

FICTION

RENT CONTROL

Lovers dream of making time stand still; so they learned how to stop the clock

BY WALTER TEVIS

My God," Edith said, "that was the most *real* experience of my life." She put her arms around him, put her cheek against his bare chest, and pulled him tightly to her. She was crying.

He was crying, too. "Me, too, darling," he said, and he held his arms around her. They were in the loft bed of her studio apartment on the East Side. They had just had orgasms together. Now they were sweaty, relaxed, blissful. It had been a perfect day.

Their orgasms had been foreshadowed by their therapy. That evening, after supper, they had gone to Harry's group as always on Wednesdays, and somehow everything had focused for them. He had at last shouted the heartfelt anger he bore against his incompetent parents; she had screamed her hatred of her sadistic mother, her gutless father. And their relief had come together there on the floor of a New York psychiatrist's office. After the screaming and pounding of fists, after the real and potent old rage in both of them was spent, their smiles at each other were radiant. They went afterwards to her apartment, where they had lived together half a year, climbed up the ladder into her bed, and began to make love slowly, carefully. Then frenetically. They were picked up bodily by it and carried to a place where they had never been before.

Now, afterwards, they were settling down in that place, huddled together. They lay silently for a long time. Idly she looked toward the ledge next to the mattress, where she kept cigarettes, a mason jar with miniature roses, a Japanese ashtray, and an alarm clock.

"The clock must have stopped," she said.

He mumbled something inarticulate. His eyes were closed.

"It says nine-twenty," she said, "and we left Harry's at nine."

"Hmmm," he said, without interest.

PAINTING BY GEORGE TOOKER



She was silent for a while, musing. Then she said, "Terry, what time does your watch say?"

"Time time," he said. "Watch watch." He shifted his arm and looked. "Nine-twenty," he said.

"Is the second hand moving?" she asked. His watch was an Accutron, not given to being wrong or stopping.

He looked again. "Nope. Not moving." He let his hand fall on her naked behind, now cool to his touch. Then he said, "That is funny. Both stopping at once." He leaned over, her body toward the window, pried open a space in her Levolor blinds, and looked out. It was dark outside, with an odd shimmer to the air. Nothing was moving. There was a pile of plastic garbage bags on the sidewalk opposite. "It can't be eleven yet. They haven't taken the garbage from the Toreador." The Toreador was a Spanish restaurant across the street; they kept promising they would eat there sometime but never did.

"It's probably about ten-thirty," she said. "Why don't you make us an omelet and turn the TV on? Make mine with cheddar. And three eggs."

"Sure, honey," he said. He slipped on his bikini briefs and eased himself down the ladder. Barefoot, he went to the tiny Sony near the fireplace, turned it on, and padded over to the stove and sink at the other end of the room. He heard the TV come on as he located the omelet pan, which he had bought her, under the sink, nestling between the Bon Ami and the Windax. He got eggs out, cracked one, looked at his watch. It was running. It said nine-twenty-six. "Hey, honey," he called out. "My watch is running."

After a pause she said, her voice slightly hushed, "So is the clock up here."

He shrugged and put butter in the pan and finished cracking the eggs, throwing the shells into the sink. He whipped the eggs with a fork, then turned on the fire under the pan and walked back to the Sony for a moment. A voice was saying, "... nine-thirty." He looked at his watch. Nine-thirty. "Jesus Christ!" he exclaimed.

But he had forgotten about it by the time he cooked the omelets. His omelets had been from the beginning one of the things that made them close. He had learned to cook them before leaving his wife, and it meant independence to him. He made omelets beautifully—tender and moist—and Edith was impressed. They had fallen in love over omelets, had called themselves the Cholesterol Kids, eating them after making love, eating them on Sundays. He cooked lamb chops, too, and bought things like frozen cappelletti from expensive shops, but omelets were central.

They were both thirty-five years old, both youthful, good-looking, smart. They were both Pisces, with birthdays three days apart. Both had good complexions, healthy dark hair, clear eyes. They both bought clothes at Bergdorf Goodman and Saks and Bloomingdale's; they both read the

Sunday Times, spoke fair French, and watched *Nova*, and each had read *The Stories of John Cheever*. He was a magazine illustrator, she a lawyer; they could have afforded a bigger place, but her studio was rent-controlled and had a terrific Midtown address. It was too much of a bargain to give up. "Nobody ever leaves a rent-controlled apartment," she told him. So they lived in one and a half rooms together, and money piled up in their bank accounts.

They were terribly nervous lovers at first, too unsure of everything to enjoy it, full of explanations and self-recriminations. He had trouble staying hard; she would not lubricate and could excite herself only with his hands on her. She was afraid of him and made love dutifully, often with resentment. He was embarrassed by his unreliable member, sensed her withdrawal from his ardor, was afraid to tell her so. Often they were miserable.

But she had the good sense to take him

● Terry touched
Edith again, this time laying his
hand gently
on her bare back. Outside
everything stopped.
It was as if an image on a
movie screen
was stilled for that moment. ●

to her therapist, and he had the good sense to go. Finally, after six months of private sessions and of group, it had worked. They had had the perfect orgasm, the perfect release from tension, the perfect intimacy.

Now they ate their omelets in bed from Spode plates, using his mother's silver forks. Sea salt and Java pepper. Their legs were entwined as they ate.

They lay silent for a while afterwards. He looked out the window. The garbage was still there; there was no movement in the street; no one was on the sidewalk. There was a flatness to the way the light shone on the buildings across from them, as if they were painted—some kind of a backdrop.

He looked at his watch. It said nine-forty-one. The second hand wasn't moving. "Shit!" he said, puzzled.

"What's that, honey?" Edith said. "Did I do something wrong?"

"No, sweetie," he said. "You're the best thing that ever happened. I'm crazy about you." He patted her ass with one hand and gave her his empty plate with the other.

She set the two plates on the ledge, which was barely wide enough for them. She glanced at the clock. "Jesus," she

said, "that sure is strange ..."

"Let's go to sleep," he said. "I'll explain the theory of relativity in the morning."

But when he woke up, it wasn't morning. He felt refreshed, thoroughly rested; he had the sense of a long and absolutely silent sleep, with no noises intruding from the world outside, no dreams, no complications. He had never felt better.

When he looked out the window, the light from the streetlamp was the same and the garbage bags were still piled in front of the Toreador and—he saw now—what appeared to be the same taxi stood motionless in front of the same green station wagon in the middle of Fifty-first Street. He looked at his watch. It said nine-forty-one.

Edith was still asleep, on her belly, with one arm across his waist, her hip against his. Not waking her, he pulled away and started to climb down from the bed. On an impulse he looked again at his watch. It was nine-forty-one still, but now the second hand was moving.

He reached out and turned the electric clock on the ledge to where he could see its face. It said nine-forty-one also, and when he held it to his ear, he could hear its gears turning quietly inside. His heart began to beat stronger, and he found himself catching his breath.

He climbed down and went to the television set and turned it on again. The same face appeared as before he had slept, wearing the same oversized glasses, the same bland smile.

Terry turned the sound up, seated himself on the sofa, lit a cigarette, and waited.

It seemed a long time before the news program ended and a voice said, "It's ten o'clock."

He looked at his watch. It said ten o'clock. He looked out the window, it was dark—evening. There was no way it could be ten in the morning. But he knew he had slept a whole night. He knew it. His hand holding the second cigarette was trembling.

Slowly and carefully he put out his cigarette, then climbed back up the ladder to the lott bed. Edith was still asleep. Somehow he knew what to do. He laid his hand on her leg and looked at his watch. As he touched her the second hand stopped. For a long moment he did not breathe.

Still holding her leg, he looked out the window. This time there was a group of people outside; they had just left the restaurant. None of them moved. The taxi had gone and with it the station wagon, but the garbage was still there. One of the people from the Toreador was in the process of putting on his raincoat. One arm was in a sleeve and the other wasn't. There was a frown on his face visible from the third-story apartment where Terry lay looking at him. Everything was frozen. The light was peculiar, unreal. The man's frown did not change.

Terry let go of Edith, and the man finished putting on his coat. Two cars drove by in the

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flashed me a smile and put them back on her father. He gave up and let her. She then took his arm firmly. "Aunt Hilda!"

Our hostess came running over. "Yes, Deety? Why did you stop them, darling? You didn't give us time to get bets down." Fights were no novelty at Hilda "Sharp" Corners's parties. Her food and liquor were lavish, the music always live; her guests were often eccentric but never dull. I had been surprised at the presence there of N. O. Brain.

I now felt that I understood it: a planned hypergolic mixture.

Deety ignored Hilda's questions. "Will you excuse Pop and me and Mr. Carter? Something urgent has come up."

"You and Jake may leave if you must. But you can't drag Zebbie away. Deety. That's cheating."

Deety looked at me. "May I tell?"
"Eh? *Certainly!*"

That blitty Brainsy picked this moment to interrupt. "Mrs. Corners, Dr. Burroughs can't leave until he apologizes! I insist. My privilege!"

Our hostess looked at him with scorn. "Merde, Professor. I'm not one of your teaching fellows. Shout right back at Jake Burroughs if you like. If your command of invective equals his, we'll enjoy hearing it. But just *one more word* that sounds like an order to me or to one of my guests, and out you go! Then you had best go straight home; the Chancellor will be trying to reach you." She turned her back on him. "Deety, you started to add something?"

Sharp Corners can intimidate Internal Revenue agents. She hadn't cut loose on Brainsy—just a warning shot across his bow. But from his face one would have thought she had hulled him. However, her remark to Deety left me no time to see whether he would have a stroke.

"Not Deety, Hilda. Me. Zeb."

"Quiet, Zebbie. Whatever it is, the answer is no. Deety? Go ahead, dear."

Hilda is related to that famous mule. I did not use a baseball bat because she only comes up to my armpits and grosses forty-odd kilos. I picked her up by her elbows and turned her around, facing me. "Hilda, we're going to get married."

"Zebbie darling! I thought you would never ask."

"Not you, you old harridan. Deety I proposed, she accepted. I'm going to nail it down before the anesthetic wears off."

Hilda looked thoughtfully interested. "That's reasonable." She craned her neck to look at Deety. "Did he mention his wife in Boston, Deety? Or the twins?"

I set Hilda back on her feet. "Pipe down, Sharpie; this is serious. Dr. Burroughs, I am unmarried, in good health, solvent, and able to support a family. I hope this meets with your approval."

"Pop says yes," Deety answered. "I hold

his power of attorney."

"You pipe down, too. My name is Carter, sir, Zeb Carter. I'm on campus; you can check my record. But I intend to marry Deety at once, if she will have me."

"I know your name and record, sir. It doesn't require my approval; Deety is of age. But you have it anyhow." He looked thoughtful. "If you two are getting married at once, you'll be too busy for shoptalk. Or would you be?"

"Pop, let it be. It's all set."

"So? Thank you, Hilda, for a pleasant evening. I'll call you tomorrow."

"You'll do no such thing; you'll come straight back and give me a lull report. Jake, I heard you. You are *not* going on their honeymoon."

"Aunt Hilda, please! I'll manage everything."

We were out the side door close on schedule. At the parking lot there was a bobble. Which heap, mine or theirs? Mine is intended for two but can take four. The rear

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people than . . . cancer.*

seats are okay for two for short trips. Theirs was a four-passenger family saloon, not fast but roomy, and their luggage was in it. "How much luggage?" I asked Deety, while I visualized two overnight bags strapped into one backseat with my prospective father-in-law stashed in the other.

"I don't have much, but Pop has two big bags and a fat briefcase. I'll show you."

"Damn. 'Perhaps you'd better. Where?'"

"Over in the far corner. I'll unlock it and turn on the lights." She reached into the inside pocket of her father's jacket and took out a Magic Wand.

"Wait for baby!"

The shout was from our hostess. Hilda was running down the path in front of her house, purse clutched in one hand and about eight thousand newdollars' worth of sunset mink flying like a flag from the other.

So the discussion started over again. Seems Sharpie had decided to come along to make certain that Jake behaved himself, and she had taken just long enough to tell Max (Hilda's bouncer-butler-driver) when to throw the drunks out or cover them with blankets, as needed.

"Hilda listened to Deety's summary, then

nodded. "Got it. I can handle your car, Deety; Jake and I will go in it. You ride with Zebbie, dear." She turned to me. "Hold down the speed, Zebbie, so that I can follow. No tricks, Buster. Don't try to lose us, or you'll have cops busting out of your ears."

I turned my sweet, innocent eyes toward her. "Why, Sharpie darling, you know I wouldn't do anything like that."

"You'd steal City Hall if you could figure a way to carry it. Who dumped that load of lime Jello into my swimming pool?"

"I was in Africa at that time, as you know."

"So you say. Deety darling, keep him on a short leash and don't feed him meat. But marry him; he's loaded. Now where's that radio link? And your car."

"Here," said Deety, pointing the Magic Wand and pressing the switch.

I gathered all three into my arms and dived. We hit the ground as the blast hit everything else. But not us. The blast shadow of other cars protected us.

|||

Zeb

Don't ask me how. Ask a trapeze artist how he does a triple 'sault. Ask a crap-shooter how he knows when he's "hot." But don't ask me how I know it's going to happen just before it hits the fan.

It doesn't tell me anything I don't need to know. I don't know what's in a letter until I open it (except the time it was a letter bomb). I have no precognition for harmless events. But this split-second knowledge when I need it has kept me alive and relatively unscarred in an era when homicide kills more people than does cancer and the favorite form of suicide is to take a rifle up some tower and keep shooting until the riot squad settles it.

I don't see the car around the curve on the wrong side; I automatically hit the ditch. When the San Andreas Fault cut loose, I jumped out a window and was in the open when the shock arrived—and didn't know why I had jumped.

Aside from this, my ESP is erratic. I bought it cheap from a war-surplus outlet.

I sprawled with three under me. I got up fast, trying to avoid crushing them, I gave a hand to each woman, then dragged Pop to his feet. No one seemed damaged. Deety stared at the fire blazing where their car had been, face impassive. Her father was looking at the ground, searching. Deety stopped him. "Here, Pop." She put his glasses back on him.

"Thank you, my dear." He started toward the fire.

I grabbed his shoulder. "No! Into my car—*fast!*"

"Eh? My briefcase . . . could have blown clear."

"Shut up and move! All of you!"

"Do it, Pop!" Deety grabbed Hilda's arm. We stuffed the older ones into the alter-space; I shoved Deety into the front passenger seat and snapped, "Seat belts!" as I slammed the door, then was around to the

left so fast that I should have caused a sonic boom. "Seat belts fastened?" I demanded as I fastened my own and locked the door.

"Jake's is fastened, and so is mine, Zebbie dear," Hilda said cheerfully.

"Belt tight, door locked," Deety reported. The heap was hot; I had left it on trickle. What use is a fast car that won't go scat? I switched from trickle to full, did not turn on the lights, glanced at the board, and released the brake.

It says here that duos must stay grounded inside city limits; so I was lifting her nose before she had rolled a meter, and she was pointed straight up as we were clearing the parking lot.

Half a klick straight up while the g meter climbed—two, three, four—I let it reach five and held it, not being sure what Pop's heart could take. When the altimeter read four klicks, I cut everything—power, transponder, the works—while hitting a button that dropped chatt, and let her go ballistic. I didn't know that anyone was tracking us. I didn't want to find out.

When the altimeter showed that we had topped out, I let the wings open a trifle. When I felt them bite air, I snap-rolled her onto her belly, let wings crawl out to subsonic, and let her glide. "Everybody okay?"

Hilda giggled. "Whoops, dearie! Do that again! This time, somebody kiss me."

"Pipe down, you shameless old strumpet Pop?"

"I'm okay, son."

"Deety?"

"Okay here."

"Did that fall in the parking lot hurt you?"

"No, sir. I twisted in the air and took it on one buttock while getting Pop's glasses. But next time put a bed under me, please. Or a wrestling mat."

"I'll remember." I switched on the radio but not the transponder and tried all police frequencies. If anyone had noticed our d-does, they weren't discussing it on the air. We were down to two klicks. I made an abrupt wingover to the right, then switched on power. "Deety, where do you and your Pop live?"

"Logan, Utah."

"How long does it take to get married there?"

"Zebbie," Hilda cut in, "Utah has no waiting time—"

"So we go to Logan."

"—but does require a blood test. Deety, do you know Zebbie's nickname around campus? The Wasp. For 'Wassermann positive.' Zebbie, everybody knows that Nevada is the only state that offers twenty-four-hour service, no waiting time, no blood test. So point at Reno and sign off."

"Sharpie darling," I said gently, "would you like to walk home from two thousand meters?"

"I don't know; I've never tried it."

"That's an ejection seat . . . but no parachutes."

"Oh, how romantic! Jake darling, we'll sing the 'Liebestod' on the way down. You'll sing tenor, I'll force a soprano, and we'll die in each other's arms. Zebbie, could we have more altitude? For the timing."

"Dr. Burroughs, gag that hitchhiker, Sharpie, 'Liebestod' is a solo."

"Picky, picky! Isn't dead-on-arrival enough? Jealous because you can't carry a tune? I told Dicky Boy that that should be a duet, and Cosima agreed with me—"

"Sharpie, button your frimpin' lip while I explain. One: Everybody at your party knows why we left and will assume that we headed for Reno. You probably called out something to that effect as you left—"

"I believe I did. Yes, I did."

"Shut up. Somebody made a professional effort to kill Dr. Burroughs. Not just kill, but overkill; that combo of high explosive and Thermit was intended to leave nothing to analyze. But it is possible that no one saw us lift. We were into this go-wagon, and I was goosing it less than thirty seconds after that booby trap exploded. Innocent bystanders would look at the fire, not at us. *Guilty* bystanders . . . There wouldn't be any. A professional who booby-traps a car either holes up or crosses a state line and gets lost. The party or parties who paid for the contract may be nearby, but if they are, Hilda, they're in your house."

"One of my guests?"

"Oh, shut it, Sharpie; you are never interested in the morals of your guests. If they can be depended on to throw custard pies or do impromptu strips, or some other prank that will keep your party from growing dull, that qualifies them. However, I am *not* assuming that the boss villain was at your party; I am saying that he would not be lurking where the Man might put the arm on him. Your house would be the best place to hide and watch the plot develop."

"But, guest or not, he was someone who *knew* that Dr. Burroughs would be at your party, Hilda, who knew that key fact?"

She answered with uncanny seriousness. "I don't know, Zebbie. I would have to think."

"Think hard."

"Mmm, not many. Several were invited because Jake was coming. You, for example—"

"I became aware of that."

"—but you weren't told that Jake would be present. Some were told—N. O. Brain, for example—but I can't imagine that old fool booby-trapping a car."

"I can't, either, but killers don't look like killers; they look like people. How *long* before the party did you tell Brainy that Pop would be present?"

"I told him when I invited him. Mmm, eight days ago."

I sighed. "The possibilities include not only the campus but the entire globe. So we must try to figure probabilities. Dr. Burroughs, can you think of anyone who would like to see you dead?"

"Several!"



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"Let me rephrase that. Who hates your guts so bitterly that he would not hesitate to kill your daughter as long as he got you? And also bystanders such as Hilda and me. Not that we figure, save to show that he didn't give a hoot who caught it. A deligent personality. Amoral. Who is he?"

Pop Burroughs hesitated. "Dr. Carter, disagreement between mathematicians can be extremely heated, and I am not without tault." *You're telling me, Pop!* "But these quarrels rarely result in violence. Even the death of Archimedes was only indirectly related to his—our—profession. To encompass my daughter as well. . . No, even Dr. Brain, much as I despise him, does not fit the picture."

Deety said, "Zeb, could it have been me they were shooting at?"

"You tell me. Whose dolly have you busted?"

"Hmm. I can't think of anyone who dislikes me even enough to snub me. Sounds silly, but it's true."

"It's the truth," put in Sharpie. "Deety is just like her mother was. When Jane—Deety's mother and my best friend until we lost her—and I were roommates in college, I was always getting into jams and Jane was always getting me out, and never got into one herself. A peacemaker. So is Deety."

"Okay, Deety, you're out of it. So is Hilda, and so am I, as whoever placed that booby trap would not predict that either Hilda or I would be in blast range. So it's Pop they're gunning for. Who, we don't know; why, we don't know. When we figure out why, we'll know who. Meantime, we've got to keep Pop out of range. I'm going to marry you as fast as possible, not only because you smell good but to give me a legitimate interest in this fight."

"So we go first to Reno."

"Shut up, Sharpie. We've been on course for Reno since we leveled off." I flipped on the transponder, but to the left, not to the right. It would now answer with a registered, legal signal—but not one registered to my name. This cost me some shekels I did not need but that were appreciated by a tight-lipped family man in Indo. Sometimes it is convenient not to be identified by sky cops every time one crosses a state line.

"But we aren't going to Reno. Those cowboy maneuvers were intended to deceive the eye, radar, and heat seekers. The evasion against the heat seekers—that rough turn while we were still in glide—either worked or was not needed, as we haven't had a missile up the tail. Probably wasn't needed; people who booby-trap cars aren't likely to be prepared to shoot a duo out of the sky. But I couldn't be certain; so I ducked. We may be assumed to have died in the blast and fire, and that assumption may stand up until the mess has cooled down and there is daylight to work by. Even later it may stand up, as the cops may not tell anyone that they were unable to find organic remains. But I *must* assume

that Professor Moriarty isn't fooled, that he is watching by repeater scope in his secret HQ, that he knows we are headed for Reno, and that hostiles will greet us there. So we won't go there. Now quiet, please; I must tell this baby what to do."

The computer-pilot of my car can't cook, but what she can do she does well. I called for display map, changed scale to include Utah, used the light pen to trace route—complex, as it curved around Reno to the south, back north again, made eastward over some very empty country, and passed north of Hill Air Force Range in approaching Logan. I ted in height-above-ground while giving her leeway to smooth out bumps and added one change in speed-over-ground once we were clear of Reno radar. "Got it, girl?" I asked her.

"Got it, Zeb."

"Ten-minute call, please."

"Will call you ten minutes before end of routing!"

"You're a smart girl, Gay."

"Boss, I bet you tell that to all the girls. Over."

"Roger and out, Gay." The display taded.

Certainly I could have programmed my autopilot to accept a plan in response to a punched "Execute." But isn't it pleasanter to be answered by a warm contralto? But the "smart girl" aspect lay in the fact that it took my voice to make a flight plan operative. A skilled electron pusher might find a way to override my lock, then drive her manually. But the first time he attempted to use autopilot, the car not only would not accept the program but would scream for help on all police frequencies. This unnerves car thieves.

I looked up and saw that Deety had been following this intently. I waited for some question. Instead Deety said, "She has a very pleasant voice, Zeb."

"Gay Deceiver is a very nice girl, Deety."

"And talented. Zeb, I have never before been in a Ford that can do the things this car—Gay Deceiver?—can do."

"After we're married, I'll introduce you to her more formally. It will require reprogramming."

"I look forward to knowing her better."

"You will. Gay is not exactly all Ford. Her external appearance was made by Ford of Canada. Most of the rest of her once belonged to Australian Defence Forces. But I added a few doodads. The bowling alley. The powder room. The veranda. Little homey touches."

"I'm sure she appreciates them, Zeb. I know I do. I suspect that had she not had them, we would all be as dead as canasta."

"You may be right. If so, it would not be the first time Gay has kept me alive. You have not seen all her talents."

"I'm beyond being surprised. So far as I can see, you didn't tell her to land at Logan."

"Logan seems to be the next most likely place for a reception committee. Who in Logan knows that you and your father were

going to visit Hilda?"

"No one, through me."

"Mail? Milk cartons? Newspapers?"

"No deliveries to the house, Zeb." She turned her head, "Pop, does anyone in Logan know where we went?"

"Dr. Carter, to the best of my knowledge, no one in Logan knows that we left. After having lived many years in the buzzing gossip of academe, I have learned to keep my life as private as possible."

"Then I suggest that you all ease your belts and sleep. Until ten minutes before reaching Logan there is little to do."

"Dr. Carter—"

"Better call me Zeb, Pop. Get used to it."

"Zeb it is, son. On page eighty-seven of your monograph, after the equation numbered one-twenty-one in your discussion of the rotation of six-dimensional spaces of positive curvature, you said, 'From this it is evident that,' and immediately wrote your equation one-twenty-two. How did you do it? I'm not disagreeing, sir. On the contrary! But in an unpublished paper of my own I used a dozen pages to arrive at the same transformation. Did you have a direct intuition? Or did you simply omit publishing details? No criticism, I am impressed either way. Sheer curiosity."

"Doctor, I did not write that paper. I told Deety so."

"That is what he claimed, Pop."

"Oh, come now! Two Drs. Zebulon E. Carter on one campus?"

"No. That's not my name. I'm Zebadiah J. Carter, Zebulon E.-for-Edward Carter, and called Ed, is my cousin. While he is probably listed as being on campus, he is in fact doing an exchange year in Singapore. It's not as improbable as it sounds; all male members of my family have first names starting with Z. It has to do with money and a will and a trust fund and the fact that my grandfather and his father were somewhat eccentric."

"Whereas you aren't," Hilda said in her sweetest voice.

"Quiet, dear." I turned toward Deety.

"Deety, do you want to be released from our engagement? I *did* try to tell you that you had trapped the wrong bird."

"Zebadiah—"

"Yes, Deety?"

"I intend to marry you before this night is over. But you haven't kissed me. I want to be kissed."

I unfastened my seat belt, started to unfasten hers, found that she had done so.

Deety kisses even better than she tangles.

During a break for oxygen, I asked her in a whisper, "Deety, what do your initials stand for?"

"Well . . . please don't laugh."

"I won't. But I have to know them for the ceremony."

"I know. All right, D. T. stands for Dejah Thoris."

Dejah Thoris—Dejah Thoris Burroughs—Dejah Thoris Carter! I cracked up.

I got it under control after two whoops. Too many Deety said sadly, "You said you wouldn't laugh."

"Deety darling, I wasn't laughing at your name; I was laughing at *mine*."

"I don't think Zebadiah is a funny name. I like it."

"So do I. It keeps me from being mixed up with the endless Bobs and Eds and Toms. But I didn't tell my middle name. What's a funny name starting with J?"

"I won't guess."

"Let me lead up to it. I was born near the campus of the university Thomas Jefferson founded. The day I graduated from college I was commissioned as a second looie, Aerospace Reserve. I've been promoted twice. My middle initial stands for John."

It took not quite a second for her to add it up. "Captain . . . John . . . Carter, of Virginia."

"A clean-limbed fighting man," I agreed. "Kaor, Dejah Thoris. At your service, my princess. Now and forever!"

*• A skilled electron
pusher might find a way to
override my lock,
then drive her . . . But the
car . . . would scream
for help on all police
frequencies. This
unnerves car thieves. •*

"Kaor, Captain John Carter. Hellum is proud to accept."

We fell on each other's shoulders, howling. After a bit, the howling died down and turned into another kiss.

When we came up for air, Hilda tapped me on a shoulder. "Would you let us in on the joke?"

"Do we tell her, Deety?"

"I'm not sure. Aunt Hilda talks."

"Oh, nonsense! I know your full name, and I've never told anyone. I held you at your christening. You were wet, too. At both ends. Now give!"

"All right. We don't have to get married. We already *are*. For years. More than a century."

Pop spoke up. "Eh? What's this?" I explained to him. He looked thoughtful, then nodded. "Logical." He went back to some figuring he was doing in a notebook, then looked up. "Your cousin Zebulon, is he in the telephone book?"

"Probably not, but he lives at the New Raffles."

"Excellent. I'll try both the hotel and the university. Doctor . . . son . . . Zeb, would you be so kind as to place the call? My

Comcredit code is Nero Aleph eight zero one dash seven five two dash three nine three two Zed Star Zed." (Zed Star Zed credit rating—I was not going to have to support my prospective father-in-law.)

Deety cut in. "Pop, you must *not* call Professor Carter—Zebulon Carter—at this hour."

"But, my dear daughter, it is not late at night in—"

"Of course it isn't; I can count. You want a favor from him. So don't interrupt his after-lunch nap. Mad dogs and Englishmen."

"It isn't noon in Singapore; it's—"

"Siesta time, even hotter than noon. So wait."

"Deety is right, Pop," I interrupted, "but for the wrong reasons. It doesn't seem to be a matter of life and death to call him this minute. Whereas it might be a matter of life and death—ours, I mean—to make a call from this car, especially with your credit code. Until we find out who the Boys in the Black Hats are, I advise that you place calls from the ground and from public phones that you can feed with newdollars instead of your code. Say a phone in Peoria. Or Paducah. Can it wait?"

"Since you put it that way, sir, yes, it can wait. Although I have trouble believing that anyone wishes to kill me."

"Available data indicate it."

"Agreed. But I have not yet grasped it emotionally."

"Takes a baseball bat," said Hilda. "I had to sit on him while Jane proposed to him."

"Why, Hilda my dear, that is utterly un-factual. I wrote my late beloved a polite note saying . . ."

I let them argue while I tried to add to available data. "Gay Deceiver."

"Yes, Boss?"

"News, dear."

"Ready, Boss."

"Retrieval parameters. Time: since twenty-one hundred. Area: California, Nevada, Utah. Persons: your kindly boss, dear, Jacob Burroughs, Dr. D. T. Burroughs, Miz Hilda Corners . . ." I hesitated. "Professor Neil O'Heret Brain." I felt silly adding Brainy, but there had been a row between Pop and him, and years earlier my best teacher had said, "Never neglect the so-called trivial roots of an equation," and had pointed out that two Nobel prizes had derived from "trivial" roots.

"Parameters complete, Boss?"

Dr. Burroughs touched my shoulder. "Can your computer check the news, if any, on your cousin?"

"Mmm, maybe. She stores sixty million bytes, then wipes last-in-last-out everything not placed on permanent. But her news storage is weighted sixty-forty in favor of North America. I'll try Smart Girl."

"Holding, Boss."

"Addendum. First retrieve by parameters given. Then retrieve by new program. Time: backwards from now to wipe time. Area: Singapore. Person: Zebulon Edward Carter aka Ed Carter aka Doctor Z. E. Carter aka Professor Z. E. Carter aka Professor or

Dr. Carter, of Raffles University."

"Two retrieval programs in succession. Got it, Zeb."

"You're a smart girl, Gay."

"Boss, I bet you tell that to all the girls. Over."

"Roger, Gay. Execute!"

"San Francisco (AP). A mysterious explosion disturbed the academic quiet of..." A story ending with the usual claim about an arrest being expected "momentarily" settled several points: All of us were believed dead. Our village top cop claimed to have a theory but was keeping mum—meaning that he knew even less than we did. Since we were presumed dead and since the news said nothing about an illegal lift-off and other capers that annoy sky cops, I assumed that police radar had not been looking at us until after we had become just one more blip behaving legally. The lack of mention of the absence of Gay Deceiver did not surprise me, as I had roaded in and had been last or nearly last to park and could have arrived by taxi, by public capsule, or on foot. Dr. Brain was not mentioned, and there was nothing about the row. Guests had been questioned and released. Five cars parked near the explosion had been damaged.

"Nevada: null retrieval. Utah: Salt Lake City (UPI). A fire near Utah State University campus in Logan destroyed..." Blokes in black hats again, and Deety and her Pop were dead twice over, as they were pre-

sumed to have been overcome by smoke, unable to escape. No one else hurt or missing. Fire attributed to faulty wiring. "End of first retrieval, Zeb. Second retrieval starting." Gay shut up.

I said soberly, "Pop, somebody doesn't like you."

He groaned, "Gone! All gone!"

"No copies of your papers elsewhere? And your... gadget?"

"Eh? No, no! It's *much* worse! My irreplaceable collection of pulp magazines. *Weird Tales*, *Argosy*, *All-Story*, the early Gernsbachs, *The Shadow*, *Black Mask*—ooooooh!"

"Pop really does feel bad," Deety whispered, "and I could manage tears myself. I taught myself to read from that collection. *War Aces*, *Air Wonder*, the complete Clayton Astoundings. It was appraised at two hundred thirteen thousand newdollars. Grandpop started it, Pop continued it. I grew up reading them."

"I'm sorry, Deety." I hugged her. "They should have been microfiched."

"They were. But that's not like having the magazines in your hands."

"I agree. Uh, how about the... you know, thing in the basement?"

"What 'thing in the basement'?" demanded Sharpie. "Zebbie, you sound like H. P. Lovecraft."

"Later, Sharpie. Comfort Jake; we're busy Gay!"

"Here, Zeb. Where's the riot?"

"Display map, please." We were midway over northern Nevada. "Cancel routing and cruise random. Report nearest county seat."

"Winnemucca and Elko are equidistant to one percent. Elko closer by ETA as I am now vectored eleven degrees north of Elko bearing."

"Deety, would you like to be married in Elko?"

"Zebadiah, I would love to be married in Elko."

"Elko it is, but loving may have to wait. Gay, vector for Elko and ground us, normal private cruising speed. Report ETA in elapsed minutes."

"Roger Wilco, Elko. Nine minutes, seventeen seconds."

Hilda said soothingly, "There, there, Jake darling; Mama is here," then added in her top-sergeant voice, "quit stalling, Zebbie! What thing in which basement?"

"Sharpie, you're nosy. It belonged to Pop, and now it's destroyed, and that's all you need to know."

"Oh, but it wasn't," Dr. Burroughs said. "Zeb is speaking of my continua craft, Hilda. It's safe. Not in Logan."

"What in the name of the dog is a continua craft?"

"Pop means," Deety explained, "his time machine."

"Then why didn't he say so? Everybody savvies *time machine*. George Pal's *Time Machine*—a classic goodie. I've caught it



"Did you hear someone say, 'Eureka'?"



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on the late-late early show more than once."

"Second retrieval complete." Gay Deceiver reported. "Holding."

"Report second retrieval, please."

"Singapore (Reuters). The Marston expedition in Sumatra is still unreported, according to authorities at Palembang. The party is thirteen days overdue. Besides Professor Marston and native guides and assistants, the party included Dr. Z. E. Carter, Dr. Cecil Yang, and Mr. Giles Smythe-Belisha. The minister of Tourism and Culture stated that the search will be pursued assiduously. End of retrieval."

Poor Ed. We had never been close, but he had never caused me grief. I hoped that he was shackled up with something soft and sultry, rather than losing his head to a jungle machete, which seemed more likely. "Pop, a few minutes ago I said that somebody doesn't like you. I now suspect that somebody doesn't like *n*-dimensional geometries."

"It would seem so, Zeb. I do hope your cousin is safe—a most brilliant mind! If not, it would be a great loss to all mankind."

(And to himself, I added mentally. And to me, since family duty required that I do something about it. When what I had in mind was a honeymoon.) "Gay."

"Here, Zeb."

"Addendum. Third news retrieval program. Use all parameters, second program. Add Sumatra to area. Add all proper names and titles found in second retrieval.

Run until canceled. Place retrievals in permanent memory. Report new items soonest. Start."

"Running, Boss."

"You're a good girl, Gay."

"Thank you, Zeb. Grounding Elko two minutes, seven seconds."

Deety squeezed my hand harder. "Pop, as soon as I'm legally Mrs. John Carter, I think we should all go to Snug Harbor."

"Eh? Obviously."

"You, too, Aunt Hilda. It might not be safe for you to go home."

"Change in plans, dear. It's going to be a double wedding. Jake. Me."

Deety looked alert but not displeased. "Pop?"

"Hilda has at last consented to marry me, dear."

"Rats," said Sharpie. "Jake has never asked me in the past and didn't this time; I simply told him. Hit him with it while he was upset over losing his comic books and unable to defend himself. It's necessary, Deety. I promised Jane I would take care of Jake, and I have—through you, up to now. But from here on you'll be taking care of Zebbie, keeping him out of trouble, wiping his nose. So I've got to hog-tie Jake into marriage to keep my promise to Jane. Instead of sneaking into his bed from time to time as I've done in the past."

"Why, Hilda dear, you have never been in my bed!"

"Don't shame me in front of the children.

Jake. I gave you a test run before I let Jane marry you, and don't you dare deny it."

Jake shrugged helplessly "As you wish, dear Hilda."

"Aunt Hilda, do you love Pop?"

"Would I marry him if I didn't? I could carry out my promise to Jane more simply by having him committed to a shrink factory. Deety, I've loved Jake longer than you have. *Much!* But he loved Jane, which shows that he is basically rational despite his weird ways. I won't try to change him, Deety. I'm simply going to see to it that he wears his overshoes and takes his vitamins, as you've been doing. I'll still be Aunt Hilda, not Mother. Jane was and is your mother."

"Thank you, Aunt Hilda. I thought I was as happy as a woman can be, getting Zebadiah. But you've made me still happier. No worries."

(I had worries. Blokes with black hats and no faces. But I didn't say so, as Deety was snuggling closer and assuring me that it was all right because Aunt Hilda wouldn't fib about loving Pop, but I should ignore that gutt about her sneaking into Pop's bed—on which I had no opinion and less interest.) "Deety, where and what is Snug Harbor?"

"It's a nowhere place. A hideout. Land Pop leased from the government when he decided to build his time twister instead of just writing equations. But we may have to wait for daylight. Unless . . . Can Gay Deceiver home on a given latitude and longitude?"

"She certainly can! Precisely."

"Then it's all right. I can give it to you in degrees, minutes, and fractions of a second."

"Grounding," Gay warned us.

The Elko County clerk did not object to getting out of bed and seemed pleased with the century note I slipped him. The county judge was just as accommodating and pocketed her honorarium without glancing at it. I stammered but managed to say, "I, Zebadiah John, take thee, Dejah Thoris . . ." Deety went through it as solemnly and perfectly as if she had rehearsed it, while Hilda snittled throughout the ceremony.

A good thing that Gay came home on a pin point; I was in no shape to drive, even in daylight. I had her plan her route, too, a dogleg for minimum radar and no coverage at all for the last hundred-odd kilometers to this place in the Arizona strip north of the Grand Canyon. But I had her hover before grounding—I being scared silly until I was certain there was not a third fire there.

A cabin, fireproof, with underground parking for Gay. I relaxed.

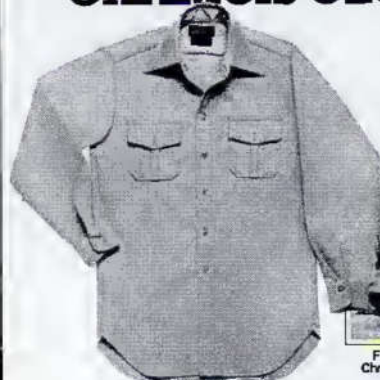
We split a bottle of chablis. Pop seemed about to head for the basement. Sharpie tromped on it, and Deety ignored it.

I carried Deety over the threshold into her bedroom, put her gently down, faced her. "Dejah Thoris—"

"Yes, John Carter?"

"I did not have time to buy you a wedding

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present, but I do have something for you."

"I need no present from my captain."

"Hear me out, my princess. My Uncle Zamir did not have as fine a collection as your father had, but may I gift you with a complete set of Clayton Astoundings—"

She suddenly smiled.

"—and first editions of the first six Oz books, quite worn but with the original color plates? And a first in almost mint condition of *A Princess of Mars*?"

The smile became a grin, and she looked nine years old. "Yes!"

"Would your father accept a complete set of *Weird Tales*?"

"Would he! Northwest Smith and Jirel of Joiry? I'm going to borrow them, or he can't look at my Oz books. I'm stubborn, I am. And selfish. And mean!"

"'Stubborn' stipulated. The others denied."

Deety stuck out her tongue. "You'll find out." Suddenly her face was solemn. "But I sorrow, my prince, that I have no present for my husband."

"But you have!"

"I do?"

"Yes. Beautifully wrapped and making me dizzy with heavenly fragrance."

"Oh." She looked solemn but very happy.

"I would like my husband to unwrap me. Please?"

I did.

That is all anyone is ever going to know about our wedding night.

IV

Deety

I woke early as I always do at Snug Harbor, wondered why I was ecstatically happy, then remembered and turned my head. My husband—*husband!*—what a heart-filling word—my husband was sprawled facedown beside me, snoring softly and drooling onto his pillow. I held still, thinking how beautiful he was, how gently strong and gallantly tender.

I was tempted to wake him, but I knew that my darling needed rest. So I eased out of bed and sneaked noiselessly into my bathroom—*our* bathroom!—and quietly took care of this and that. I did not risk drawing a bath although I needed one. I have a strong body odor that calls for at least one sudsy bath a day, two if I am going out that evening, and this morning I was certainly whiff as a polecat.

I made do with a stand-up bath by letting water run in a noiseless trickle into the basin. I would grab that proper bath after my captain was awake, meanwhile, I would stay downwind.

I pulled on shorts, started to tie on a halter, stopped, and looked in the mirror.

Suddenly I wondered why I was putting on a halter. The day was going to be hot. While Pop is so cubical about some things that he turns up at the corners, skin is not one of them. (Possibly he had been, then Mama had gently gotten her own way.) I like to be naked and usually am at Snug Harbor,

weather permitting. Pop is almost as casual. Aunt Hilda was family-by-choice; we had often used her pool and never with suits (the pool was screened for that purpose).

That left just my lovely new husband, and if there was a square centimeter of me he had not examined (and praised), I could not recall it. Zebadiah is easy to be with, in bed or out. After our hasty wedding I was slightly tense lest he ask me when and how I had mislaid my virginity. But when the subject could have come up, I forgot it and he apparently never thought about it. I was the lusty wench I have always been, and he seemed pleased—I *know* he was.

So why was I lying on this teal hammock? I was—but *why*?

Because two things equal to the same thing are never equal to each other. Basic mathematics. If you select the proper sheal of postulates. People are not abstract symbols. I could be naked with any one of them but not with all three.

I felt a twinge that Pop and Aunt Hilda might be in the way on my honeymoon, but then I realized that Zebadiah and I were just as much in the way on theirs. So I stopped worrying. It would work itself out.

Took one last look in the mirror, saw that my scrap of halter, like a good evening gown, made me nakeder than skin would have. My nipples popped out; I grinned and stuck out my tongue at them. They stayed up; I was happy.

I went through and closed after me two soundproof doors, then no longer had to keep quiet. Pop does not tolerate anything shoddy; if it doesn't work properly, he fixes it. Pop's B.S. was in mechanical engineering, his M.S. in physics, his Ph.D. in mathematics; there isn't *anything* he can't design and build. A second Leonardo da Vinci—or a Paul Dirac.

No one in the everything room. I decided not to head for the kitchen end yet; if the others slept a bit longer, I could get in my morning tone-up. No violent exercise this morning, mustn't get more whiff than I was—just controlled limbering. Stretch high, then palms to the floor without bending knees—ten is enough. Vertical splits, both legs, then the same to the floor with my forehead to my shin, first right, then left.

I was doing a back bend when I heard, "Ghastly. The battered bride. Deety, stop that."

I continued into a backwards walkover and stood up, facing Pop's bride. "Good morning, Aunt Hillbilly." I kissed and hugged her. "Not battered. Bartered, maybe."

"Battered," she repeated, yawning. "Who gave you those bruises? What's his name?—your husband."

"Not a bruise on me, and you've known his name longer than I have."

"Mmm, a futile discussion. So my problem child is adequate?"

"Well . . . he's not a member of the Ku Klux Klan—"

"I never thought he was! Zebbie isn't that

sort of person anyhow."

"—but he's a wizard under a sheet!"

Aunt Hilda looked startled, then guffawed. "I surrender. We're both the happiest women in the world."

"And the luckiest. Aunt Nanny Goat, that robe of Pop's must be too hot. I'll get something of mine. How about a tie-on, fit-anybody bikini?"

"Thanks, dear, but you might wake Zebbie." Aunt Hilda opened Pop's robe, held it wide, and fanned herself with it. I looked at her with new eyes. She's had three or four term contracts, no children. At forty-two, her face looks thirty-five, but from her collarbones down she could pass for eighteen. Little bitty teats—I had more at twelve. Flat belly and lovely legs. A china doll; makes me feel like a giant.

She added, "If it weren't for your husband, I would simply wear this old hide. It is hot."

"If it weren't for *your* husband, so would I," I retorted.

"Jacob? Deety, he changed your diapers. I know how Jane reared you. True modesty, no false modesty."

"It's not the same, Aunt Hilda. Not today."

"No, it's not. You always did have a wise head, Deety. Women are tough-minded, men are not; we have to protect them while we pretend to be fragile ourselves, to build up their fragile egos. But I've never been good at it. I like to play with matches."

"Aunt Hilda, you are *very* good at it, in your own way. I'm certain Mama knows what you've done for Pop and blesses it and is happy for Pop. For all of us—all five of us."

"Don't make me cry, Deety. Let's break out the orange juice; our men will wake any time. First secret of living with a man: Feed him as soon as he wakes."

"So I know."

"Yes, of course you know. Ever since we lost Jane. Does Zebbie know how lucky he is? Does he have any idea?"

"He says so. I'm going to try hard not to disillusion him."

V

Jake

I woke in drowsy euphoria, became aware that I was in bed in our cabin that my daughter calls Snug Harbor, then woke completely and looked at the other pillow—the dent in it. Not a dream! Euphoric for the best of reasons!

Hilda was not in the bath, but my toothbrush was damp. I smiled at this. Logical, as Hilda now had any germs I was harboring. And Hilda, for all her playfulness, is no-nonsense practical. She faces danger without a quail (had done so last night), but she would say, "*Gesundheit!*" to an erupting volcano even as she fled from it.

I showered, shaved, and brushed my teeth in nine minutes and dressed in under nine seconds as I simply wrapped around my waist a terry-cloth sarong Deety had bought for me. The day promised to be a

scorching. Even that hip wrap was a concession to propriety. That is, I did not know my new son-in-law well enough to subject him abruptly to our casual ways; it might offend Deety.

I was the last up and saw that all had made much the same decision. Deety was wearing what amounted to a bikini minimum (indecently decent!), and my bride was "dressed" in a tie-on job belonging to Deety. The tie-ties had unusually large bows; Hilda is tiny, my daughter is not. Zeb was the only one fully dressed: an old pair of working shorts, a worn-out denim shirt Deety had confiscated, and his evening shoes. He was dressed for the street in any western town save for one thing: I'm built like a pear; Zeb is built like the Gray Lensman.

My shorts fitted him well enough—a bit loose—but his shoulders were splitting the shirt's seams. He looked uncomfortable.

I took care of amenities—a "good morning" to all, a kiss for my bride, one for my

● *Poor Ed. We had never been close, but he had never caused me grief. I hoped that he was shackled up with something . . . sultry, rather than losing his head to a machete.* ●

daughter, a handshake for my son-in-law—good hands, callused. Then I said, "Zeb, take that shirt off. It's hot and getting hotter. Relax. This is your home."

"Thanks, Pop." Zeb peeled off my shirt. Hilda stood up on her chair, making her about as tall as Zeb. "I'm a militant, women's-rights gal," she announced, "and a wedding ring is not a ring in my nose—a ring that you have not yet given me, you old goat."

"When have I had time? You'll get one, dear—first chance."

"Excuses, excuses! Don't interrupt when I'm orating. Sauce for the gander is no excuse for goosing the goose. If you male chauvinist pigs—I mean goats—can dress comfortably, Deety and I have the same privilege." Whereupon my lovely little bride untied that bikini top and threw it aside like a stripper.

"What's for breakfast?" asked Pooch. I misquoted.

I was not answered. Deety made me proud of her for the nth time. For years she had consulted with me, at least with her eyes, on "policy" decisions. Now she looked not at me but at her husband. Zeb

was doing Old Stone Face, refusing assent or dissent. Deety stared at him, gave a tiny shrug, reached behind her, and untied or unsnapped something and discarded her own top.

"I said, 'What's for breakfast?'" I repeated.

"Greedy gut," my daughter answered. What we were offered, as fast as Deety could pour batter and Hilda could serve, was a gourmet specialty that would enrage a *cordon bleu* but that, for my taste, is ambrosia: a one-eyed Texas stack—a tall stack of thin, tender buttermilk pancakes to Jane's recipe, supporting one large egg, up and easy, surrounded by hot sausage, and the edifice drowned in melting butter and hot maple syrup, with a big glass of orange juice and a big mug of coffee on the side.

Zeb ate two stacks. I concluded that my daughter would have a happy marriage.

VI

Hilda

Deety and I washed dishes, then soaked in her tub and talked about husbands. We giggled and talked with the frankness of women who trust each other and are sure that no men can overhear. Do men talk that openly in parallel circumstances? From all I have been able to learn in after-midnight horizontal conversations, all passion spent, men do *not*. Or not men I would take to bed. Whereas a "perfect lady" (which Jane was, Deety is, and I can simulate) will talk with another "perfect lady" she trusts in a way that would cause her father, husband, or son to faint.

We quit yakking and looked for our men. Deety said that they were certain to be in the basement. "Aunt Hilda, I don't go there without invitation. It's Pop's *sanctum sanctorum*."

"You're warning me not to risk a faux pas?"

"I'm his daughter; you're his wife. Not the same."

"Well, he hasn't told me not to . . . and today he'll forgive me, it ever. Where do you hide the stairs?"

"That bookcase swings out."

"Be darned! For a so-called cabin, this place is loaded with surprises. A bidet in each bath didn't startle me; Jane would have required them. Your walk-in freezer startled me only by being big enough for a restaurant. But a bookcase concealing a priest's hole . . . As Great-Aunt Nettie used to say, I do declare!"

"You should see our septic tank—yours, now."

"I've seen septic tanks. Pesky things—always need pumping at the most inconvenient time."

"This one won't have to be pumped. Over three hundred meters deep. An even thousand feet."

"For the love of . . . *Why?*"

"It's an abandoned mine shaft below us that some optimist dug a hundred years back. Here was this big hole; so Pop used

it. There is a spring farther up the mountain. Pop cleaned that out, covered it, concealed it, put pipe underground, and we have lavish pure water under pressure. The rest of Snug Harbor Pop designed mostly from prefab catalogs, fireproof and solid and heavily insulated. We have—you have, I mean—this big fireplace and the little ones in the bedrooms, but you won't need them, other than for homeyness. Radiant heat makes it skin-comfortable even in a blizzard."

"Where do you get your power? From the nearest town?"

"Oh, no! Snug Harbor is a hideout; nobody but Pop and me, and now you and Zebadiah, knows it's here. Power packs, Aunt Hilda, and an inverter in a space behind the back wall of the garage. We bring in power packs ourselves and take them out the same way. Private. Oh, the leasehold record is buried in a computer in Washington or Denver, and the federal rangers know the leaseholds. But they don't see us if we see or hear them first. Mostly they cruise on past. Once one came by on horseback. Pop fed him beer out under the trees. From outside this looks like just a prefab, a living room and two shed-roof bedrooms. Nothing to show that important parts are underground."

"Deety, I'm beginning to think that this place—this *cabin*—cost more than my townhouse."

"Uh... probably."

"How do you swing back this bookcase?"

"Switch on the cove lights, then turn on the cold water at the sink. Then switch off the cove lights, then turn off the water—in that order."

"... "Curiouser and curiouser," said Alice."

The bookcase closed behind us and was a door with a knob on the upper landing side. The staircase was wide, treads were broad and nonskid, risers gentle, guard rails on both sides—not the leg breakers most houses have as cellar stairs. Deety went down beside me, holding my hand like a child needing reassurance.

The room was beautifully lighted, well ventilated, and did not seem like a basement. Our men were at the far end, bent over a table, and did not appear to notice us. I looked around for a time machine, could not spot it—at least, not anything like George Pal's or any I had ever read about. All around was machinery. A drill press looks the same anywhere, and so does a lathe, but others were strange—except that they reminded me of machine shops.

My husband caught sight of us, stood up, and said, "Welcome, ladies!"

Zebbie turned his head and said sharply, "Late to class! Find seats, no whispering during the lecture, take notes; there will be a quiz at eight o'clock tomorrow morning. If you have questions, raise your hands and wait to be called on. Anyone who misbehaves will remain after class and wash the chalk boards."

Deety stuck out her tongue, sat down

quietly. I rubbed his brush cut and whispered an indecency into his ear. Then I kissed my husband and sat down.

My husband resumed talking to Zebbie. "I lost more gyroscopes that way."

I held up my hand. My husband said, "Yes, Hilda dear?"

"Monkey Ward's sells gyro tops. I'll buy you a gross."

"Thank you, dearest, but these weren't that sort. They were made by Sperry Division of General Foods."

"So I'll get them from Sperry."

"Sharpie." Zeb put in, "you're hankering to clean the erasers, too."

"Just a moment, son. Hilda may be the perfect case to find out whether or not what I have tried to convey to you—and which really can't be conveyed save in the equations your cousin Zebulon used, a mathematics you say is unfamiliar to you—"

"Completely unfamiliar!"

"—but which you appear to grasp as mechanics. Would you explain the concept

*• I stopped worrying.
It would work . . . out. Took
one last look
in the mirror, saw that my
scrap of a halter,
like a good evening gown,
made me naked
than skin would have. . . •*

to Hilda? If she understands it, we may hypothesize that a continua craft can be designed to be operated by a nontechnical person."

"Sure," I said scornfully, "poor little me, with a button for a head. I don't have to know where the electrons go to use holovision. I just twist knobs. Go ahead, Zebbie. Take a swing at it. I dare you."

"I'll try," Zebbie agreed. "But, Sharpie, don't chatter; keep your comments to the point, or I'll ask Pop to give you a fat lip."

"He wouldn't dast!"

"So? I'm going to give him a horsewhip for a wedding present—besides the *Weird Tales*. Jake; you get those, too. But you need a whip. Attention, Sharpie."

"Yes, Zebbie. Same to you, doubled."

"Do you know what *precess* means?"

"Certainly. Precession of the equinoxes. Means that Vega will be the North Star when I'm a great-grandmother. Thirty thousand years or some such."

"Correct in essence. But you're not even a mother yet."

"You don't know what happened last night. I'm an expectant mother. Jacob wouldn't dare use a whip on me."

My husband looked startled but pleased, and I felt relieved. Zebbie looked at his own bride. Deety said solemnly, "It is possible, Zebadiah. Neither of us was protected; each was ovulating or close to ovulation. Hilda is blood type B Rhesus positive and my father is AB positive. I am A Rhesus positive. May I inquire yours, sir?"

"I'm O positive. Uh, I may have shot you down the first salvo?"

"It would seem likely. But . . . does this meet with your approval?"

"Approval!" Zebbie stood up, knocking over his chair. "Princess, you could not make me happier! Jake! This calls for a toast!"

My husband stopped kissing me. "Unanimous! Daughter, is there champagne chilled?"

"Yes, Pop."

"Hold it!" I said. "Let's not get excited over a normal biological function. Deety and I don't *know* that we're caught; we just hope so. And—"

"So we try again," Zebbie interrupted. "Deety, what's your cycle?"

"Twenty-eight and a half days, Zebadiah. My rhythm is pendulum steady."

"Mine's twenty-seven; Deety and I just happen to be in step. But I want that toast at dinner and a luau afterwards; it might be the last for a long time. Deety, do you get morning sickness?"

"I don't know; I've never been pregnant . . . before."

"I have and I do, and it's miserable. Then I lost the naked little grub after trying hard to keep it. But I'm not going to lose this one! Fresh air and proper exercise and careful diet and nothing but champagne for me tonight, then not another drop until I know. In the meantime, Professors, may I point out that class is in session? I want to know about time machines, and I'm not sure I could understand with champagne buzzing my buttonhead."

"Sharpie, sometimes you astound me."

"Zebbie, sometimes I astound myself. Since my husband builds time machines, I want to know what makes them tick. Or at least which knobs to turn. He might be clawed by the Bandersnatch, and I would have to pilot him home. Get on with your lecture."

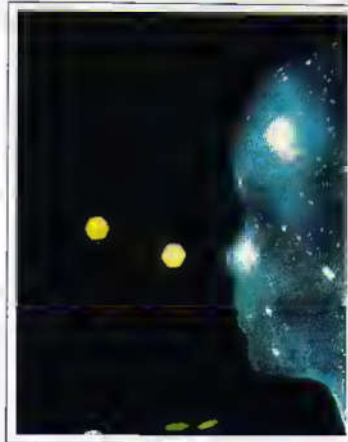
"I read you loud and clear."

Class resumed. "Sharpie, can you explain precession in gyroscopes?"

"Well, maybe. Physics One was required, but that was a long time ago. Push a gyroscope and it doesn't go the way you expect, but ninety degrees from that direction so that the push lines up with the spin. Like this—" I pointed a forefinger like a little boy saying, "*Bang!* You're dead!"

"My thumb is the axis, my forefinger represents the push, the other fingers show the rotation."

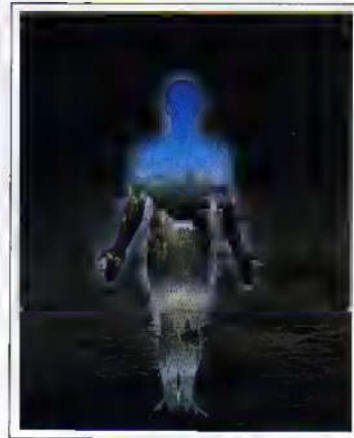
"Go to the head of the class. Now—think hard!—suppose we put a gyroscope in a frame, then impress equal forces at *all three* spatial coordinates at once, what would it do?"



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I tried to visualize it. "I think it would either faint or drop dead."

"A good first hypothesis. According to Jake, it disappears."

"They do disappear. Aunt Hilda. I've watched it happen several times."

"But where do they go?"

"I can't follow Jake's math; I have to accept his transformations without proof. But it is based on the notion of six space-time coordinates, three of space, the usual three that we see—marked x , y , and z —and three time coordinates, one marked t like this (t), one marked τ , Greek alphabet (τ), and the third from the Cyrillic alphabet, teh (\bar{m})."

"Looks like an m with a macron over it."

"So it does, but it's what the Russians use for t ."

"No, the Russians use 'chai' for tea. In thick glasses with strawberry jam."

"Stow it, Sharpie. So we have x , y , and z ; t , τ , and teh , six dimensions. It is basic to the theory that all are at right angles to each other, and that any one may be swapped for any of the others by rotation, or that a new coordinate may be found (not a seventh but replacing any of the six) by translation, say, τ to τ prime by displacement along x ."

"Zebbie, I think I fell off about four coordinates back."

My husband suggested, "Show her the caltrop, Zeb."

"Good idea." Zeb accepted a widget

from my husband and put it in front of me. It looked like the jacks I used to play with when I was a little girl, but there were not enough things sticking out—four instead of six. Three touched the table, a tripod; the fourth stuck straight up.

Zeb said, "This is a weapon, invented centuries ago. The points should be sharp, but these have been tiled down." He flipped it, let it fall to the table. "No matter how it falls, one prong is vertical. Scatter them in front of cavalry and the horses go down—discouraging. They came into use again in World Wars One and Two against anything with pneumatic tires—bicycles, motorcycles, trucks, and so forth. Big enough, and they disable tanks and tracked vehicles. A small sort can be whittled from thornbushes for guerrilla warfare—usually poisoned and quite nasty."

"But here this lethal toy is a geometrical projection, a drawing of the coordinates of a four-dimensional space-time continuum. Each spike is exactly ninety degrees from every other spike."

"But they aren't," I objected. "Each angle is more than a right angle."

"I said it was a *projection*. Sharpie, it's an isometric projection of four-dimensional coordinates in three-dimensional space. That distorts the angles, and the human eye is even more limited. Cover one eye and hold still, and you see only two dimensions. The illusion of depth is a construct of the brain."



"I'm not very good at holding still—"

"No, she isn't," agreed my bridegroom, whom I love dearly and at that instant could have choked.

"But I can close both eyes and *feel* three dimensions with my hands."

"Good! Close your eyes and pick this up and think of the prongs as the four directions of a four-dimensional space. Does the word *tesseract* mean anything to you?"

"My high-school geometry teacher showed us how to construct them—projections—with modeling wax and toothpicks. Fun. I found other four-dimensional figures that were easy to project. And a number of ways to project them."

"Sharpie, you must have had an exceptional geometry teacher."

"In an exceptional geometry class. Don't faint, but I was grouped with what they called overachievers after it became 'undemocratic' to call them gifted children."

"Be durned! Why do you always behave like a fritterhead?"

"Why don't you ever look beneath the surface, young man! I laugh because I dare not cry. This is a crazy world, and the only way to enjoy it is to treat it as a joke. That doesn't mean I don't read and can't think. I read everything from Giblett to Hoyle, from Sartre to Pauling. I read in the tub, I read on the john, I read in bed, I read when I eat alone, and I would read in my sleep if I could keep my eyes open."

Zebbie said, "Attention, class. The two prongs of the caltrop painted blue represent our three-dimensional space of experience. The third prong, painted yellow, is the t -time we are used to. The red fourth prong simulates both τ -time and teh -time, the unexplored time dimensions necessary to Jake's theory. Sharpie, we have condensed six dimensions into four; then either we work by analogy into six or we have to use math that apparently nobody but Jake and my cousin Ed understands. Unless you can think of some way to project six dimensions into three. You seem to be smart at such projections."

I closed my eyes and thought hard. "Zebbie, I don't think it can be done. Maybe Escher could have done it."

"It can be done, my dearest," answered my dearest. "but it is unsatisfactory. Even with a display computer with capacity to subtract one or more dimensions at a time. A superhypertesseract—a to the sixth power—has too many lines and corners and planes and solids and hypersolids for the eye to grasp. Cause the computer to subtract dimensions, and what you have left is what you already knew. I fear it is an innate incapacity of visual conception in the human brain."

"I think Pop is right," agreed Deety. "I worked hard on that program. I don't think the late great Dr. Marvin Minsky could have done it better in flat projection. Holovision? I don't know. I would like to try it if I ever get my hands on a computer with holovideo display and the capacity to add, subtract, and rotate six coordinates."

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"But why six dimensions?" I asked. "Why not five? Or even four, since you speak of rotating them interchangeably?"

"Jake?" said Zeb.

My darling looked fussed. "It bothered me that a space-time continuum seemed to require three space dimensions but only one time dimension. Granted that the universe is what it is, nevertheless nature is filled with symmetries. Even after the destruction of the parity principle, scientists kept finding new ones. Philosophers stay wedded to symmetry, but I don't count philosophers."

"Of course not," agreed Zeb. "No philosopher allows his opinions to be swayed by facts. He would be kicked out of his guild. Theologians, the lot of them."

"I concur, Hilda, my darling, after I found a way to experiment, it turned out that six dimensions existed. Possibly more, but I see no way to reach them."

"Let me see," I said. "If I understood earlier, each dimension can be swapped for any other."

"By ninety-degree rotation, yes."

"Wouldn't that be the combinations taken four at a time out of a set of six? How many is that?"

"Fifteen," Zebbie answered.

"Goodness! Fifteen whole universes? And we use only one?"

"No, no, my darling! That would be ninety-degree rotations of one Euclidean universe. But our universe, or universes, has been known to be non-Euclidean at least since 1919. Or 1886 if you prefer. I stipulate that cosmology is an imperfect discipline. Nevertheless, for consideration that I cannot state in nonmathematical terms, I was forced to assume a curved space of positive radius—that is to say, a closed space. That makes the universes possibly accessible to us either by rotation or by translation of *this* number." My husband rapidly wrote three sixes.

"Six sixty-six," I said wonderingly. "The Number of the Beast."

"Eh? Oh! The Revelation of Saint John the Divine. But I scrawled it sloppily. You took it that I wrote 666, but what I intended to write was $(6^6)^6$: six raised to its sixth power, and the result in turn raised to its sixth power. That number is *this*: 1.03144×10^{28} , or, written in full, 10,314,424,798,490,435,546,171,949,056. That's more than ten million sextillion universes in our group."

What can one say to that? Jacob went on, "Those universes are our next-door neighbors, one rotation or one translation away. But if one includes combinations of rotation and translation—think of a hyperplane slicing through superhypercontinua not at the point of here-now—the total becomes innumerable. Not infinite, because infinity has no meaning. Uncountable. Not subject to manipulation by mathematics thus far invented. Accessible to continua craft, but no known way to count them."

"Pop—"

"Yes, Deety?"

"Maybe Aunt Hilda hit on something. Agnostic as you are, you nevertheless keep the Bible around as history and poetry and myth."

"Who said I was agnostic, my daughter?"

"Sorry, sir. I long ago reached that conclusion because you won't talk about it. Wrong of me. Lack of data never justifies a conclusion. But this key number—one-point-oh-three-one-four-four-plus times ten to its twenty-eighth power—perhaps that is the Number of the Beast."

"What do you mean, Deety?"

"That Revelation isn't history, it's not good poetry, and it's not myth. There must have been some reason for a large number of learned men to include it while chucking out several dozen gospels. Why not make a first hypothesis with Occam's Razor and read it as what it purports to be? Prophecy."

"Hmm. The shelves under the stairs, next to Shakespeare. The King James Version, never mind the three others."

Deety was back in a moment with a

•The room was beautifully lighted, well ventilated, and did not seem like a basement. . . . I looked around for a time machine, could not spot . . . any I had ever read about. •

well-worn black book, which surprised me. I read the Bible for my own reasons, but it never occurred to me that Jacob would. We always marry strangers.

"Here," said Deety. "Chapter thirteen, verse eighteen: 'Here is wisdom. Let him that hath understanding count the number of the beast: for it is the number of a man; and his number is six hundred threescore and six.'"

"That can't be read as exponents, Deety."

"But this is a translation, Pop. Wasn't the original in Greek? I don't remember when exponents were invented, but the Greek mathematicians of that time certainly understood powers. Suppose the original read 'Zeta, Zeta, Zeta,' and those scholars, who weren't mathematicians, mis-translated it as six hundred and sixty-six?"

"Uh . . . moon-drift, daughter."

"Who taught me that the world is not only stranger than we imagine but stranger than we can imagine? Who has already taken me into two universes that are *not* this one and brought me safely home?"

"Wait a half!" Zebbie said. "You and Pop have tried the time-space machine?"

"Didn't Pop tell you? We made one minimum translation. We didn't seem to have gone anywhere, and Pop thought he had failed. Until I tried to look up a number in the phone book. No *J* in the book. No *J* in the *Britannica*. No *J* in any dictionary. So we popped back in and Pop returned the verniers to zero and we got out and the alphabet was back the way it ought to be and I stopped shaking. But our rotation was even more scary, and we almost died. Out in space with blazing stars—but air was leaking out, and Pop just barely put it back to zero before we passed out . . . and came to, back here in Snug Harbor."

"Jake." Zebbie said seriously. "That gadget has got to have more fail-safes, in series, with deadman switches for homing." He frowned. "I'm going to keep my eye open for both numbers, six sixty-six and the long one. I trust Deety's hunches. Deety, where is the verse with the description of the Beast? It's somewhere in the middle of the chapter."

"Here it is. 'And I beheld another beast coming up out of the earth; and he had two horns like a lamb, and he spake as a dragon.'"

"Hmm. I don't know how dragons speak. But if something comes up out of the earth and has two horns . . . and I see or hear either number—I'm going to assume that he has a 'black hat' and try to do unto him before he does unto us. Deety, I'm peaceable by policy, but two near-misses are too many. Next time, I shoot first."

I would as lief Zebbie hadn't mentioned black hats. Hard to believe that someone was trying to kill anyone as sweet and innocent and harmless as my darling Jacob. But they were, and we knew it.

I said, "Where is this time machine? All I've seen is a claptrap."

"Caltrop, Aunt Hilda. You're looking at the space-time machine."

"Huh? Where? Why aren't we in it and going somewhere *fast*? I don't want my husband killed; he's practically brand-new."

"Sharpie, stop the chatter," Zebbie put in. "It's on that bench, across from you."

"All I see is a portable sewing machine."

"That's it."

"What? How do you get inside? Or do you ride it like a broom?"

"Neither. You mount it rigidly in a vehicle—one airtight and watertight by strong preference. Pop had it mounted in their car—not quite airtight and now kaput. Pop and I are going to mount it in Gay Deceiver, which *is* airtight. With better fail-safes."

"Much better fail-safes, Zebbie," I agreed.

"They will be. I find that being married makes a difference. I used to worry about my own skin. Now I'm worried about Deety's. And yours. And Pop's. All four of us."

"Hear, hear!" I agreed. "All for one, and one for all!"

"Yup," Zebbie answered. "Us four, no more. Deety, when's lunch?"

To be continued next month

ROCKET

CONTINUED FROM PAGE 75

overrides: engine cut-off, manual capsule release, escape release. "It's got a big red panic button, but the tail-safe one won't be hooked up."

Below the astronaut, but still in the pressurized shell, ride the autopilot, the telemetry equipment, radio transceiver, radar transponder, controls for stabilization, attitude indicators, inverter oxygen and compressed air bottles, capsule lock, and release mechanisms.

The language of all this is downright obscene. "The autopilot is a strapdown system using HIG gyros and pendulous accelerometers," he says, "a real beauty capable of being programmed to hold either a constant angle of ascent or a gravity turn after the initial kick."

How is the ship steered? "The gyro and the accelerometer signals are combined with a feedback signal from the thrust-chamber-position sensors."

The rocket's propulsion system, the contained explosion, is built around four Rocketdyne LR101 engines. They are, in effect, the inspiration for the whole trip. "When I saw those Atlas engines in the junkyard, I had no fixed idea of what I might do with them, but I just couldn't bear to see them bust 'em up. For twenty-five bucks, I said, I'll buy 'em, even if I have to use 'em for paperweights."

He rescued them from a scrap dealer in Ontario, California, who specializes in melting down stainless steel, even though, as Truax pointed out to the scrap man, the engines were not stainless steel but nickel-plated, which gives the appearance of stainless steel.

Originally built as vernier engines for the Thor and Atlas, they were used after the main engines cut out to give that last tweak to the velocity, to give that last increment of speed to the missile that allowed it to hit its target with finite precision. Giving 1,000 pounds of thrust apiece, the engines were manifolded together by Truax to yield 4,000 pounds of thrust, a comfortable margin of thrust over weight. The gleaming engines look like large upside-down wine carafes ready to pour out fire.

The tour goes on, valve by valve. Truax explains how these engines receive their flow of liquid oxygen (LO₂) and Jet-A kerosene, an ordinary jet kerosene that can be stored at room temperature and is a slightly cruder grade of the same stuff that fired the first stage of the Apollo Saturn 5, the largest rocket ever built.

The engine sits on four load cells, rigidly attached to the launch platform. The hold-down fittings, in the center of the arrangement of the engines, restrain the rocket, even after the fires have started, holding it down until the thrust builds up, reaches a power equal to the weight of the rocket, and surpasses it by a comfortable margin. Then the instrumentation says, All systems go, and the bird rises.

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All the rocket's valves, poppets, and joints have been altered slightly to fit the lovely pieces of discarded technology. Unlike NASA designs, very little of the X-1 is of "ad hoc" design. "Overengineering, that's where your tax dollar goes," says Truax. "For maximum effectiveness, one should do calculations on important issues, apply rules of thumb on others, and use a calibrated eyeball on the rest. When to do which is the essence of engineering judgment." He squints a calibrated eyeball into the sunlight.

"I try to use things that have been well developed, as close to the original as possible." The LO_2 and kerosene are pushed into the thrust chambers by the pressure of liquid helium held at -250°F in a titanium sphere. There it is on the garage floor, a shining beach ball of incredible strength, able to hold up to 5,000 pounds per square inch (psi) of freezing liquid gas. It was initially installed in a Titan 1. "And here's the helium regulator, a nice little pressure valve at one hundred twenty-five psi. I traded a junkman some turbines for it. It's gold-plated, off the Lockheed Agena."

The electronics and telemetry overflow from a toolroom offside the carport, a wired cave of oscilloscopes, graphs, galvanometers, and other gadgets. The oscillograph, originally created for the B-52 and used to monitor H-bombs prior to their being dropped, cost \$14,000 new. Truax picked one up—and the paper (usually \$80 a roll) and a viewing table—for \$75. It and other oscillographs will be used to monitor chamber pressures, feed, and tank pressures.

"And my pièce de résistance!" crows the rocketman. The inertial platform unit—balls within balls of circuitry and floating, rotating gyroscopes that measure latitude, longitude, altitude, pitch, roll, and yaw.

"They were initially in the X-15," Truax beams, "still the world's fastest plane, but their development was started even before that, for the Dyna-Soar." That aptly named but still diabolic weapon was made obsolete by the ICBMs, but it still remains one of the first reusable winged rockets. It was a skipbomber that was designed in the Fifties as a manned gliding vehicle on top of a Titan 3 that would drop a bomb on the city of your choice, skip back up to the fringe of space, circle the world, and return to base.

"One out of the four X-15s crashed, and I got the three other units at thirty-five dollars apiece. I paid more for the mailing costs. And the program that developed them cost twenty-five million dollars."

And on it goes: "These pressure transducers cost me one hundred dollars for a whole mess of 'em. I dickered. They're usually three hundred and fifty dollars apiece. The gyro flight package, that's from the Polaris."

Truax's single largest expense will be the propellant tanks. They will be farmed out. "We can't be profligate with our tank rates," he says. The tanks will be fabricated from grade-250 maraging steel, an incredibly

strong alloy capable of handling up to 250,000 psi before it begins to yield. (U.S. Steel makes the thinnest sheets of this material ever rolled, and they're still too thick for Truax's purposes.) And while his potential welding company can furnish him with .078-inch thickness, he wants it milled down to an incredible .05 inch, fingernail-thin. He's also trying to figure out a way of getting U.S. Steel to pay for the tanks. "I'll have to work on their sense of patriotism and desire to grow with the times."

Corporate backing has been a problem for this project, because, as Truax points out, it may fail. "After Evel's parachute had a premature ejection, so to speak, the company that furnished the chute went out of business. Of course, this is a different situation. I had asked Evel to postpone the Snake River shot until I ironed out the difficulty with the chute, but he said, 'No way, not with all that TV money riding on it.'"

"I'm not allowing this rocket to get out of my technical control. I won't go up until I'm completely satisfied, no matter which TV networks are waiting."

Ahead are months of testing, the sound and fury of captive firings. A moving-van company has donated a van to be used as both the static-test control center and the launch control center, and the tests are being done in one corner of a local airfield.

Despite his caution, Truax is willing to accept lower reliability statistics than NASA will. "They have gone completely wacky, insisting on first-time success. The astronauts, to a man, are willing to accept a lower survival probability than the ninety-eight-percent survival and the ninety-six-percent reliability for mission success. These were set not out of consideration for their safety but because government administrators do not want to risk the embarrassment of failure.

"We all recognize it would take an infinite amount of money to obtain one-hundred-percent reliability. We expect to achieve the extremely low cost by adherence to minimal objectives, by strict simplicity of equipment, by extensive use of well-proven but surplus components, and, quite frankly, by asking the astronauts and sponsors to take a somewhat higher risk than is currently acceptable to NASA." Evel, for example, was willing to accept a 60-percent risk.

If the trip is successful and Truax makes some money, he plans to launch and re-launch the Volksrocket until he gets the funnies out of it and the reliability statistics are up. "Then," he says, "we'll open up the barnstorming era of space travel. We'll sell tickets. Not quite a penny a pound around the fairground, but maybe one hundred dollars a pound. Once we can assure people that their chance of coming back in one hunk is ninety-five percent or better, a lot of guys will be willing to pay ten thousand dollars for the ride of their lives."

What makes Truax think people will do it? "People are incurable optimists. The X-1 is not more dangerous than the Indy 500,

where people risk their lives for paltry rewards. Take Evel, for example. He just wants to make money without working—greater risk for greater reward. Fast cars and taster women. Each person wants recognition, some more than others. Me, I want to beat NASA with the first woman in space. First a man, then a woman, and, if I haven't killed anyone off by then, I'll send up some of the people who've been bugging me.

"I'd say of the millions of people in the Western world, there are maybe one thousand who've made a pile and who are not satisfied with their lives. It will cost me five thousand dollars. I'll make five thousand dollars. The world's first rocket spaceline!"

The glint is heavy in his eye. There are all kinds of show-biz possibilities, movies, TV, foreign rights, spin-off toys, T-shirts, "although I'm not much of a T-shirt-and-bul-ton man," he smirks. But he's nothing corporate, either. "I always like to keep my hands dirty; everyone does. But in a big shop there's one little black box for the little guy, and he gets to get his hands dirty, but he doesn't know what the little black box is for. The supervisor keeps track of seventeen little black boxes, but he doesn't understand 'em, and the manager keeps track of thirty groups of supervisors, and the head of the whole business doesn't even know what a little black box is, he's so busy testifying before congressional committees and petitioning for money. Here, I can see

the whole picture and get my hands dirty. I'm probably the envy of all the engineers in the aerospace industry."

However, Truax may have a bit of a corporate storm on his hands. Correa and Ramundo are beginning to vie for position now, and there could brew up a Battle of the Astronauts. Ramundo wants to hitch the Volksrocket up to a big-time media and promotion scheme; and although this will supply Truax with much-needed capital it happens, it will take the rocket's usage somewhat out of his control. On the other hand, Correa can at best supply Truax with slow, steady increments of money. Yet with Correa, the company stays small. Correa, to escalate his involvement, has had his own dummy rocket built with *Arriba*, the name of the tortilla steamer he's invented, painted on its side.

Ramundo is getting anxious, saying the only thing standing between him and the stars is the "tortilla roller." Yet, so far, the tortilla roller is the only one who has laid down spendable cash for the project itself.

I tell Truax I want to visit Correa. "Well, expect headdress, feathers, paint, the whole thing. He's a bona fide Inca."

The Inca's secretary ushers me into his air-conditioned office at Mission Bell Bakery, in Redwood City, a short trajectory from Saratoga. Correa is dressed in conventional California sport clothes, no gold or feathers. But he has the Inca cheekbones, the black, almond-shaped eyes. Yes, he

did read about Truax in the *National Star*; he is a sky diver, a pilot, and feels it's his manifest destiny to be an astronaut. He tells me the great drawings on the Nazca plains of Peru, of course, were etched there by early Inca astronauts who flew hot-air balloons kept aloft in structures made of *tortoro*, a reedlike plant that grows at Lake Titicaca. And being a Rosicrucian, too, he advocates power of the mind: "We try to develop our consciousness, always amplifying awareness, exploring further into things. And, of course, the rocket is good for business, having *Arriba* painted on the side."

He brings out an *Arriba* steamer. It is a square box with a top of clear plastic, resembling a stereo turntable. "I noticed a problem with the store-bought tortilla," he explains. "They dry up and crack in the oven and get greasy on the stove. So I redesigned my baby daughter's vaporizer and came up with this device for rejuvenating the tortilla. The Tortilla Advisory Board is pleased with it, and if I sell three hundred and fifty thousand steamers this year, I will make five million dollars, plenty of money for the rocket."

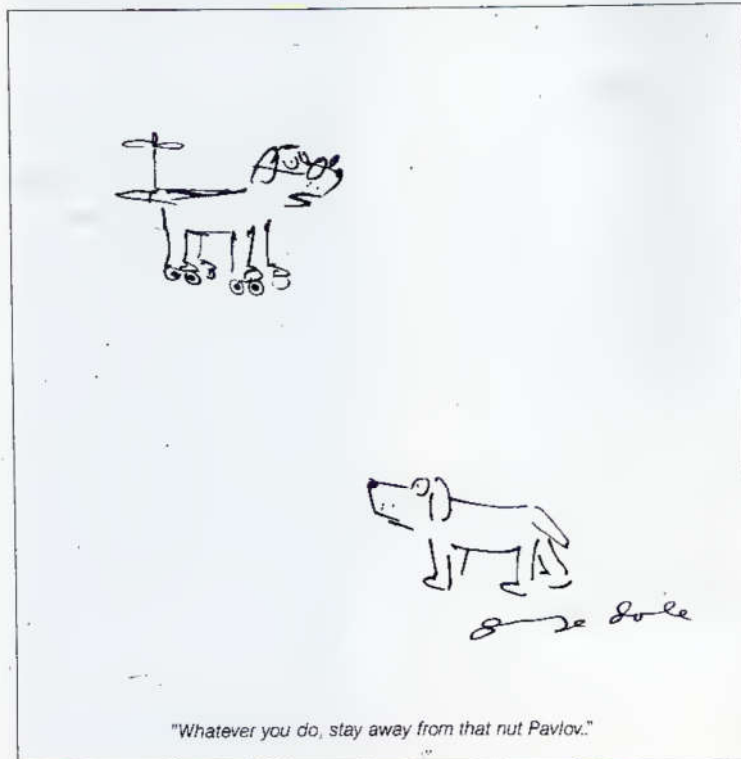
When I left, he loaded me with a giant bag of tortillas and a pound of heavy white Mexican cheese. "We need private enterprise in space," he said, flashing a dazzling white smile. "In September I start training for zero-g."

"The main problem is motivation," Truax explained later, at the kitchen table, as Sally pulled a loaf of Wonder Bread out of the freezer, plopped four slices on the *Arriba*, and watched as they puffed up like sponges from the steam. "You just have to get the idea you can do something. Hell, we knocked off the moon in ten years. We've got to stop thinking we're helpless."

"What gets people stirred up? Walt Disney? Wernher von Braun? The race with the Russians? I'm hoping to kick off private participation in the decision making as to what kind of space program we're going to have. Right now, we've got only the bureaucratic way. You get only one approach, no studies for comparison. Competition gets the economic shakeout. I hope we'll get some spacelines out of this."

"Within fifty years, at least fifty thousand people will be working in space. And way downstream, in a thousand years, there'll be more people living in space than on Earth, and we'll have colonies. All the material in the solar system could be built into a habitat, a giant ring, say, within the orbit of Mercury: a solar collector on the inside, radiators on the outside, and everything our little hearts desire there. Compute the number of people it would hold. It would range in the upper billions."

"Once I thought going to the moon would be the challenge of a lifetime, and we finished that off in ten years. Now, after this project gets going, I want to finish off war and aging. I can devote all my time to it. Except when I'm appearing on TV." ☐



"Whatever you do, stay away from that nut Pavlov."