

A Swift Enterprise Saga

Thomasina Swift – Girl Inventor And The Arc Jet

By Leo L. Levesque

Dedication

Thanks to my wife for her support and corrections to the story.

A man can't live without both.

And thank you to Thomas Hudson (tedwardfox). For his marvelous covers for my stories. He has giving them a real visual feel.

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Foreword

The Multi-Universe

The Multi-Universe holds all the probabilities that happen in a person's life. Each major decision adds changes to everyone else's life and adds more folds of probability.

Some people's presence are so dominating that their personality affects unknown numbers of realities. This can be in the past, present or future.

But when five Tom Swifts find out about each other and start to interact in each other's lives there's bound to be repercussions.

A simple story left on a table at a restaurant draws the five Toms together to investigate the existence of a sixth Tom.

Tom Jr., thought to be the original, lives in Shopton, New York and was born in the nineteen fifties. He was eighteen years old, tall, lean, with short blond hair and blue eyes. All the Toms looked alike.

TSL (*Tom Swift Lives*), the closest Tom in probability, lives in Shopton, New York and is in the present.

Tom III lives a hundred years into the future and resides in Shopton, New Mexico, but spends most of his time on board his space ship the *Exedra*.

Tom IV lives in Shopton, California and in the present.

Tom V lives in Shopton, New York, in the present, the youngest at sixteen.

Prologue Part Two: Thomasina Swift and the Arc Jet

The same three Tom Swifts were in the meeting room in the back of Tom's restaurant where they met a few weeks earlier. Two of then sat empty handed, but the third was fiddling with a weird robot contraption. It was a self- balancing, mono-wheeled and three feet high. A computer control system and drive unit was located inside the ring. Two radar antennas arched up over the top of the wheel and sweep around and around. Tom Jr. finally got up and sat down in front of the remote control box that was on the table.

He looked with satisfaction at his newest invention and said to Tom III and Tom IV. "It's all set, we just have to take it outside and it will patrol the whole area. If it detects a Negative Zone, it will zero in on it with its full array of video and sensing equipment turned on. If the zone is outgoing, it will launch a drone into it. The drone will return with the probability start location from within the multi-universe."

"What if it's incoming?" asked Tom III.

"The sensing array will record the object or person that emerges and follow it at a discreet distance. The wheel will also send out an alarm signal and it will automatically broadcast its video and other information to the remote here to this unit and it will show up on the screen. I plan to leave it here and if no one is at the restaurant when anything happens then the remote will send a signal out to all five of us at our home probabilities." Tom took out four fob receivers from his pocket and put them on the table. Each had a name on it so it would go to the right Tom.

"I'll leave the other two warning devices here so that TSL and Tom V can pick them up at their leisure. Also notice that it has a quantum radio in it that can keep us all in contact." Tom Jr. sat there waiting for the inevitable question.

Tom IV looked at Tom Jr. and shook his head and said, "Tom, even you can't make a quantum radio go to more than one location! How did you do it?"

"The easiest way possible. That remote on the table has five quantum radios in it and a processor chip that enables the signals to be transferred to any or all the radios as needed. My question is, did you guys come up with anything to help us out?"

Tom III sat back in his chair, raised his arms up and placed his hands behind his head, locking his fingers together.

"Well," he said, "I haven't been lazy ether. I just finished equipping the *Exedra*, my space ship, with about the same devices that you made but in a larger scale. I can probe a whole solar system at once. The only thing is that the Negative Zone portal is only detectable for an hour and there's no way to get in front of it, if

I'm elsewhere in the solar system, to send a probe into it. But at least if the mystery person is coming by space ship and shuttles down, we can then track him when he leaves here in his ship."

They looked at Tom IV, who shook his head 'no' and said. "I didn't invent a thing, but I have something just as good!" He reached down and picked up a folder off the floor and put it on the table. The other two Toms looked at it and reached for it at once. "Hold it, guys. There are two copies of that new story in there, so no fighting! But I've got to tell you, you better hang on to your seat with this one. The probability that Thomasina Swift lives in really took a turn. Wait and see!"

Chapter One: "Daddy's Back!"

Tommy Swift parked her motorcycle next to Sandra Swift's white sports car. Sandy was leaning against it and was smiling to herself.

Tommy walked over to her and asked? "What's making that terrible noise? It's worse than fingernails on a blackboard," and proceeded in put her fingers in her ears.

"That noise is just wonderful. I could listen to it all day," Sandy replied and she continued to smile and listen.

"You've got to be kidding, it's awful. I wish it would stop," and at that moment the sound increased to a higher pitch and then exploded with a bang. A column of smoke billowed into the sky.

"Sandy, call 9-1-1!" and she was reaching for the door handle of the car to get in.

Sandy kept on smiling and said, "Not bad, not bad at all. It took almost ten minutes before it ruptured. Tommy, slow down, it's only Daddy," and she grabbed Tommy and twirled both of them around and around, laughing all the time. When she stopped the spinning, she shouted, "Its Daddy, he's back!" and started to dance a jig. Tommy stopped her and gave her a shake.

"Sandy, get a hold of yourself. What do you mean it's your father?" looking into her face for a reason for her antics.

"Get into the car and we'll go to where he is and I'll explain." Sandy drove the car onto the tarmac that bisected the Swift Construction Company's property, and headed to the far end. She turned right onto the other runway that ran along the back fence. She headed toward the last of the smoke that hung in the air and she explained.

"Dad put all his experiments away right after the funerals of mom and Tom. The one he was working on when they died was making that noise. It was a new type of jet engine. What's different about it I don't know." She parked the car in front of a blockhouse type building and led Tommy around it to the back. Fifty feet further back was a pit that looked like a swimming pool except that a long ramp came out of one side. A forklift stood at the bottom of the ramp with a box on its forks. A test stand was located in the middle of the pit and Mr. Damon Swift was just getting down with what was left of the engine. All the connections for fuel, electricity and the instrument's leads were disconnected. He tossed the parts into the box. He looked up when Sandy called down to him from the edge of the pit.

"Daddy, it ran for over ten minutes this time. Did you figure out the problem?"

"Oh, hi Sandy and Tommy. No it's the same old problem, too much heat. After I pick this place up I'll get the instrument readings from the blockhouse and study them back at my work shed to confirm it."

"Tommy and I will pick up here, so why don't you get the readings?" Sandy led the way down the stairs into the pit.

"I would like that, thanks," was his reply. As he passed Tommy on his way out he held out his hand to stop her.

"Tommy, I owe you an apology. I've been acting foolishly for the past two years and when you came over to visit us I just passed the anger on to you for my wife and son's death. I'm the one at fault for the condition you found this company in. All you wanted to do was help and I ignored you. You were a god send to us and I can never forgive myself for treating you the way I did. Please believe me, I want you to stay as long as you like. You are a part of this family," and he reached out to her. Tommy with tears in her eyes wrapped her arms around Mr. Swift and hugged him for dear life. After a minute she whispered into his ear.

"Thank you, Mr. Swift. That means a lot to me. And if you could, I would like you to tell me more about both of them."

"I will, I promise," he replied. They separated and he started to walk up the stairs. He stopped, turned and looked at Sandy.

"Young lady, remind me to tell you how much I love you too," and he went up the stairs. Sandy grabbed Tommy in a hug and laughed in delight.

By the time they finished picking up the pieces Mr. Swift was back carrying a laptop with him.

"We're all set, Dad, are you going back to the shed?"

"Yes, I'll meet you there. Thanks for the help, girls!" He climbed onto the forklift and drove up the ramp.

Sandy and Tommy reached the shed first, leaving her father so far behind that it would be at least fifteen minutes before he arrived. The shed was unlocked and the girls peeked in. It was two stories high and half full of crates. A couple of them were pulled out from the rest and one was open and empty.

"What do you think is in that other crate?" asked Tommy as they walked toward it.

"It's probably another engine, Dad had a couple of them."

"Can we open it?"

"Why not? Dad's going to anyway, might as well save him the trouble." With crowbars from a work bench they tackled the job and in a few moments they had it open. Tommy immediately grabbed a screw driver and had the inspection plates off. She hemmed and hawed to herself and stood back at last.

"So, said Sandy, "are you satisfied?" she called over from the bench that she was sitting on.

"Yes, I am. It's a hybrid of a rocket and jet; more rocket then jet. The combustion is sustained by a plasma arc and your dad is feeding in the fuel and oxygen through evenly spaced nozzles around the arc. The arc must run at over two thousands degrees and the gasification of the fuel must add a thousand degrees more. No wonder the jet is exploding. The plasma field is burning right through the metal. If he adds a magmatic containment field to hold the plasma off the chamber wall and runs the fuel over the chamber's outer wall to help cool it off, it might work."

By now Sandy's eyes were glazed over and her head was nodding yes, on its own.

"Do you think that will really make it work, Tommy?" asked Mr. Swift as he walked in. Tommy gasped and swallowed hard.

"Sorry, Mr. Swift, I didn't want you to hear that. I'm not criticizing your engine. The simplicity of its design is great. The heat is the trouble," and Tommy's face slowly turned back to normal from its beet red color.

"It's okay, Tommy; I would like your candor at all times. Science takes no sides, you ether do it right or it doesn't work."

"Thank you, sir, for your understanding and I do think it might help."

"Good! Then I suggest a competition. I'll tackle this with your new approach and you can redesign it any which way you like. I'm sure you already did that in your head." He laughed at the look on her face as he guessed at what she was doing.

"We'll have to keep it on the cheap, sir. Our research funds are on the low side."

"Oh, I can understand that, Tommy. I'll use the engine I have here and if you want I'll let you make a blueprint of your engine. And if it looks sound, you win. No time limit, first one to finish wins."

"And what do you win?" asked Sandy, now taking interest in the conversation.

"Why, having your name on the patent!" was his answer.

Chapter Two: Forced Landing

A week later, Sandy was climbing the spiral stairway of the control tower. She was wearing the Swift's green coveralls (of a worker). It was two o'clock on a Saturday afternoon.

As her head rose above the floor she could see Tommy by the windows with binoculars, and she called out, "I don't do windows and by the looks of this place I don't rebuild!"

"You don't have to do ether," she laughed. "Come over here and tell me what building is what, as I point them out to you. You can do that, right?"

"So I'm a map in workers coveralls?"

"No, you're a map in workers coveralls that will help compile my list of buildings I'm interested in, and then we're going to visit and explore each one. Heels are optional."

"So start pointing and I'll inform. By the way, why are you looking at buildings?"

"I need a place to call my own. Your father has his shed, as he calls it, and I would like a place where I can set up my equipment, electronics, chemistry, physics and so on as my needs change."

"But dad has all that. Can't you share?"

"Sure on the same project, but if he's doing physics and I'm doing chemistry we'll get into each other's way. So you see I need my own place." Tommy then handed Sandy a pair of binoculars, and pointed to a hanger type building next to where they were.

"That's the grounds keeper's building and next to it is the radio communications and radar building and tower."

"Across the tarmac looks like all airplane hangars and supply sheds?" asked Tommy?"

"You're good, you don't need me!" chuckled Sandy.

"You're a brat!" exclaimed Tommy. "How about that big red one. It's a little far away but it'll do," pointed Tommy.

"Oh! Oh! Can you pick them! That was the hangar for the *Silver Cloud*, great granddad's dirigible. Coveralls I've got, a building you have not," quipped Sandy. "That one's kinda off limits."

"Okay. Those four small building right across the runway from us... can I have them or do the Swifts have a lasting memory on them, too?" asked Tommy in frustration.

"There all yours... want to look at them?"

"Sure, they probably have holes in the roofs and that's why no one has a claim on them. For an empty complex with tons of buildings, it's sure hard to get one." Tommy swept her arm around at the buildings to emphasize her point. She stopped as she spotted a speck in the sky and raised her binoculars to it. Tommy lowered the glasses and rubbed the glass pane in front of her and raised them again. Still not sure at what she was looking at she then stepped outside onto the catwalk that surrounded the tower.

"Sandy, I think that plane is in trouble. Take a look yourself!" Sandy had followed her out and did as asked.

"I can't tell, but it is wobbly. It's coming from the other side of the lake; there is an air show there this weekend. I'm sure it part of its entertainment."

"It's still coming this way and I can faintly hear its engine and it doesn't sound good." Tommy was still straining to see the plane better. "Do you think the pilot knows there's a runway here?"

"If he's not from around here, I doubt it; we're no longer on the air charts as a usable airfield."

"We've got to do something!" and Tommy rushed into the tower and franticly started to search through all the drawers and cabinets. At last she found what she wanted, a flair gun and three flairs.

She rushed back outside and shot one into the air, picked up her glasses and looked again. A second flair went into the sky. This time she waited longer before shooting off the last flair.

The plane was much closer now and the sputtering engine went silent and the plane took a nose dive, recovered quickly and did it again. Its course was so sporadic that it looked like it would crash at any time. It finally made it to the far end of the runway and with a loud bang hit the ground, bounced twice and rolled to a stop half way down the strip.

"Let's go, Sandy! He may be hurt," and off they raced from the tower and out of the administration building and into Sandy's car. With a roar the car shot down the runway and squealed to a stop before the plane. The pilot was out by then and kicking the ground in anger.

"Dang it to all, I've had it! I'm cursed with the worst luck! Dang it!" and this time he hit the plane. The girls ran up to him and Tommy asked.

"Are you all right? Do you need medical attention?"

Only then did the pilot notice the two women.

"No, no, I'm fine; just get me a gun to put this cart out of its misery. I've had the nastiest year ever, It just won't stay running, if is not the carburetor, it's the fuel pump or it the cylinder heads..." and he kicked the ground again. "So much for my troubles all I need is a map and a phone." Sandy and Tommy burst out laughing at

this but the look from the pilot brought them to their senses.

"We're sorry, but you just hit upon a private joke. I'm Tommy and this is Sandy. Are you from the air show?"

"Yes I am, in fact I was in a pylon race when this happened."

"A pylon race?" asked Sandy.

"Two planes race against each other while flying around a set course that's three miles long. And, to add to the excitement, we fly only fifty feet off the ground and have to complete three laps."

"And you call that fun?" asked Sandy as she shook her head 'no'. Both the pilot and Tommy laughed at her. "Why do you need the map?"

"So I can tell my ground crew how to come and get me, Sandy."

Tommy spoke up quickly and said. "She can take you to a map and phone, I'll stay here and guard."

"There's no need to guard, no one wants that pile of junk. By the way I'm Bud Kenworth, aerobatic and pylon racer," and he shook both their hands. He was tall with black hair, brown eyes, squared jawed and had a quick smile when he talked.

"I have to stay, Sandy's car only holds two and it's not my day to be a hood ornament." Tommy's eye gleamed with mischief.

"Well, if I had a car you could be my ornament any time."

"I'll rather be seated next to you inside," and she blushed.

"How about a plane ride instead? Come by the air show tomorrow and I'll take you up in the *Abby*, the sweetest bi-plane there is!" The joy in his voice was astounding.

"Can't wait. Go with Sandy and we can talk some more when she brings you back."

Two minutes later, the car was off in the distance and Tommy had the motor cowling off. She poked here and there at the engine.

"Nope, it's not the motor," she talked to herself. "Let's check the electrical," she muttered and proceeded in get into the plane and ducked down under the control board. "The fuses are okay, the ignition wires are all set." She turned over the engine and it started and all the other electronics came to life as well. The engine rumbled, the radio buzzed with traffic control chatter and the instruments lit up. For a few minutes all was well and then things started to go fluky. The engine was sputtering and the instruments were blinking on and off. Finally everything stopped.

"Now what's causing that?" She ducked back under the dashboard and felt around with her hands.

"Aha! That's it. The computer chips are getting hot and shutting down. Why isn't the mother board getting any outside air?" She reached around for the air vent

and found something else. She pulled a red rag out of the air intake port. She was stunned by this; there was no way it could have happened by itself. Someone had sabotage the plane! She put the cowling back on and sat on the ground resting against the wheel and waited.

* * *

It was just before dusk when an eighteen wheeler drove past the gates of the Construction Company and stopped for a moment, reversed, and then drove onto the grounds. The driver headed across the tarmac, it was pulling a container box with canvas sides. It circled around and stopped so the back of the truck was in front of the plane. A gray hair man of sixty or so climbed out of the truck and limped his way toward Bud and the girls.

Before he got there Bud called out, "Patches, do you recognize this?" and he held out the red rag.

"Sure, Boss, it's one of my cleaning rags," he answered in a Texas draw.

"Do you know where you left it?"

"No sir, not that I recollect."

"How about in the air intake port for the control panel?" and Bud was having a hard time in controlling his anger.

"Can't be, sir, I cleaned the plane this morning like I always do before a race, but I put no rig into the air intake port." Patches was almost mumbling by now and was looking nervously at all of them. He knew he was in trouble and could not think of a way out of it.

"Are you sure, Patches, or you just don't remember?" and Bud's temper was getting the best of him.

"I remember I didn't do it, I swear."

"You're lying!" screamed Bud, losing it a last. "Your back on the booze, aren't you?"

"No, sir, not a drop! Believe me, Boss" he pleaded.

"I believe you're lying to me. Do you realize how many people you could have killed if I crashed into that crowd? I can't take it anymore. All those mishaps with the plane this year... did you cause them?" he asked in a hard voice.

'No sir, it was...Never mind, you won't believe me," and he was almost crying in despair.

"Believe you? Why won't I believe you?" he demanded.

"It's JJ."

"What!" Bud yelled. "Now you're trying to blame my brother? How dare you! Get out of here, Patches. Get walking before I do something I'll regret!" Bud took a step forward and started to raise his fists.

Patches looked to the girls for help, but could only see their bewilderment at what was going on.

"Boss, please!" he pleaded. "I'm innocent I tell ya! I haven't touched a drop, please!" and he was trembling with fear.

"Get out of here! Now! Start walking and don't come back. I'll have your pay ready when you ever show up at the air show, after that you're on your own," and Bud turned around and walked off into the gathering darkness.

Tommy looked first at Patches and then at Sandy. She spread her hands out in hopelessness and ran after Bud. When Tommy reached Bud she touched his arm and stopped him. She drew him close to her and held him for a moment. She could feel him shaking with anger.

"Bud, is there anything I can do to help?" and she could see the strain of all this on his face. He shook his head no and just stood there with his arms at his side and his fists clutched tight. Tommy touched his face with her fingers and whispered, "Please, let me help."

And this time he answered her. "I've known Patches all my adult life and he never lied to me before. But why blame my brother? I know JJ is a pain at times and a little troublesome but he's a good kid. He's only seventeen. There's no reason for him to want to hurt me," and he looked over to where the plane was and Sandy was there by herself. Patches was gone, he could not see him anywhere. He exhaled and looked back at Tommy.

"You're a remarkable woman, Tommy. Anyone else would be running away from here as fast as she could by now."

"Well, you're right, I'm remarkable. But, Bud, there's something not right with this whole thing. I can't see Patches doing you harm, drunk or not drunk. Are you sure you did the right thing?" she softly asked, searching his eyes for his true feelings.

He stayed silent, so Tommy added, "It's going to be dark soon, so why don't you fly the plane back and I'll drive the rig back and Sandy can meet us there. We can check out your standing in the meet and then decide what to do. I know from personal experience that things always look different the next day."

"You can drive that rig?"

"Sure, or would you rather I fly the plane back?" and her eyes twinkled with naughtiness.

"Whoa there, girl, I'm gullible but not that gullible!" and he smiled for the first time.

"Well the first thing you're going to learn about us Swifts, Sandy and me, is that we don't boast, we *do!*" and she poked him in the chest.

"Swift, as in those watch bracelets?" he arched his eyebrows in surprise.

"Yes, that's us. I'm the designer and Sandy is the public relation expert."

Bud was dumbfounded, "You take the rig. I don't think I can drive after hearing that. The plane in going to be hard enough to land in this light anyway." He led her to the rig and gave her the keys. "Luck." was all he said and turned to Sandy and asked.

"Would you mind finding Patches and bringing him back to the air show? That old fool will never make it on his own."

"Sure, Bud, glad too."

Chapter Three: The Night Tells All

Sandy found Patches trudging up the road going toward Shopton, a town a few miles from the Construction Company. His limp was so bad that he had to stop every couple of feet and rest. He did not notice her as she pulled up next to him. She rolled down the window and called out to him.

"Patches, I'm Sandy Swift, one of the girls from the construction company that were with Bud. Please get into the car. I'll take you back. Please, get in," and she swung the door open.

"No thanks, Miss, I'm not wanted there anymore," and he started to hobble away.

"Please get in, Patches, because I believe you. We need to talk." He stopped and looked at her. He knew he couldn't go much further and he got into the car. Sandy turned the car around and headed towards the air show.

It was dark now and Sandy took it slow, she wanted time to talk to him and think. After a while patches looked at her and asked," Why do you believe me or want to help? Were strangers?"

"My family just went through an ordeal and I know how it feels to be left out in the cold. I know you're upset and have the right to be. And I see that Bud has a blind spot for his brother, JJ, so tell me about him." Sandy took a quick look at Patches and could see that he was thinking about it. At last he started to talk.

"JJ showed up one day just after the spring air shows and flying competitions started. He gave Bud some excuse that he finished classes early and being a senior in school that meant he was done for the year and he wanted to see the country over the summer before he headed off to college. Bud just took him in and told their parents that JJ was staying with him for the summer. They seemed relieved at that and wished them a good time."

"Bud has always been independent and took care of himself and he thinks everyone else is like that if you let them. He's only been out of the Air Force for about nine months now and is all wound up with this flying business and hasn't noticed the company JJ has been with lately." Patches stopped for a time and watched the dark countryside go by. He could see the lake flashing by as the road neared it and turned away from it. He was lost in it for awhile but soon could see the lights glowing in the sky from the carnival that was being held along with the air show.

"That company that JJ is keeping," inquired Sandy to get the conversation going again, "is it that bad?" She took a look at Patches face and could see that it

was.

"I guess that was my mistake, Miss..." he faltered as he did not know her name.

"Sandy Swift."

"Miss Swift, I should have told Bud. I could have made him listen. That Flagger Group is nothing but bad news."

"Flagger," interrupted Sandy, "as in Andy Flagger of Shopton Community Bank?"

"I don't know about that, Miss Swift, "but he's running things down there at the air show and the carnival, something to do with his communication company."

"That's the same Flagger all right. Sorry, please continue."

"I never came across a flyer and ground crew that is always causing some kind of trouble. There's poker or craps games going all night, licker, girls and fist fights. Most of the trades' people stay away from them but there're always new suckers to be found in every show we do. JJ finds it exciding... they use him as a gopher and then there's Flaggers granddaughter who's always hanging around and causing trouble with the younger boys. JJ is always trailing after her like a lost puppy dog." Patches was shaking his head in dismay.

"Doesn't Bud know any of this? It seems impossible for him not to."

"Oh, he knows all about the hi-jinks, but he turns a deaf ear if JJ is involved."

"That's awful, Patches," was all Sandy could say. She stopped the car at an intersection just before the carnival parking lot and Patches told her that he'd get out there.

"Miss Swift? If you don't mind. I think I'll like to stay away from Bud tonight. I'll stay with one of the roadies I know from the carnival. Are you coming tomorrow? I could use the support especially if Bud's not flying. I just don't know how to get out of this." He opened the door and stepped out before Sandy could reply. He bent down to look at Sandy.

"Thanks for listening."

"Patches, we'll find out the truth somehow, believe me. Tommy and I won't stop till we do!"

He nodded his head and said, "I forgot to mention that Flagger's pilot and crew are Russian. And by the number of tattoos they all have they're hard core." He closed the door and rapped the roof twice. She drove off toward the gate. Just inside she pulled over, stopped and tapped her bracelet to activate the phone.

"Hello, Tommy. Where are you? I'm at the front gate to the carnival." She paused, listening. "Yes, sure I'll be there in a few minutes. I know where you're at. See ya." and she put the phone back on her wrist in its bracelet mode.

She looked around for a moment and decided which way to go to reach the

camp grounds, but it was dark and she ran out of parking lot before she could get there.

"Darn, if it's not a field. I'll just walk the rest of the way," Sandy told herself. The moon was bright and the going was easy. She reached the back of a large tent and started to go around it when she heard hers and Tommy's names. She located a small rip in the tent and peered through.

"That Tommy and Sandy, what's their name, really messed things up," said a male voice in anger. "Not only did they give him a place to land, one of them fixed the plane and now he can fly tomorrow."

"Well JJ, I guess you'll have to stop that from happening," a small squeaky female voice answered back, "especially if you want that I.O.U. to disappear."

"I already did your bidding for that I.O.U. He didn't finish that race today, did he?" he shouted back.

"No he didn't, but he can still fly tomorrow and we wanted him out completely, my boy," she retorted.

"I'm not a boy!" he shot back, "and if your flyer is so good he should be able to win. Bud's in last place and your guys in first. If he loses with that kind of lead he deserves to lose," and JJ laughed in her face.

"That might have been good enough before, but those Swift girls stuck their noses into this and now we're out for blood. Their blood if possible!" and the girl squealed in delight at that thought.

"If you think I'll do all your family's dirty laundry, you've got another thing coming." He laughed softly to himself. Grabbing her by the arms he pulled her toward him. "You'll have to sweeten the pot, my dear. No more of that kissy, kissy thing you do. If you want me to do all your bidding then you're going to pay a woman's price. Lay it all down and we're in business."

A look of disgust swept over her face for a second and then she smiled at him. "You get rid of your brother," she said and gave him a little kiss, "and I'm all yours tomorrow night." Then, she gave him a longer kiss.

Sandy was so astounded at hearing all of this that she stumbled and fell onto the tent. She recovered quickly and ran to the side where there were some bushes.

"What's that?" shouted JJ as he saw and heard the tent puff in as Sandy hit it. "Someone is out there listening to us." He pushed the girl aside and ran out. He circled around and found no one. By luck Sandy went one way and he went the other. He didn't see Sandy crouching down behind the bushes because she was also kneeling down in a drainage ditch that was running behind them. He stood there for a couple of minutes in the shadow of the tent hoping someone would come out. He finally lost patience and went back into the tent.

Sandy was laughing to herself as he went back, for the mystery girl had slipped away as soon as he ran out of the tent.

"She's a Flagger all right, always ready to sneak off into the dark if there's trouble." She heard his scream of frustration and watched as he ran away from the tent looking for the girl. She waited a little bit and then proceeded to find Bud and Tommy.

Chapter Four: Fire Destroys

"So that's all of it," Sandy was sitting in Bud's motor coach sipping tea and telling what she'd overheard.

"Are you sure, Sandy, really sure it was JJ?" A look of horror was in his eyes.

"I'm sorry Bud, but that girl *did* call him JJ. I got a really good look at him when he was standing at the back of the tent. He a little smaller than you, the same hair and face with a few pimples, a red bandana around his neck and he was wearing cowboy boots."

"God! That's him all right. As a kid whenever he got into trouble we would call him Jesse James, The Outlaw. The funny thing about that was he liked it and started to wear the boots and bandana as a talisman. For whatever "Luck" it brought him. I should have seen it then. He'd go out of his way to cause mischief. I thought it was to get attention and he would outgrow it." Bud just could not believe in how stupid he was. "When I find that kid I'm going to wring his silly neck!"

They sat in silent around the small dinette table as they finished their tea. Bud was getting more and more agitated as time went on. He wanted to find out the truth.

"Oh God," Bud moaned at last, "What am I going to say to Patches? I've railroaded him right out of here." He put his face in his hands and moaned again. Tommy touched his hand and he looked at her.

"We all make mistakes. The best thing to do is not repeat them and fix the ones we made. I'm sure that Patches knows that all you needed was time to get it straight. Both of you need to sit and talk." Bud took her hand and held it.

"Thanks, Tommy, and you too, Sandy. With friends like you, we'll get out of this mess. But now I must find both JJ and Patches before there is more trouble. You ladies make yourselves at home and I'll be back as soon as I can." He got up and walked to the door, but when he turned to say goodbye both girls were right behind him.

"All for one and one for all. Let's go!" Tommy pushed him out the door.

It was after midnight and they were exhausted from standing by the exit gates in a furtive hope of seeing either JJ or Patches leaving the carnival grounds.

"This is not going to happen tonight, so why don't both of you stay at the motor coach and I'll stay with a flyer friend of mine. We may find them before the competition tomorrow. I mean later this morning. Let's get some sleep."

They were just passing the last of the concession stands and starting down the road to the camp site when they thought they heard a moan from behind the last

stand. They stopped and listened and heard nothing. They looked at each other and started to walk, Then Bud heard it again. He walked quickly backed the way they had come and circled around the stand.

"Tommy! Sandy! Go get help--- I found Patches, and he's hurt."

They both rushed to the men. Bud was kneeling by Patches' side, taking out a small flashlight from his pocket to look at the injured man. His face was a mass of blood and his eyes swollen shut. One arm was bent the wrong way and one of his legs looked twisted. Sandy fell to the ground and cradled his head on her lap. She touched his face and whispered to him.

"Patches, we're here--- Bud, Tommy and me. We're here and were going to help you. You just hang on. Please hang on." Her tears fell on his face.

Tommy was dialing 9-1-1 on her phone and giving direction to the police and the ambulance. Bud was on his phone too and getting the carnival people to open the gates for the police and ambulance. In a few minutes the sirens could be heard and a small crowd of cronies with lights were gathered around them. The medics immediately called for air transport as they started to stabilize Patches.

Just as they were loading Patches into the helicopter he called out. "Fire, the planes, fire!" and fell unconscious again. Sandy, who was going with him, heard him shout out. She called to Bud who was with the police trying to give a coherent report and he ran to her thinking the worst. She told him what Patches said. Bud looked at Patches just before the older man he disappeared into the helicopter.

"Planes, planes on fire! No!" he shouted and ran off down the road. Tommy looked at Sandy who was getting into the 'copter and then at Bud who was running into the night toward were they kept the planes; she grabbed a policeman and explained to him what had just happened.

Bud was half way there when the sky lit up with a fireball. It lasted only ten seconds and a loud "Vaaroom" sound echoed throughout the night. Bud pushed his way through the crowd and stood gazing at what was left of the tent and planes that were in it. A husky built man walked toward Bud and put his hand on his shoulder.

"Sorry, Bud, we did the best we could, but it happened so fast. We couldn't save both of them." Bud nodded his head at lost for words.

"But we did save *her*," and he pointed off to the side where it was dark and a silhouette of the pylon plane could be seen. Bud stumbled and the man grabbed him and held him up. Bud recovered and mumbled thanks.

"You're not going to like this Bud, but we caught the arsonist."

"You did! Where is he?" He clenched his fist. The man waved a group of men over and when they parted someone pushed their prisoner forward. *It was JJ!*

Bud reached out and grabbed him by his shirt and shook him while screaming. "Why did you do it JJ, why?"

"I had to. They were going to kill me if I didn't!" he gasped.

"Who are they?" demanded Bud, still clutching JJ.

"I can't tell you, they'll still get me."

Bud tossed him to the ground.

"Get him to the cops before I kill him." Bud then told the other pilots and crew personnel what had happened to Patches and asked if they would guard his plane so he could go to the hospital. By the time he had everything in order, Tommy showed up with Sandy's car and directions to the hospital.

The sun was just starting to shine when the doctor from the E R came to find them.

"He's in recovery and on the critical list... will be for a couple of days. If nothing goes wrong he'll be awake in about forty-eight hours. But right now we're keeping him in an induced coma till the brain swelling goes down. They really did a number on him. If you found him a little bit later then you did, I doubt he would have survived."

"What is the extent of the damage?" Bud asked, but not really wanting to know. He felt more responsible for this than ever.

The doctor opened his chart and said, "Beside the head injury, one ear drum was destroyed, the cornea of one eye is damaged and will have to be re-attached later on, an arm and a leg, both in two places, were broken and a couple of ribs were cracked and one broken, but it did not puncture his lung. Thank God or it would have probably killed him. A body can only take so much!"

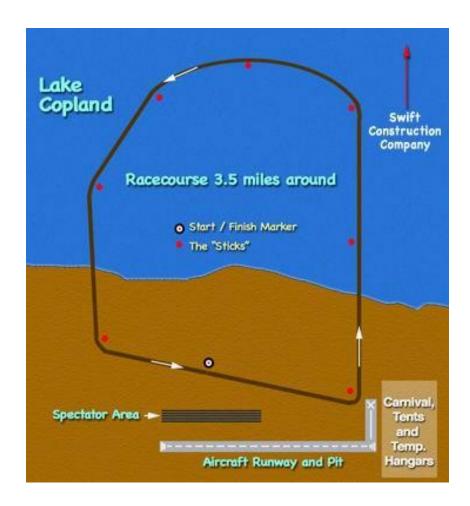
"When can we see him?" asked Sandy, who was in tears and Tommy was holding her close to her side.

"You can see him now, but he won't know it. I'll tell the nurse to let you see him for a moment. But remember you won't see much, he's bandaged from head to toe and there are several IV's running. He's in traction for his leg and arms so don't touch him. Give me a minute and then follow me in. The nurse will direct you."

They all stood around the bed. A number of machines were whirling and blinking away, doing their best to keep Patches alive. Sandy so much wanted to touch him, to let him know that they were there but settled on talking to him. Bud just stood there clenching has fist in rage and Tommy held his arm trying to calm him.

Bud softly spoke up. "Patches, get well, will ya? I need you more than ever. After tomorrow I'll be here every day until they release you and then to wherever you want to go. I promise you!" He glanced at his friends. "Girls, if you're ready, we've got a race to win. When Patches wakes up I want that trophy to be the first thing he sees."

Chapter Five: The Races



The Formula One Class Pylon race is flown over a course of 3.5 miles, doing three laps. The lowest altitude allowed is fifty feet to the maximum of three hundred and fifty feet. Spotters are located at each turn, marked by a "Stick" which is made of a telephone pole fifty feet high topped with fifty-five gallon drums painted red and white alternately for visibility. The pilots must stay on the outside of each stick. There are seven course marker sticks and one start/finished stick with a black and white checkerboard pattern. That pole is located in front of the Grand Stand and aircraft pit area.

* * *

"Ladies and gentlemen, welcome to the East Coast Pylon Race finals sponsored by Flagger Communication. The field of contestants has been whittled down to our last eight pilots. Our first head-to-head race this morning will be between our own Albert Logan from New York City and Bud Kenworth from San Diego, California. They're both on the flight line and ready to go... and yes ladies and gentlemen we have just received clearance from the FAA to start the race. So hang on to your hats and enjoy the show."

The roar of the crowd was louder than the idling engines of both planes on the starting line. Bud was anxious to start this race. He looked at Tommy who was ready to close the canopy of the plane and quickly reached out and gave her a kiss.

"What's that for?" asked Tommy mischievously.

"For luck," he replied sheepishly. Tommy took his face in both her hands and kissed him long and deeply. When she let him go she said. "Now, that's for luck! Go get 'em, Flyboy." She slammed the canopy shut and climbed down the ladder. Sandy helped her push the ladder back and pulled the wheel chucks away.

Logan, the other pilot, was already off the ground and Bud followed suit.

As they watched the two planes line up behind the pace plane Sandy nudged Tommy and asked, "Tommy, what was that about? Aren't you afraid you're moving too fast with Bud?" She was concerned for her friend.

"Sandy, you don't know the half of it," she sighed. "I feel like I've known Bud all my life. That we're meant to be together and we always have been. It's a sense of déjà vu." She slowly shook her head to clear out that feeling and smiled at Sandy. "I know that you'll keep me safe and sound."

Sandy reached out and placed her arm over her shoulder. "I'll keep you safe if you keep me safe, for here comes Samson!" They both laughed.

"Well I guess I didn't miss anything yet, ladies," and a tall, handsome man threw his arms out to hug them both. He spent a moment longer and harder with Sandy than Tommy and loosely held Sandy's hand afterwards.

"They're just lining up now, Haz. Here they come!" shouted Tommy.

Both planes were side by side behind the pace plane, a hundred feet off the ground, as they approached the front of the grand stands. The pace plane peeled off to the right over the stands just before reaching the starting pole and both racers poured on the power. A sharp left turn and Logan, being on the inside, had the lead. Bud had an instant to decide, above or below Logan? He knew that Logan was a sloppy flyer in his turns so he went high to be out of his way, for eventually he would slip downward as he knifed his turns and Bud did not want to be in the way when it happened.

It did, as they doglegged left to bring them around to the front of the crowds and to the end of the second lap. Logan's plane nosed downward for a second and to keep it from hitting the ground he had to maneuver the plane to a horizontal position and that forced him to take a long outside turn towards the lake instead of the snap turn Bud did because he was still flying ninety degrees sideways to the

ground. As long as Bud perfectly knifed his remaining turns there was no way for Logan to beat him.

Bud flashed past the finish line doing several barrels rolls and a back loop. The crowd went wild and yesterday's favored flyer was back and pleasing the audience.

Tommy and Sandy pushed the ladder into place as Haz chucked the wheels. Bud was so high on adrenalin that he jumped to the ground, grabbed Tommy and swing her around and around yelling, "One down for Patches! Let's get the rest!" Bud's confidence was back and he felt on top of the world.

Sandy said to Bud as he calmed down. "Haz, this is Bud Kenworth, pilot extraordinaire," by way of an introduction. "Bud, this is Hercules A. Samson, Haz to friends, friend and financier to the Swift's. They both shook hands and it slowly turned into a show of strength. After a moment they both smiled at each other and slapped each other on the shoulders while they shook their right hands to restore circulation.

"Boys, now that 'me caveman' is over with, can we do something constructive?" asked Sandy as the girls laughed at the guys.

"Thanks for calling me, Sandy." Haz said as he looked at her. "I've got to check into this. This may be the key to my missing puzzle piece. Flagger and the Russian mob, a match made in hell if I ever saw one! And it fits into all my other troubles of late. I'll be back before Sergey Levenkov's first run." He waved to them as he slipped into the crowd in his three piece suit.

"What's that all about?" asked Bud as he pulled the ladder over to the engine and opened the engine cowling. Tommy and Sandy pulled another ladder up to the other side and joined him in looking over the engine. They could talk freely up there with no one hearing them.

"It's a long story, Bud, and Tommy can fill you in on it later. Let's just say that the Flaggers have been a thorn in the Swifts side for a long time and Flagger Sr. managed to add Haz to his list." Sandy looked down at the motor and was afraid to touch it. Bud and Tommy were pulling out dip sticks and fine tuning various engine parts.

"She's down a little oil, Bud. I'll go get some and put it in. You better check the gaskets and seals for leaks," and Tommy was off to get the oil.

Sandy continued her story, "Haz owns a Russian satellite communication network out in the Caspian Sea region, and Flagger wanted it too. He pulled some shenanigans in the stock market and almost ruined Haz. Haz rallied his friends and stopped the rush on his stocks and stabilized his finances. He never could prove that Flagger was involved. Flagger wanted to globalize his communication company but Haz put a stop to it by obtaining the network. Now Haz is the happy owner of six satellites that are about to shut down in the next year or so. He knew

that when he bought the network and that's why he could afford to do it. He's replacing the old satellites, as a matter of fact, using some of Swift's components that use Tommy's computer chip designs."

Tommy had returned and they toped of the oil. Closing the engine compartment, they settled down on the ground to watch the races.

"Is that the whole story? Bud inquired while watching the other flyers race by.

"Not by a long shot," Sandy started again. "A few months back the Russian mob tried to move into the town were the network employees live. With Haz' help and a private army of mercenaries, hired by him, they stopped the mob and now the town is an armed fortress with the people fearing for their lives.

"Haz is moving the whole operation to New Guinea. He's has bought an old abandoned radio telescope from NASA and is converting it to his use. He will move all his Russian personnel that want to go and their families. The mob has put such a strangle hold on the area that the Kremlin has finally notice it and sent in troops of their own."

"Is that why they are having summer maneuvers in that area?" asked Bud.

"Yes, it is and they will stay there until Haz gets his people out."

"Why do the Russians care? They're the ones who sold it."

"Their own communication setup depends on some of those six satellites. If Haz's go down there well be holes in their total coverage."

Haz showed up at that point with a bag in his hands and passed out high powered binoculars to everyone saying, "It's the best way to watch the wolf pull off his tricks."

Sergey was racing Mat Huston from Texas and they were the last run of this heat. The pace plane pulled out of the way and the race was on. Sergey took the high altitude and kept abreast of Huston for over two and a half laps. As he passed the last lake stick he made his move. The plane suddenly accelerated for ten second putting him into the lead. Sergey dropped his plane down to a lower height and blocked Huston from passing him. There was no time left for Huston to pass and recover the extra distanced made by passing. Sergey won easily.

"Did you see that?" shouted Bud. "He must be using a super charger of some kind. It's against the rules. How's he doing it? The planes are checked for that." He was amazed at what he had just witnessed.

Haz answered him. "He has been called out on that several times in the past and they never found a thing. His engine is always up to specs and nothing out of the ordinary is ever found."

He then pulled out a plastic green hose and told them Sergey's secret. "His mechanic snakes a hose like this past the fire wall and puts it in front of the air intakes for the carburetor. The other end is connected inside the cockpit to the

spare oxygen tank that filled with Hi-Octane gas. After he's done with it he pulls the hose back in and hooks it up to the emergency oxygen face mask. Didn't you notice those hoses looked alike? No? No one else does either."

"I had to pay dearly for this information, but it was worth it." Haz rubbed his hands together and laughed. "I can't wait to spoil his fun! I've get a phone call to make."

"No wait, Haz!" exclaimed Bud. "I need to beat him. I owe it to everyone here. You can report him as soon as I win or lose. He can't jettison the tank and that's all you need to get him." Bud's eyes were on fire with hatred for the man.

'You can't beat that super charger." But seeing the flyer's determined look, he caved in. "It's your neck, Buddy Boy... if the others are willing to let you fly who am I to stop you?"

* * *

"Bud, you're up," called up the pit boss as the half hour break between rounds was coming to a close. There were now four flyers left. Bud drew Amos from Maryland and Sergey had Mitchell from the state of Oregon.

Bud easily won his race as Amos turned too quickly at the dog leg and cut inside of the stick and was disqualified. Bud only had to beat the clock of average speeds and did it with seconds to spare.

Sergey was just as lucky, as Mitchell's engine seized up and black smoke billowed out everywhere. He had to do a force landing. Sergey also breezed in with a good time. The race was put on hold until they cleared the runway and Sergey could land. He was given and extra fifteen minutes to turn his plane around.

As soon as Amos blew his chance to win the race, Tommy grabbed Sandy to go on a scavenger hunt. It didn't take them long to find what Tommy wanted. One phone call, a quick drive down the road and some haggling on Sandy's part soon had them back. Their half hour time table was now an hour because of the delays and Tommy was thrilled over the turn of events.

"Did you miss us, guys?" asked Tommy as she climbed into the plane and Sandy joined Has on the other side of the engine. They were doing the routine checkup. She wigged herself upside down under the instrument panel and began to fasten a yellow steel bottle to an empty spot with zip straps she had in her breast pocket.

"You can't do that, Sandy!" Bud burst out.

"Just watch me. These races are not going to be of any use to anyone now. The officials will have to cancel this week of competition. The important thing is for you to win. This will put you on the same playing field as Sergey. It's now your skill against his, he just doesn't know it." Tommy gave the tank a final quarter turn so that the quick release valve for the gas was in easy reach.

Sandy handed Bud the gas feed line; he looked at it for a second and then took it. He sighed in resignation and went to work. As he hooked it up he asked Tommy, "What is in this tank? It won't ruin my engine, will it?"

"No, Bud, its nitrous oxide...laughing gas. We got it from a dental technician. It cost Sandy a hundred bucks and three buttons on her blouse to get it. Two pairs of eyes shifted to Sandy's blouse. It was buttoned up to her throat.

"Sorry boys, no peep show for you today!" Sandy said teasingly. Bud and Haz turned red and the girls giggled at them. "I think you better get that hose to Tommy, Bud, so she can finish up and you can hide your head in the engine. And as for you, Mr. Samson, you just added another check mark to your bad boy list." She folded her arms and looked at him sternly.

After Tommy hooked up the hose to the canister she remarked to Bud, "this should give you the same ten second acceleration that Sergey has, so use it wisely.

* * *

Sergey took to the high altitude as always. He mirrored Bud's moves to a tee. He knew that Bud was the better flyer, so he hoped for a silly mistake from Bud or his own burst of speed at the end of the race to win.

He laughed to himself as he thought of the surprise Bud was going to get when he landed and found out about the death of his friend, Patches. It should be happening at this very moment and his crew would take care of Bud Kenworth's plane and equipment tonight as Bud and those damn Swift's grieved over the lost of their friend.

This momentary loss of concentration cost him the race. He missed the last outgoing stick on the lake and the second or two it took to find it again put him so far out that even the super charger would do him no good. He flew behind Bud as far as the last dogleg and instead of turning left he just flew off at low altitude. Bud in the meanwhile flashed across the finish line and then gave the spectators an acrobatic show no one would forget for some time to come.

* * *

"They're all gone, sir, every last one of them." Normally the F.B.I. doesn't report to civilians but this was a special case. "Somehow," he continued, "they got word that we were coming and bugged out. All their equipment is gone and Sergey flew off the face of the earth. We have an all points bulletin out for them but it's not likely to catch us anything."

They were talking outside the hospital that Patches was in. Bud and the rest of the group were inside. Haz looked at the door but was not too happy about going

in and seeing his friends. The F.B.I. man was still talking and he focused on that.

"The orderly that tried to kill Mr. O'Brian is dead. He OD'd on the stuff he tried to use on his victim. No loss there, he was a local punk with a long rap sheet starting when he was a kid. We got here just in time to stop him from getting into the room but not in time to stop him from killing himself. If that's it, Mr. Samson, I've got paper work to do."

He nodded his farewell and walked off to his car. Haz then decided not to tell his friends about the close call Patches had.

Chapter Six: Aftermath

Two days later, Bud placed the now useless racing trophy on the bedside table. Tommy and Sandy were with him. All the lights were out except for a small night light and the monitoring equipment. The doctor was slowly stopping the IV drip that kept Patches unconscious.

Sandy was holding his other hand. She could not get over how much that man had affected her. "How long will it take for him to regain consciousness, Doctor?" asked Sandy in a whisper.

"Not long, Miss. Once this drug is stopped he will wake up, if there is no brain damage. Just give it a couple of minutes. He stepped back to watch the monitors.

"Well, Doctor?" asked Bud just a few minutes later, anxious for his friend.

"He's coming around. His vital signs are good and getting stronger. His body is still in bad shape with a lot of damage, so give him time."

Patches eyes began to flutter and his mouth to move. The drain tube was gone from his lungs and he had only an oxygen nose piece. His eyes finely focused on Sandy and a small smile crossed his face. "Heaven," he hoarsely whispered, "I'm seeing angels." His eyes closed and he fell asleep.

"That's it, people, he's good," said the doctor. "Right now he needs all the rest he can get. I guess the monstrous trophy means something to him, so leave it. I'll tell the nurses to leave it alone, for now. Come back tomorrow and he'll be ready to see people for a short period of time," and the doctor ushered them out.

* * *

"Thomasina Swift, you can't move that crate by yourself!" shouted Sandy from the ground in front of the loading docks. It was a week after the pylon competition.

Tommy laughed. "No Sandy, one of the dock workers is getting a forklift. I was just told about this delivery for me from the Air Force storage facility in New Mexico and I'm trying to find out who sent it."

"Maybe it's from aliens...Area 51 is not too far away from there." Sandy waved her hands on each side of her head and moaned a, "Woooooooo!"

Tommy looked perplex. "What do ghosts have to do with aliens? Mexicans, Cubans? What?" she asked in exasperation.

Sandy doubled over in outright laugher at her friend and finally said, "I'm sorry Tommy. You took to being one of us so fast that I keep forgetting that you're

a Brit. No, Area 51 is where our government is supposed to be hiding alien space ships and green aliens, themselves." As Sandy told Tommy this she joined her on the dock and helped her inspected the wooden box. A humming was heard and the forklift showed up.

"Where are you taking it, Tommy?" asked the driver as he hoisted the box off the ground. The seven by seven by fifteen foot long box was swung around and now was facing the entrance.

"To the back of the metal shop. I have a temporary work space there for my arc jet engine and this is too big for anywhere else." As they followed the box Sandy inquired, "If you have completed the plans for the engine why haven't you told dad and claimed your win?"

"Your dad is so busy lately running things that I don't have the heart to tell him. I'm trying to give him a chance to finish his while I'm making a test model."

"Tommy, you don't have to wait. Dad will be happy that you found a way to make it work."

"True, I'm sure. But I made so many changes on it that I really have to make one and test it. Mr. Avery has ordered some of the components I need and I am waiting for them to show up. I thought this was it but it's way too big for that and it's from the wrong place."

In no time they had it uncrated and were looking at a late sixties style jet engine in excellent condition. They found a hand scribbled note attached to it in magic marker.

"Tell Air Chief Kenworth that we're even. But I still think that 57 Corvette he let me have is still worth more than this hunk of junk. And tell him the 'Vette now purrs like a kitten! ...Private Four Fingers"

"Bud!" both girls screamed at the same time, "but who is Private Four Fingers?" they wondered.

"Did I hear my name taken in vain just now?" asked Bud as he approached the two ladies with a smile.

Bud, you darling!" yelled Tommy as she turned and ran to him giving him a kiss. "This is the best present a girl could ever get." She was just giddy with happiness.

"Hey, it's not often a guy can give his girl a jet engine and have her happier than if it was a diamond ring." Tommy looked at him in astonishment and then looked at her finger, then at the jet and then at Sandy. "Well?" Bud asked.

"The jet!" they both yelled at the same time. Tommy touched Bud's face and added. "Later, flyboy. I'll take that ring in a year or two, O K? We need time." Tommy was concerned that she had to tell Bud this.

"Don't worry, "Bud whispered back, "we don't have to rush things. We both

have a lot of pokers in the fire right now. It's your companionship I need and want right now. The rest, we have a life time to explore, right?"

"Who says that Mr. Kenworth is not a genius?" Tommy hugged him.

"I've got great news to tell both of ya." Bud said as both of them walked back to Sandy who was still standing at the engine. "Patches is going to be released from the hospital at the end of the week and then he'll have to go to a rehab center for a while."

"But the best thing is, Sandy, your father is going to let me have that big, old, red airplane hangar by the back runway for my flight and acrobatics school and I'm going to be the one and only Swift pilot for the company. He wants to get a small cargo plane to do special deliveries and put the control tower back in working order. I told him that Patches is his man. One of the many jobs he's had in his life was as an Air Traffic Controller. He'll just have to get himself recertified and he can help me and your dad."

"Oh, that's the best news yet! Do you really think Patches will like to stay here with us?" asked Sandy.

"Sure he will. We've been talking about us settling down and he's going to need a lot of specialty care. He already has a bum leg and they broke the other one really bad, so if he every walks again without help it will be a miracle. He says he'll be happy wherever I decide to go."

"So, Sandy, make room, I'm going to bring the motor home and my plane over and stake my claim on that hangar. For now I need both you girls to help me move, and tomorrow I'll start helping you, Tommy, on that jet. As you may have guessed by that note, I was a chief mechanic in the Air Force and can take apart or fix anything that can fly, with or without wings.

* * *

Bud poked his head into Tommy's work area early one afternoon; He was helping her in the morning and setting up his flight school after lunch. He told her he had just received a call from JJ's lawyer and that they were sending him back to San Diego later that day.

"Can Sandy and I come with you? I know he's still not very happy that he's the only one that was arrested but we would like to see him off."

"That's fine by me. Maybe he'll talk to me if you're there. It can't hurt. Meet you both at the front gate in a half hour."

* * *

^{&#}x27;JJ listen," Sandy was trying to reach out to him for the last time. They were

standing beside the patrol car that was to take him to the airport. "It's up to you and Bud but you're welcome to come back after your confinement is up and the courts will let you travel. I'm sure we can find you a job you would like to do or maybe go back to school and take up a trade. We're willing to help you in any way we can. This incident doesn't have to ruin your life."

JJ was looking everywhere but at Sandy. He finally looked at Bud and hissed out. "Don't you guys get it? My life is worth nothing. Sergey is going to get me! My days are numbered!"

"If you believe that JJ," rebuked Bud, "why don't you give him up and at least you'll have accomplishing some good." JJ just turned away and told the police officer that he was ready to leave. The officer looked at Bud and shrugged her shoulders and opened the back car door and put JJ in. She got in the front seat with the other officer and they drove off leaving them there in silence.

"Hey guys!" called out Haz. He was jogging across the parking lot. "Did I miss the goodbyes?"

"Ya, Haz," snapped Tommy, "wave good bye to the back of that police car." She pointed it out at it turned the corner onto the main street.

"Sorry, Bud. I didn't mean to be rude. I didn't know he was leaving today. I came over to watch the Flagger show." They all looked at him questionably.

"And here it begins." He pointed out a black limousine that had just turned into the pickup area. It stopped near the police station and the chauffeur got out, opened the back door and stood there waiting.

"Where is she?" growled a voice from the back seat.

"She's coming now, sir," replied the chauffeur.

Portia Flagger marched down the walkway, her head held high, not looking at anyone. As she approached the car the voice demanded. "Portia, what do you have to say for yourself? I should have left you there. I hope you've learned your lesson?"

"Yes, Grandfather, I have," she squeakily replied. "But, do you know who is standing out here? It's those Swifts and that horrible Samson guy."

"What! Harrison, why didn't you tell me? Get us out of here!" the voice demanded. Before Harrison could close the door, Haz grabbed it, held it open and peeped inside.

"Flagger, old man, good to see you again," Haz was all smiles. "Just remember, what goes around, comes around. I wouldn't trust your little Russian friends. You'd better watch your back," and he slammed the door right out of the chauffeur's grip.

Haz looked at the driver and said. "If I was you I'd start looking for a new job. I don't think this one will last long." He then handed Harrison his business card. "I'm always looking for good drivers."

"Driver, get us out of here! You hear me?" Portia's voice was heard yelling and she started to hit the window with her fist.

"Thank you, sir." He tipped his hat to Haz, got into the car and drove off.

"Was that wise, Haz," asked Bud not knowing Haz abrupt business manner.

"Wise.., no, but it sure was fun."

"Why was she here?" asked Sandy as they watched the limousine drive off.

"Believe it or not she tried to buy marijuana from an undercover cop. She even pulled up in a limousine. Talk about stupid! The driver is still in there," and he pointed to the police station. "As for poor Harrison, this was his first and probably his last day."

Chapter Seven: Arc Jet

"Tommy, this is your big day," Bud called from the top of the jet engine pit. It had been a long two months of constant work. A dozen aircraft engineers and executives from various companies, a few employees and Mr. Swift were watching Tommy down in the pit. Tommy waved to them and called back.

"Be there in a minute I just have to connect the fuel line." When she was done, she doubled checked all the fittings and wiring. Satisfied with the set up, she joined the rest of the people on top of the pit and took off a covering from a portable control panel.

"Do we need to go into the blast bunker for this? Tommy?" inquired Mr. Swift with some concern for he had little success in keeping his Arc Jet from exploding.

"No, sir. It's been fully tested and this setup is for the demonstration only. I want these people to see the jet working and then look it over to see that there are no tricks. In fact we're videoing the whole procedure so we can send out copies to other interested companies."

"What kind of fuel are you using? I never received an invoice for any."

"And you won't, sir. Just wait and see why."

"It's your invention, so go for it!" and he stepped back to the side to better let the others see what Tommy was doing.

Tommy stepped up the one step that was before the control panel and faced the crowd. "As you can see, much of this jet is not in its casing, that's so you can examine it later and see the changes I made to the engine."

"The first noticeable change is all the wiring around the air compressor turbines. I'll tell you now that it's part of the self-sustaining electrical system and also functions as the start up motor for the air compressors."

"There are only two external components to this jet. One: is the fuel. Two: is the startup battery that runs only for the first five minutes. This motor will supply all the electrical needs for the plane."

Tommy let that sink in for a moment before continuing. She turned slightly and flipped one switch. The turbine slowly began to spin and gather speed.

"When I turned that switch the wiring on the outside of the turbine starts the blades to spin. That's because all the tips of the blades are rare earth magnets and those wires are coils of fine windings like you find in generators. When the electricity goes one way it's a motor and if the polarity is reversed it's a generator."

"Also the initiation system is now heating up. Once it hits two thousand degrees, Fahrenheit, the jet will fire up automatically." She paused for she knew a question was coming.

"That is an awfully hot initiation system," someone voiced, and several others agreed.

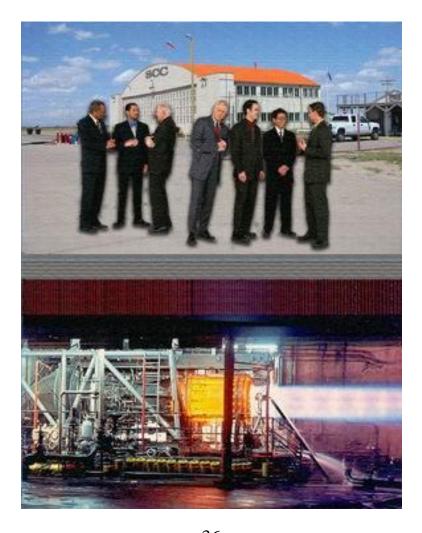
"Normally it is, but I'm starting an arc plasma field." Tommy was watching the faces of the crowd.

"You don't need a plasma field to fire up a jet. That's an overkill, if I ever saw one." The unnamed man laughed at her and quipped. "This is going to be a waste of time. She's young and doesn't know what she's doing. I'm leaving before that thing blows up."

As he started to leave Mr. Swift spoke up loudly. "Mr. Hastings, please stay. I assure you that you will not get hurt and will be pleasantly surprised by this." Hastings passed and then looked at the other engineers and came back.

"For old times' sake, Damon, I'll stay." Mr. Swift nodded his thanks.

A loud *Vroom* sound came from the jet and a twenty foot long blue flame shot out of the exhaust port. It widened for a second and then tightened up and



lost most of its color. The air shimmered around the hot exhaust and the sound was a steady low pitch rumble.

The crowd cheered at the success of the jet. Tommy was pleased by their reaction. So she continued. "The plasma field is held in place from touching the combustion chamber by a magnetic field and the compressor is now rotating by the trust of the exhaust. It's all in perfect balance, just add more fuel and the more thrust you get."

There were no questions.

"Now, for the real reason that this jet engine is so radical." Tommy held up a red can of fuel and poured it into small glasses and passed them around. She meanwhile filled a glass and in oversized gestures drank the fuel.

Several of the men tried to rush to her side for they thought she was killing herself. She waved them off.

"Sorry, I guess I went a little overboard on that. But, yes gentleman, the fuel for that jet is water. H₂O, the most plentiful substance on the planet. The plasma field tears the water molecular structure into its component parts, two hydrogen atoms and one oxygen atom. Separately they like to go boom in a small way. About forty times less then jet fuel. The energy density is very low."

"How low?" someone asked.

"To be honest, gentlemen, from four engines running at peak efficiency no more than three hundred and fifty miles per hour on a passenger jet." Tommy waited till their rumbling subsided.

"Now the ball is in your playing field. What do you want as a group for your customers? Speed and high cost with little or no profit? Or cheap and high customer returns with a very good to excellent profit?"

All of the attendees glanced at one another, trying to gauge what their answers should be.

"On an average trip the flight will last an extra hour to an hour and a half at most and you can now toot your horn about being the *greenness* fuel consumers in the world. And that gentleman will put more money in the bank than anything else you'll ever do!" Tommy then hit the power button on the control panel and the jet shut down.

"Please give us ten more minutes of your time while things cool down and then you can all examine the jet. We will take you all back to your cars a half hour after that. As you get on the return bus we will give you a specification package and a video copy of today's demonstration. Miss Swift will be your go to person.

"Thank you for your time, and good afternoon, gentlemen." And at that Tommy left the control console and walked over to Bud. "Get me to the bunker fast before I throw up!"

He grabbed her by the arm and rushed her away.

An hour later they were back. Everyone was gone but Mr. Swift, Mr. Avery, Has and Sandy, who had an assistant take the engineers back.

"Sorry," Tommy apologized, "I had a sudden attack of nerves. I hope I didn't spoil everything?"

Mr. Swift come to her and took both her hands into his. My dear, you were just fantastic. I don't think those gentleman even missed you. They were so eager to see the jet motor that they started a stampede to get to it."

"So you think they'll buy the Arc Jet, sir?"

"If they don't, I'll start manufacturing small private jets to sell to the public and once they get the word out, well..."

"Thank you, sir, for your confidence."

"You're welcome, Tommy. And please call me Damon for now on. We are colleagues as well as blood relatives." He was all smiles.

"No, sir!" Tommy was taken aback by his suggestion. "I could never call you that! Would Uncle Damon do?"

"Of course, my wonderful nice," and he gave her a little hug.

"Daddy!" exclaimed Sandy, who was next to them, "tell her!"

"Tell her what, Sandra?" He teased her.

She stomped her foot and said. "You know what we talked about last night!"

"Oh, that! I forgot, my dear."

"Tommy, are you still living at that hotel?"

"Yes, Uncle Damon." She began wondering where that was leading to.

"You've been to the house and seen the guest quarters we have. How would you like to move in there and be with us? You'll have your own entrance and have a way to the main house if you want to be with us..."

Before he could continue she threw her arms around both of them and with tears in her eyes replied. "I'd love to!"