk because he didn't know what to say.

The President's press secretary was in charge of the ceremony. Newspaper and TV people were confined to one section of the Rose Garden. The invited guests, including the boys' parents and members of the SETI team, were seated in another section. White House staff members poked and prodded the little band of Sassaphron celebrities into a receiving line. First came Alex and Jeffrey, then Susan and the three scientists. A microphone was set up near the little group.

"Get ready!" shouted the press secretary. "Here they come."

"Who's coming?" asked Jeffrey.

"The President and the First Lady," said Alex in excitement.

The buzz of conversation in the Rose Garden subsided. Flashbulbs popped. Video cameras whirred. The President walked briskly toward the receiving line. He was smiling.

The press secretary stepped forward to help with introductions. "Mr. President, please let me introduce you to Alex McIntosh and Jeffrey Wong."

Alex extended his hand and looked up into the face of the big man who towered over him. Their eyes met. Alex saw kindness and warmth in the penetrating gaze. The President shook hands with both boys. His grasp was firm. "Alex and Jeffrey, I'm mighty proud and pleased to meet both of you. On behalf of all Americans, I want to thank you for your courage and heroism. I also want to tell you how sorry the First Lady and I are that you and your families have lost friends, and your homes and your city. It's a terrible tragedy! But if it hadn't been for you fellows, the disaster would have been so much worse. Millions of people would have died."

The President's southern accent made his words seem casual and friendly. Alex relaxed. Then he heard himself speak, not knowing where the words came from. "Thank you Mr. President. We did what we could, but it was really the Sassaphron Messenger that brought us the warning, and our friend Michelle who provided the clues."

The President was a little bewildered. He glanced at Susan doubtfully, and said "Michelle? Is she here today?"

"No," said Jeffrey quickly. "She couldn't fit it into her busy schedule."

The President smiled. "But you were the ones who made us listen to the warning."

"May I tell you something else, Mr. President, something that's going to happen soon?" said Alex.

"Please do," he said, leaning forward to listen.

"All of us who lived in the Twin Cities are going to work hard to rebuild our city. We'll have to rebuild in a different place because of the crater lake and all the rubble. But we are going to do it. And our new city should be named Minnephron."

"Well, Alex, America will stand with you in rebuilding your city," said the President. "But why Minnephron?"

"It's a name with two parts: 'Minne' in memory of our lost city of Minneapolis, and 'phron' in honor of the Sassaphron Messenger that brought us the warning."

The President was pleased. "It's a great idea, Alex. All America will be on your side. Now, let me introduce you to the First Lady."

The First Lady extended both her hands, grasping one hand of each boy. She had been listening to Alex's little speech. She thanked the boys and congratulated them, and then said, "And Alex, it is a beautiful idea to name your new city Minnephron."

The press secretary urged the President and First Lady along the receiving line. Other dignitaries followed, greeting the boys and their friends. Alex had no idea who most of them were, except for the Vice President whom he recognized.

When the handshaking was over, the President stepped to the microphone. He spoke to a nationwide audience on TV and radio:

"My Fellow Americans: Our nation has suffered a disaster of immense proportions. All Americans share in the sorrow of family members and friends in Minnesota and neighboring states who have lost loved ones in this calamity, and the countless thousands who lost their homes, businesses and communities. But we are here today to express gratitude for the miracle of life. Thanks to the courage and heroism of the people standing here with me, millions of lives were spared. Without their dedication, the calamity would have befallen us without warning, a thunderbolt from the heavens that would have killed millions.

"We do not yet comprehend the magnitude of this great catastrophe. Already, the pain and suffering have been enormous. Gloomy darkness still hangs in the air and in our spirits."

The President's speech continued, but something else caught Alex's attention. There was a disturbance at the back of the visitors section. Secret Service people were scurrying about. Everyone was looking.

"My God!" gasped Susan.

Two men emerge from the crowd. They were being ushered forward by Secret Service men. Alex couldn't believe his eyes.

"It's Tim and Professor Tom!" exclaimed Jeffrey, causing the President to trip in midsentence.

"Shh!" said Alex, trembling in excitement.

The President droned on, ignoring the activity around him. Out of sight of the cameras, the Secret Service agents escorted Tom and Tim forward, and inserted them in the receiving line between Susan and the three scientists. Alex saw the joy in Susan's face. He also saw the press secretary scribble a few notes on an index card and pass it to the President.

The President completed his remarks. Then he introduced his guests of honor and described their contributions. Alex and Jeffrey had played the decisive role in uncovering the secrets of the Sassaphron Messenger, especially the warning that had saved so many lives. The President remarked that Professor Tom was probably the only living person with the knowledge to understand the writing on the Sassaphron Messenger. Then the President paid tribute to the SETI team, especially Dr. Kugelbahn. They had been the first to detect the intelligent signals from space. In the final critical days, they had worked out the path of the black hole on its collision course with Earth. The President turned to Edmund Iglehart and Ruth Geiger. In the early phase of the investigation, they had acted hastily and recklessly, and had paid for their mistakes. In the final portion of the investigation, Dr. Iglehart had played a key role by showing that the geometrical patterns on the Sassaphron Messenger provided a map of the orbit of the "dark clustering force." Dr. Geiger had played a key role in the computer analysis. He then announced a

presidential pardon for both Ed and Ruth. They would not return to prison. Their university had already agreed to take them back as professors.

The President described the dedication and courage of FBI Agent Susan Brindley. She had listened to Alex and Jeffrey when no one else took them seriously. Singlehandedly, she had put together an investigation that had saved millions of lives. Police officer Tim had played a key role in the evacuation, including the rescue of Professor Tom.

The President continued:

"And let us remember that somewhere, very far away in the Universe, in the direction of the constellation Gemini the Twins, there exists an intelligent being. That being visited our planet once long ago and took pleasure in what there was to see: the land and the green vegetation, and the people and animals on the land. Knowing of the danger facing us on that wonderful planet, this being sent a message to us across the vast ocean of space, a warning. The message carried an ancient name, Sassaphron. We must always honor and remember this name. It links humanity's distant past with our present and our future. It links the destiny of people on Earth with our mysterious guardian angel far away in the Universe. In the spirit of thanksgiving, I endorse Alex's proposal for naming the new and shining city that will surely arise. The name will be Minnephron."

The President had one more announcement. He asked Alex and Jeffrey to step forward. The boys were terrified. Would they have to make a speech? Alex glanced at Jeffrey who was shaking like a leaf. Alex grabbed his friend by the arm to give him courage.

The President smiled at them and spoke into the microphone:

"Alex and Jeffrey, through your efforts, thousands upon thousands of American lives have been saved. You had the courage, the dedication, and the conviction of your consciences to sound the alarm, to bring warning to the nation. America will always be grateful to you. For your courageous and intelligent service to the nation, I am proud to award to you the Medal of Freedom, our country's highest civilian honor."

Flashbulbs popped. Everyone in the Rose Garden applauded. The President shook hands with the young heroes and placed the medals in their hands.

Much later, after all the media interviews and congratulations, Alex and Jeffrey heard about the adventures of their missing friends.

After leaving Thunder Bay, Tim had returned to the Twin Cities. He went straight to the McIntosh house. Tom was not there, but the Sassaphron Messenger was still in the

garage. Tim correctly assumed that Tom was still trying to find a way to rescue the Messenger. Tom biked far and wide looking for help without success. Late Saturday, he returned to the McIntosh house. Tim picked him up on the bike path beside Sky Lake. There was no longer any hope of saving the Messenger. Even worse, it was too late to board the last evacuation helicopters. The two men headed out of town in Tim's car. They ran out of gas about 75 miles west of the Twin Cities. They hid in a tornado shelter in the basement of a deserted farmhouse. Their injuries from the explosion were minor, although most of the buildings in the nearby town caught fire from the heat of the shock wave.

In the hours and days following the disaster, survivors in the evacuation zone had no means of communication. Traveling by foot and military vehicle where possible, Tim and Professor Tom eventually got out of the disaster zone. Even then, the communication channels were down. It was a police officer in Fargo, North Dakota, who put them in touch with the FBI.

* * * * *

The little group of Sassaphron celebrities dined at the White House with the President and the First Lady. Afterward, Alex and Jeffrey returned to the Washington Hilton where they shared a room. Jeffrey was bubbling over with the remarkable events of the day, but Alex was glum.

"Alex, what's wrong? Can't you handle all the TV coverage? Don't you want to be mayor of Minnephron like that one goofy reporter asked?"

"Be quiet," snapped Alex. "Okay, let me tell you what's bugging me. We've gotten all this credit, but really, most of the credit belongs to Michelle. We wouldn't be here if it wasn't for her."

Jeffrey interrupted. "That reminds me of something I have to tell you. I was sitting beside Dr. Iglehart at dinner. I overheard him talking to the President. The President asked if there would be any unexpected side effects of the collision with a black hole. Guess what Dr. Iglehart said?"

"Don't leave me in suspense," said Alex sarcastically.

"He said that black holes have strange spacetime properties. He wouldn't be surprised if we experienced some peculiar abnormalities of space and time, especially if the black hole lost any mass on its passage through the Earth. There could be weird side-effects. The President asked what kind of abnormalities to expect, but Dr. Iglehart didn't have a good answer." "So, Jeffrey, you think Michelle is a strange spacetime abnormality caused by the black hole?"

"Yes, at least our ability to communicate with her," said Jeffrey cheerfully.

"But I still feel like she deserves credit. I wish we could at least say thanks to her."

"Let's try," said Jeffrey. They had brought Alex's computer with them to Washington. Soon after arriving, they had connected to Internet through a guest account at one of the local universities.

Alex flipped on the computer. For the next hour or so, they roamed through cyberspace, reading stories and commentaries about the great catastrophe. As they had done so often in the past, they searched through new and old address lists for Michelle's indistinct but telltale icon. Just as they were about to give up, they found it.

"Hurrah!" they both shouted, jumping out of their seats. How had they done it? What was the magic? They couldn't tell. Once again, they saw the rapid sequence of network transfers followed by the rainbow of colors and the shimmering blue and green stripes. Finally, they saw the CONNECT message. They bypassed the initial protocol by entering the code word Kreusa, given them by Michelle.

Something was different this time. The connection was good, but the screen went dark. A message scrolled into view in a strange calligraphic font. It said:

"In Memory of Michelle: Born 2107 A.D. in Minnephron, America, died 2160 A.D. in the First Martian Colony. This brave pioneer was a member of the small band of one hundred and one men and women who built the first Martian settlement, lived there for thirteen years, and perished bravely when the supply spacecraft failed to reach Mars. Among her proudest achievements was her antique cyberspace contact with people from the historic past. In her final will and testament, she requested that this message be maintained as a beacon. If ever her friends Alex and Jeffrey should spot this beacon in the dark ocean of time, Michelle says thank you. You played the pivotal role in bringing to light the Sassaphron Messenger's warning, and making possible the renewal that followed. Michelle wishes you joy and bids you farewell."

Tears poured down Alex's cheeks. He covered his face with his hands. Sadness swept over Jeffrey too. He understood his friend's grief. Jeffrey put his arm around his friend's shoulders.

"She was our friend. She did so much for us. She helped to save our lives," said Alex through his tears. "How strange! For us, she's dead. But on the calendar she is yet to live."

"That's just it," said Jeffrey. "Don't you see? It's still up to us. We can still repay Michelle."

"You're right," said Alex with growing excitement. "We can repay Michelle by doing our part to rebuild the world in which she will live. Jeffrey, that's what we'll do. You and I and our families and our friends. We'll build Minnephron together. And someday, long after we die, Michelle will follow us there."