## SAUCER The Conquest

### **STEPHEN COONTS**



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To all those dreamers who looked at the moon and wanted to go This page intentionally left blank.

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The author has referred extensively to *The Giant Leap* by Adrian Berry (New York: Tor Books, 2002). Mr. Berry eloquently explains the problems future interstellar voyagers will encounter and offers some innovative, fascinating solutions. This page intentionally left blank.

# PROLOGUE

#### JULY 1947

THE TRAIN EASED SLOWLY OUT OF THE BLACKNESS OF the desert night into the spotlights. As the three locomotives hissed steam, soldiers piled off the train and rushed away to form a perimeter.

Newton Chadwick stood with the small knot of civilians under the lights looking up at the giant black shroud that covered the flatbed car behind the engines. It was huge, rising over seventy feet in the air.

A dozen workers in hard hats stripped the protective shroud off the large, circular object on the flatcar. Then they began the task of rigging a harness so that the crane permanently mounted beside the track—one normally used to handle steel girders used to construct towers to test nuclear weapons—could off-load the object onto a waiting lowboy.

The senior civilian turned and solemnly shook hands with each of his colleagues. Newton Chadwick was the youngest of the group, just twenty-two. A child prodigy, genius and physics superstar, he had been thrown out of four universities for drunkenness, antisocial behavior, lewd and lascivious conduct and, at the last institution, burning down his dormitory when an unattended still in the attic caught fire. Newton was tall, pencil-thin and gawky, with flaming red hair and an awesome collection of freckles. His father, a wealthy distributor of soda fountain equipment, had been unable to overlook the obvious fact that the youngster bore no physical resemblance to him or any of his relatives. Blaming the boy's mother, the soda fountain magnate dumped several million in a trust fund and booted young Newton out into the unsuspecting world.

Newton's odyssey after his traumatic emancipation is beyond the scope of this work. Suffice it to say that after many and diverse adventures, he was recruited by a former professor who knew the quality of the boy's mind to assist in the examination and testing of captured German rockets and the development of American ones. The professor told a variety of well-intentioned lies to the authorities, who granted Newton an interim security clearance.

Tonight, as he stood in the Nevada desert surrounded by his colleagues, all of whom possessed a breathtaking collection of academic degrees, young Newton ignored the senior scientist's comments and stared at the flying saucer being off-loaded onto the lowboy.

A flying saucer! Who would have suspected that such a thing really existed?

"It was recovered in New Mexico, I heard," one man, a Harvard Ph.D., said. "Near Roswell, after one of these things crashed during an electrical storm."

"You don't believe that, do you?" another responded. "That's just a cover story."

"But where are the people who flew it?"

"They'll never tell us!"

"They're probably locked up somewhere, being interrogated."

"It's a Nazi bomber. That's the only logical explanation."

"Or Soviet."

Even at his tender age, Newton Chadwick understood that the government was perfectly capable of lying to the public, and probably had.

How the saucer came to earth and into the government's possession was immaterial. The reality was that it was right there before his eyes, a massive physical presence straight out of a Buck Rogers comic book.

The color was dark, almost as black as the night that surrounded them. The spotlights reflected from the smooth, polished surface in little pinpoints of brilliant light. The saucer was, Newton estimated, about ninety feet in diameter, perhaps a dozen feet thick in the middle, feathered toward the edges into a perfectly round, smooth leading edge. The three massive struts upon which it sat jutted from the belly. On the bottom of the struts were pads, not wheels. Protruding from the saucer's edge, covering an area of about fifteen degrees of its circumference, were four rocket nozzles, each perhaps fifteen inches in diameter. The landing gear struts and rocket nozzles were the only imperfections in the perfect oval shape that Newton could see from his vantage point.

"It's German, no doubt about it," one of the scientists insisted. "The government is trying to keep it under wraps. They don't want Uncle Joe Stalin to hear about it." Newton thought that hypothesis highly unlikely, but he held his tongue. The German rockets that he had spent the last six months examining were much cruder in appearance than this... this sleek, ominous, perfectly round black shape. Neither Soviet nor German industry was capable of manufacturing anything like this. Nor was American industry—or any industrial establishment on the planet. On *this* planet.

The saucer wasn't from *this* planet! That realization crystallized in Newton's mind.

But if it wasn't made on earth, then where?

It must have been flown here. By whom?

"... An opportunity of a lifetime," the senior man was saying. He rubbed his hands in excited anticipation.

No one responded to that. The rest of the members of the group stood mesmerized as the crane lifted the saucer onto the massive lowboy. It took ten minutes to strap it down—ten long minutes of absolute silence among the watching scientists, each of whom was lost in his own thoughts.

Finally, when the saucer was secured, the lowboy and a convoy of army trucks full of armed soldiers crept away from the lights into the darkness of the desert night.

When the remaining soldiers had disbursed and the small knot of scientists stood alone beside the motionless train, the senior man again broke the silence. "Washington wants an encrypted report of our preliminary examination by tomorrow evening. The interest is at the very highest level. We'll start at seven in the morning." A few people muttered replies, but Newton Chadwick didn't. He was staring into the night that had swallowed the saucer.

HE COULDN'T SLEEP THAT NIGHT. THE ARMY INstalled the wizards in a large tent and issued each of them a cot and sleeping bag. Lying on his cot in the darkness, his nostrils full of the sage and juniper scent of the high desert, he lay listening to the whisper of the wind, thinking about the saucer.

The existence of the saucer required each person who saw it to throw out the preconceptions of a lifetime. Somewhere out there in the vast nothingness of space, somewhere far away in space and time—for Chadwick well knew the two were inexplicably linked, which was one of the great mysteries of life—there were other intelligent creatures; they had built this saucer, and it was now here . . . on earth. On this small planet orbiting a nondescript star on the edge of a humongous galaxy that wheeled endlessly on a hidden axis in the infinite void.

Newton Chadwick was a child of his place and time, and he didn't know what to make of it. Sure, he had read his share of science fiction as a youngster—and that was precisely what it was, fiction. He had seen the Buck Rogers matinee features, watched space cowboys shoot it out with aliens bent on conquest. Or worse. Mind candy for a Saturday afternoon.

The saucer changed everything. Everything!

The other men on cots weren't sleeping either. They coughed and tossed restlessly, but no one was breathing

deeply or snoring. Physicists, mathematicians, working engineers—they were from the nation's finest universities and large industrial concerns. No doubt they were also wondering what they would find when they opened the saucer in the morning. And, because they were human, thinking about how the discoveries they would make would build careers and reputations.

Finally, when he could stand it no longer, Chadwick eased from his sleeping bag, stepped into his clothes and shoes, and slipped out of the tent. The night sky was full of stars, countless points of light flung carelessly into the inky blackness by ... by ... God?

Young Chadwick had never thought much about God. He had been dipped in religion as a child when his father and mother dragged him to church at irregular intervals, but little of it had stuck. Tonight, staring upward at the gleaming stars in the obsidian sky, he realized that if there were a God, He was a whale of a lot larger than the white-haired old man depicted on the stained glass windows of that church in New Jersey.

And there was the Milky Way, a ribbon of light that stretched from horizon to horizon, a galaxy of countless stars.

For the first time in his life Newton Chadwick felt as if he were marooned on a small island in an endless sea, confined to a tiny spit of sand, unable to escape.

ONE OF THE WIZARDS WAS A SLIM OLDER MAN WITH wispy white hair surrounding a tanned bald pate who habitually sucked on a pipe. He was the gloomiest of the lot the following morning, saying little in response to the excited inanities and speculations of his colleagues as they ate a hasty breakfast in an army mess tent. He ate in silence as they discussed the possibility that one of the creatures who had flown the saucer might still be in it. "Did the army open the thing?" No one knew.

Finally someone drew him into the conversation with a direct question. "I wish I weren't involved in this," he said gloomily. "I wish I were back in my lab at the university happily ignorant of the existence of that thing." He jerked his head in the direction of the hangar that held the saucer.

"What are you saying, Fred? The arrival of the saucer is the most exciting thing to happen on this planet since Christ rose from the dead."

"As I recall, the news of the Resurrection made a great many people very unhappy," Fred responded. "The saucer story will be greeted the same way. Who do you think is going to be overjoyed at the news? The clergy? Industrialists? Union leaders? The politicians? When they pause for a moment's thought—and I'll freely admit that they rarely exercise their brains for that long—the politicians are going to realize that the arrival of a spaceship flown by intelligent creatures from another solar system is going to rock civilization. May even shatter it."

"Anarchy? Are you predicting anarchy?"

Fred toyed with the remnants of his breakfast. "A man my age should probably stay out of the business of crystal ball predictions. However, I do think our report is going to give official Washington one hell of a scare. My gut feeling is we are wasting our time. We'll never be allowed to say a word about anything we see or do here today, and yet no one here will ever be able to forget it. We'd all be better off not knowing."

The discussion swirled around the table, but Newton Chadwick didn't participate. He rarely did. The senior men had careers, tenured faculty chairs and hardearned reputations to worry about. He didn't. Newton forked eggs and potatoes, drained a second glass of milk and left the tent while they pondered the shape of the world in the coming Age of the Saucer.

THE SAUCER WAS PARKED IN A LARGE HANGAR AT AN unused air base in the desert wastes. The wizards rode for an hour on the bus to get there. One of the officers handed out a special badge to each man, who was required to wear it on a chain around his neck as if it were a set of dog tags. They were all in such a hurry to see the saucer again that they donned the tags without protest and queued up to get past another soldier, a sergeant, who scrutinized each badge even though he had just watched the officer hand them out and the wizards put them on.

As usual, Chadwick found himself at the end of the line. He ground his teeth and waited his turn.

There it was! Sitting under the lights on its legs, apparently undamaged by the rough handling it had recently received.

They found the entry hatch on the belly of the saucer quickly enough. As the rest of the group fondled the machine and examined the rocket nozzles and tried to see through the canopy into the dark interior, three of them worked on getting the hatch open. Twenty minutes later they were still at it. They would have spent the day staring at the mechanism if one of them had not kept his hand on it for about ten seconds, then tried to manipulate it. Now it opened.

"It is sensitive to heat," they cried to their colleagues as they gathered on hands and knees under the saucer to examine the mechanism. As they excitedly discussed how this minor miracle might be physically accomplished, Newton Chadwick wriggled between them and slithered up through the hatch.

The interior was dark, lit only by the overhead lights from the interior of the hangar that penetrated the canopy. And it was empty of the creatures, living or dead, who had flown the saucer. A much relieved Newton Chadwick began a hasty inspection.

There were seats equipped with seat belts. Humans, Chadwick concluded. Or humanoids, humanlike creatures. Controls, a pilot's seat, white panels where the instruments should be . . . pedals for the pilot, a stick on the right and left. And a headband. Much like an Indian's headband that he and his friends had worn in play not too many years ago.

He picked up the band and inspected it as closely as he could in the gloom. As he did so, several of his colleagues worked up the courage to join him in the saucer's interior.

"I see you're still alive, Chadwick," the senior man said acidly. Obviously the boy didn't know his place in the pecking order, but what could you expect from a youth with his credentials?

"He's our mine canary," the second man announced.

His displeasure was also evident. "If there are horrible bacteria waiting in here to smite us, at least we have five minutes."

Chadwick couldn't resist. He coughed, grabbed his throat and made a retching sound. The older scientists scurried back out the hatch.

Newton donned the headband. Well, the saucer people apparently had heads about the same size as his, which was seven and an eighth in baseball caps. *Remember to insert that tidbit in the report to Washington*, he told himself as he looked around on the panel for something to make the headband do something.

Hmm . . .

"Are you alive in there, Chadwick?"

"I feel quite feverish, sir." They liked it when he called them sir. "Vision fading, coming and going."

"Get a doctor! Quickly." The call was repeated, which caused the soldiers to scurry about in a frenzied way. Chadwick ignored the commotion: He was too busy pulling and pushing the half dozen knobs and levers on the instrument panel. Surprising that there were so few. He had seen the cockpit of a four-engine airliner, which was stuffed with dials and gauges and dozens of levers . . .

Aha. The entire panel came to life when he pulled out one of the red knobs.

He stared at the white panels, which changed colors and became almost transparent. Symbols appeared.

And he saw into the heart of the machine.

The headband . . . My God!

He tried to organize his thoughts, and saw the pre-

sentations on the panels before him change as fast as thought.

It was some kind of calculator, like the Univac. He had read of it, a giant machine that filled a building and could be used to make scientific calculations. This was like that, only . . .

His mind galloped on. How does the saucer work? Where did it come from? Who flew it? He got immediate answers to these questions, although he didn't fully comprehend the information he saw.

As fast as thought.

"What in hell are you doing in there, Chadwick?"

Now the senior man crawled in. Before he could see the displays, Chadwick pushed the red power button in. The panels turned white and the humming in the compartment behind him died.

"Jesus Christ, you damned fool! Are you running this machine? What in hell do you think you're doing?"

"Trying to find out what makes it go," Chadwick answered curtly and, stuffing the headband into his pocket, turned around to study the back wall of the cockpit, which must provide access to the machinery he had heard.

What the senior man would have said we will never know, because he was joined by four of his colleagues, and they were instantly lost in a discussion of the wondrous things they saw about them.

Newton Chadwick, on the other hand, found the latches to the machinery compartment hatch, figured out how they worked and scuttled through. From his pocket he produced a small flashlight. With it on, he closed the hatch behind him. The scientists standing shoulder to shoulder in the cockpit paid no attention.

THE DISCUSSION THAT EVENING IN THE MESS HALL was curiously antiseptic, Newton thought. During dinner the scientists had been animated, filled to overflowing with wonder and awe at the things they had seen that day. They chattered loudly, rudely interrupted each other and talked when no one was listening. When the mess trays were cleared away and mugs of coffee distributed by soldiers in aprons, the senior man pulled out a message pad and pencil and laid them on the table before him. The conversation died there.

"What should we tell Washington?" he asked, all business.

His colleagues were tongue-tied. None was ready to commit his ideas to paper and be held accountable by his professional peers into all eternity. "We don't know enough," Fred muttered. He was the unofficial spokesman, it seemed to young Newton, who sat in one corner watching and listening.

Chadwick had said nothing during dinner. As a young man he had learned the truth of the old adage that learning occurs when one's mouth is shut. He had listened carefully to all the comments, dismissing most, and collected the wisdom of those who had a bit to offer.

He had no intention of opening his mouth, so he was startled when the senior man said sharply, "Chadwick, you were scurrying around inside that saucer today like a starving mouse. What do you think?" Young Newton pondered his answer. Finally he said cautiously, "I don't think the Germans made it."

"Well, fiddlesticks! I think we can all agree on *that*." The senior man surveyed the faces around the table over the top of his glasses. "Can't we?"

"Maybe the swastika burned off when it entered the atmosphere," some spoilsport suggested.

They wrangled all evening. At ten o'clock the senior man left, thoroughly disgusted, and trekked through the Nevada night to the radio tent. There he wrote the report to Washington. He read it through, crossed out a sentence in the middle and corrected the grammar. Finally he signed the form and handed it to the radio clerk to encode. He took solace from the fact that the message was classified and would never, ever, be read by his faculty colleagues at the university. He paused to light his pipe as the clerk read his composition.

"Can you make that out?" he asked gruffly.

The clerk looked at him with wide eyes. "Seems clear enough, sir."

The senior scientist left the tent in a cloud of tobacco smoke.

This is the message the encryption clerk read:

"Team spent day examining the flying saucer, which appears to be a spaceship manufactured upon another planet, undoubtedly in another solar system, by a highly advanced civilization using industrial processes unknown on earth. Appears to be powered by some form of atomic energy. No weapons found. Recommend that extensive, thorough examination continue on a semipermanent basis. Knowledge to be gained will revolutionize every scientific field."

The encryption clerk whistled in amazement and went to work with the code book.

IN THE DARKNESS OUTSIDE THE SLEEPING TENT, NEWton Chadwick sat in the sand and fingered the headband he had "borrowed" from the saucer. The magic wasn't in the headband, which was merely a fabric that contained thousands of tiny wires, each thinner than a human hair. This headband, Newton believed, was the way the pilot of the saucer communicated with the electronic brain of the machine. That electronic brain was the heart of the saucer. True, there was a nuclear reactor that used heat in a strange electrolysis process to crack water into its constituent parts. The hydrogen was then burned in the rockets. And there was a huge ring around the bottom of the ship that Newton suspected was used to modulate the planet's gravitational field in some manner.

Yet the crown jewel of the saucer was the artificial brain that talked to his brain through this headband. This headband proved that the crew of the saucer had brains very similar to ours. And there was more: Inside that device, Newton suspected, was some record of the scientific and technical knowledge that the saucer's makers had used to build it. This record was the library housing the accumulated knowledge of an advanced civilization, and it was there for the man with the wit and brains to mine it.

These older men, scientists and engineers—he had listened carefully to their comments all evening. They

still didn't understand the significance of the electronic brain, nor the headband. One reason was that they had not powered up the saucer. The other was that Newton had pocketed every headband he found, all four of them.

Given enough time, they would get a glimmer of the truth. They certainly weren't fools, even if they were conventional thinkers.

Actually there were at least three electronic brains that Newton had found. He thought about them now, wondering how so much information could be packaged into such small devices. Amazingly, they weighed about eight pounds each and were no larger than a shoe box.

He was sitting there speculating about how they might work when a soldier drove up in a jeep and rushed into the tent. In a few moments he heard the senior man swear a foul oath.

"Damnation!" he exclaimed to his colleagues. "Washington refuses to allow further access to the saucer. They want it sealed immediately. We are to return to Florida tomorrow."

Newton Chadwick leaped to his feet. He stuffed the headband into a pocket as he considered.

Inside the tent Fred declared, "They've lost their nerve. I was afraid of that."

There was a jeep parked next to the one the soldier had just driven up, one that had been provided for the use of the senior man. Chadwick walked over and looked in the ignition. The key was there. He hopped in, started the engine, popped the clutch and fed gas. • • •

IT WASN'T UNTIL AFTER BREAKFAST, AS THE SCIENtists packed, that anyone missed young Chadwick. A search was mounted, and by midmorning it was learned that he visited the saucer about two that morning. He had displayed his badge and was admitted by the sentries, who had not been told to deny entry to badge-holders. Chadwick was inside for only thirty minutes, then drove away in an army jeep.

Despite the protests of the senior scientist, the army officer in charge sealed the saucer and refused to allow further entry, so no one knew what Chadwick had done inside it, if anything. Neither Chadwick nor the jeep could be found. Not that anyone looked very hard. The very existence of the saucer was a tightly held military secret, and the circle of persons with access to that information was very small.

Back in Florida the scientists who had visited the saucer were debriefed by FBI agents. They would be prosecuted, they were told, if they ever discussed the existence of the saucer or anything they had learned about it with any person not authorized to have access to that information. When the senior man asked who had access, he was told, "No one."

It was all extremely frustrating. The senior man retired two years after he saw the saucer. He wrote a treatise about it that his daughter thought was fiction. After his death from a heart attack, she tossed the manuscript into the trash.

The other scientists who had gone inside the saucer that day in the desert were also forced to get on with their lives while living with the memory of what they had seen. The Age of the Saucer that they had hoped for didn't arrive. Like the senior man, they too aged and died one by one, bitter and frustrated.

As the seasons came and went and the years slipped past, the saucer they had seen in the Nevada desert sat undisturbed in its sealed hangar.

#### OCTOBER 2004, MISSOURI

THE SLEEK LITTLE PLANE ZIPPED IN LOW AND FAST, dropping below the treetops as it flew along the runway just a few feet above the ground; then the nose pointed skyward and the plane rolled swiftly around its horizontal axis once . . . twice . . . three times.

Rip Cantrell was the pilot. The alternating sunny blue sky and colorful earth were almost a blur as the plane whipped around. He centered the stick and the plane stopped whirling.

Up he went higher and higher into the sky, then gently lowered the nose and let the bird accelerate. The plane was an Extra 300L, a two-place aerobatic plane with two seats arranged in tandem. The pilot sat in the rear seat; today the front one was empty.

With the airspeed rapidly building, Rip brought the stick back smoothly. The increasing Gs mashed him down into the seat. Fighting the increased weight of his helmet and visor, he steadied at four Gs as the nose climbed toward the zenith. Throwing his head back, he could see the ground come into view as the plane became inverted at the top of the loop. He backed off on the G to keep the loop oval. The engine was pulling nicely, the ground beginning to fill the windscreen, so as

the airspeed increased, he eased the G back on. The nose dropped until the Extra was plunging straight down.

Here Rip pushed the stick forward, eased back on the throttle and slammed the stick sideways. The plane rolled vigorously as it accelerated straight down in a wild corkscrew motion. *The controls are incredibly sensitive*, he thought, marveling at the plane's responsiveness to the slightest displacement of stick or rudder.

A glance at the altimeter, center the stick and pull some more, lifting that nose toward the horizon. The Gs were intense now; he was pulling almost six. He fought to keep his head up and blinked mightily to keep the sweat running down his forehead from blinding him. In seconds the plane was level. Rip eased off on the G and pulled the throttle back to idle.

The piston engine's moan dropped to a burble, and the plane began a gentle, descending turn to line up on the runway. With the power at idle, the plane floated into a perfect three-point landing, kissing the grass.

Rip steered his craft to a stop in front of the large wooden hangar beside the runway and cut the engine. He opened the canopy, snapping the safety line into place so it wouldn't fall off, and unstrapped. Still in the pilot's seat, he took off the helmet and swabbed the sweat from his face.

One of the men sitting on a bench beside the hangar heaved himself erect and strolled over to the Extra.

"Well, whaddaya think?"

"It's okay," Rip said. Lean, tanned by the sun, he was about six feet tall and in his early twenties.

"You sure fly it pretty well," the guy on the ground

said enthusiastically, cocking his head and squinting against the glare of the brilliant sun.

"Save the flattery. I'll buy it."

The next question was more practical. "You gonna be able to get insurance?"

"I'm going to pay cash," Rip said as he stepped to the ground. "Then I don't have to insure it, do I?"

"Well, no. Guess not. Though I never had anyone buy one of these flying toys that didn't want to insure it. Lot of money, you know."

"I'll walk up to the house and get the checkbook. You figure out precisely what I owe you, taxes and all."

"Sure." The airplane salesman headed back to the bench beside the hangar.

Rip walked past the hangar and began climbing the hill toward his uncle's house. It was one of those rare, perfect Indian summer days, with a blazing sun in a brilliant blue sky, vivid fall foliage, and a warm, gentle breeze decorated with a subtle hint of wood smoke. Rip didn't notice. He climbed the hill lost in his own thoughts.

His uncle Egg Cantrell was holding a conference at his farm, so the house was full to overflowing. He had invited twenty scientists from around the world to sort through the data on the computer from the saucer Rip had found in the Sahara and donated to the National Air and Space Museum the previous September. Egg had removed a computer from the saucer and kept it. Its memory was a storehouse of fabulous information, which Egg used to patent the saucer's technology, and even more fabulous data on the scientific, ethical and philosophical knowledge of the civilization that constructed it.

The visiting scientists shared Egg's primary interest, which was computer technology. He had spent most of the past year trying to learn how the saucer's computer worked. The Ancient Ones knew that progress lies in true human-computer collaboration. They had promoted computers from dumb tools to full partners capable of combining known information, new data and programs of powerful creativity and logic techniques to generate and test new ideas. In effect, the computer could do original, creative thinking, a thing still beyond the capability of any computer made on earth.

Egg and his guests were having a wonderful time. They spent every waking minute with a dozen PCs containing files Egg had copied from the saucer's computer or talking with colleagues about what they had learned.

Egg was on the porch in an earnest discussion with two academics from California when he saw Rip coming up the hill with his hands in his pockets, eyes on the ground. He had been like this since his girlfriend, Charlotte "Charley" Pine, took a job with the French lunar expedition. She had been gone for six weeks, and a long six weeks it had been.

Egg excused himself from his guests and intercepted Rip before he could get to the porch. Egg was in his fifties, a rotund individual with little hair left. His body was an almost perfect oval—hence his nickname—but he moved surprisingly quickly for a man of his shape and bulk. He had been almost a surrogate father to Rip after his real dad died eleven years ago. "Good morning," Egg said cheerfully. "Heard the plane. Is it any good?"

"It's okay. The guy is waiting for me to write him a check."

"He can wait a little longer. What say you and I take a walk?"

Rip shrugged and fell in with Egg, who headed across the slope toward the barn. "It's been quite a year, hasn't it?" Egg remarked. Actually more like thirteen months had passed since Rip donated the saucer from the Sahara to the National Air and Space Museum. They had indeed been busy months for Egg as he mined the data on the saucer's computer, filed patent applications with his, Rip's and Charley's names attached and licensed the propulsion technology.

The money from the licenses had been pouring into the bank that handled the accounts. While they were not yet rich enough to buy Connecticut, each of them could probably afford a small county in Mississippi or Arkansas.

Having a lot of money was both a curse and a blessing, as Rip and Charley discovered. They didn't need regular jobs, which meant that they had a lot of free time. Charley taught Rip to fly, and after he got his private license they had flown all over the country, leisurely traveled the world and finally returned to Missouri in midsummer.

After a few more weeks of aimless loafing, Charley jumped at a job offered by Pierre Artois, who was heading the French effort to build a space station on the moon. One morning she shook Egg's hand, hugged him, gave him a kiss and left. Her departure hadn't come as a surprise. He had known she was bored, even if Rip hadn't figured it out.

"I sorta miss Charley," Egg said now to Rip, who didn't respond.

Inside the barn Egg seated himself on a hay bale in the sun. Rip stood scuffing dirt with a toe, then finally seated himself on the edge of a feed-way.

"What are you going to do with your life, Rip?"

"I don't know."

"Buying toys won't help."

"The Extra is quite a plane."

"Everybody needs one."

"I reckon."

"Toys won't help what's ailing you."

Rip sighed.

"You could help me with this conference, if you wished," Egg continued, his voice strong and cheerful. "They keep asking questions about the saucer—you know as much about it as I do, maybe more."

"Don't want to answer questions about the saucer," Rip responded. "Talked about it enough. Time to move on to something else."

"What?" Egg asked flatly.

"I don't know," Rip said with heat. "If I knew, I'd be doing it."

"You aren't the first man who ever had woman troubles. Sitting around moping about Charley isn't going to help."

That comment earned a glare from Rip.

"The launch is going to be on television this evening," Egg continued blandly. A French spaceplane had been launched every two weeks for the last six months, shuttling people and equipment to the new French base on the moon. Charley Pine was scheduled to be the copilot on the next flight. Since an American was going to be a crew member, the American networks had decided to air the launch in real time. "Are you going to watch?"

"She's going to the moon and you want me to watch it on television. How should I answer that?"

Egg sat on his bale for another moment, decided he didn't have anything else to say and levered his bulk upright.

"Sorry, Unc," Rip told the older man. "My life is in the pits these days."

"Maybe you ought to work on that," Egg said, then walked on out of the barn.

"Well, it *is* a mess," Rip told the barn cat, who came over to get her ears scratched. "After you've owned and flown a flying saucer, been everywhere and done everything with the hottest woman alive, where do you go next?"

The galling thing was that he knew the answer to that question. To the moon, of course! And he was sitting here in central Missouri twiddling his thumbs watching television while Charley did it for real.

Terrific! Just flat terrific!

CHARLEY PINE HAD JUST LIVED THROUGH THE BUSIEST six weeks of her life. From dawn to midnight seven days a week, the French had trained her to be a copilot in their new spaceships.

Unwilling to bet lives on just one ship, the French had built four of them. Two generations beyond the American space shuttles, the French ships were reusable spaceplanes, launched from a long runway in the south of France. They carried two large fuel tanks, one on either side, which they jettisoned after they had used the fuel. They then flew on into orbit, where they rendezvoused with a fuel tank, refilled their internal tanks and continued on to the moon. After delivering their cargo, the spaceplanes returned to earth orbit and reentered the atmosphere. They landed in France on the runway they had departed from and were readied for another voyage to the moon.

Bored with doing nothing, unable to interest Rip in anything other than sitting around, Charley had instantly accepted Pierre Artois' job offer. She didn't tell Rip until the following morning. Then she broke the news at breakfast and was gone fifteen minutes later.

Sure, leaving Rip had been hard, but she was unwilling to retire at the ripe old age of thirty. Sooner or later, Rip was going to have to figure out life. When he did, then she would see. If he did.

Pierre Artois believed in maximum publicity. The French government was spending billions on the lunar mission, so he didn't miss many chances to get all the good press he could. This evening, six hours before launch, he and his lunar crew stood in front of a bank of television cameras to answer questions.

Before the press zeroed in on Artois and the French space minister, one of the reporters asked a question of Charley, who was wearing a sky blue flight suit that showed off her trim, athletic figure. Her long hair was pulled back in a ponytail. The reporter was an American, who naturally asked his question in English. In addition to all the technical information she was trying to absorb, Charley was also taking a crash course in French. Her four semesters of French way back when allowed her to buy a glass of wine, find a restroom and ask for a kiss, but that was about it. She gave up trying to learn the names of all the people shoving information at her, and called everyone *amigo*. That froze a few smiles, but Pierre Artois said she was one of his pilots, so frozen smiles didn't matter. She was actually grateful the first question was in English, until she heard it.

"Ms. Pine, some American pundits have said that hiring you to fly to the moon is just a publicity stunt by Monsieur Artois. Would you care to comment upon that?"

"Not really," she said lightly, trying to be cool. "I've been in space before." Actually her flying credentials were as good as anyone's. A graduate of the Air Force Academy and the air force's test pilot program, a veteran fighter pilot and the pilot of the flying saucer that had made such a splash last year, she believed she deserved this job, so the sneering hurt. It also immunized her against second thoughts about Rip. She was going to do this or die trying.

The chief pilot on the first mission was a man, Jean-Paul Lalouette. He was five or six years older than Charley and seemed to share the condescending opinion of the American newspaper pundits, but he was too wise to let it show—very much. Charley picked up on it, though. She glanced at him now and saw he was wearing the slightest trace of a smile.

Lalouette and his male colleagues thought she should be very impressed with them. The fact that she

wasn't didn't help their egos. "T.S.," Charley Pine muttered, which was American for "*C'est la guerre*."

After a couple of puff questions that allowed Charley to say nice, inane things about the French people and the lunar base project, the press zeroed in on Pierre Artois, to Charley's intense relief. She took several steps backward and tried to hide among the technicians she and Lalouette were flying to the moon.

Pierre obviously enjoyed the glare of television lights. A slight, fit man whose physical resemblance to Napoleon had occurred to so many people that no one remarked on it anymore, he looked happy as a man could be. And well he should, since he was making his first trip to the moon on this flight. His journey to the lunar base after years of promoting, cajoling, managing and partially financing—from his own pocket—the research and industrial effort made this appearance before the press a triumph.

Charley Pine didn't quite know what to make of Pierre, whom she had met on only three occasions. She had watched him in action on television for several years, though. The scion of a clan of Belgian brewers and grandson of the legendary Stella Artois, Pierre struck Charley as a man who desperately wanted to be somebody. An endless supply of beautiful women, a river of money and an exalted social position weren't enough—he had larger ambitions.

Charley had devoted ten seconds of thought to the question of what made Pierre tick, and concluded that the answer was beer. Every French farmer who ever squished a grape had more panache than Pierre did. France was all about wine, and Pierre was beer. This tragedy fairly cried out for psychoanalysis by a topnotch woman—or even a man—but unfortunately Pierre hadn't bothered; like Napoleon, he had looked for a world to conquer. The French lunar expedition was his, lock, stock and barrel, and he was going to make it a success ... or else.

Despite Artois' love of the spotlight, Charley Pine admired him. Pierre Artois was a man who dreamed large. He dreamed of a French space program, with a base on the moon as a stepping-stone to Mars, which he defined as a challenge worthy of all that France had been and could be in the future. He had fought with all the will and might of Charlemagne to make it happen. His vision, optimism and refusal to take no for an answer had triumphed in the end.

The real reason for the French space program, or indeed any space program, was that the challenge was there. The moon was there; Mars was there; the stars beckoned every night. Charley Pine believed that people needed dreams, the larger the better. Our dreams define us, she once told Rip.

What a contrast the dreamer Pierre Artois was, Charley mused, to the modern Americans. Somewhere along the way they had lost the space dream. Space costs too much, they said. NASA had morphed into a petrified bureaucracy as innovative as the postal service. These days Americans fretted about foreign competition and how to save Medicare—and who was going to foot the bill. Rip once remarked that the current crop of pennypinching, politically correct politicians would have refused to finance Columbus. Watching Artois, Charley knew that Rip was right. The press conference was a photo op and nothing more. One of the American reporters asked about the fare-paying passenger Artois had agreed to take to the moon, one Joe Bob Hooker, who rumor had it was paying twenty-five million euros for his round-trip ticket. "This is a profit-making venture," Artois responded. "He paid cash." He refused to say more about his passenger.

"Your wife has preceded you to the moon, has she not?"

Ah, yes—true love on the moon. No fool, Pierre knew the media would play this story line like a harp. He glanced longingly at the ceiling, then said simply, "We will soon be together. I have missed her very much." He touched his left breast and added with a straight face, "She is the best part of me." Charley Pine nearly gagged.

After a few more one-liners for television and a pithy comment or two for the newspapers, Pierre led his crew off the stage.

Soon they began the suiting-up process, some of it filmed by a cameraman with a video camera. Then the crew boarded a bus for the two-mile journey to the spaceplane, which sat on the end of a twelve-thousandfoot runway. The bus had to travel a hundred yards or so on a public highway, one lined with the curious and small knots of protesters with signs. Apparently even the Europeans couldn't do anything these days without someone complaining, Charley thought.

She found herself beside the American passenger, a stout man in his fifties. "You the American woman?" he asked.

Hooker's color wasn't so good.

"That's right."

"Glad you're going. Nice to have somebody to speak American to."

"Right."

"'Bout had it up to here with the frogs."

"They kept you busy, have they?"

"Like a hound dog with fleas. You can really fly this thing?"

"No. I'm a Victoria's Secret model that Artois hired when he found he couldn't afford the real Charlotte Pine."

Hooker gave her a sharp look and said nothing more.

After a glance out the window she concentrated on lowering her own anxiety level. *This is just another flight*, she told herself, just like all those flights in highperformance airplanes she made in the air force. More precisely, like those saucer rides with Rip Cantrell.

She was thinking of Rip when the spaceplane came into view. *Jeanne d'Arc*. She had explored every inch of the craft during training and spent several weeks in the simulator, yet the sight of the ship sitting on the concrete under the floodlights, ready to fly, caused a sharp intake of breath.

She was really going to do it. She was going to the moon! Yee-haa! I hope Rip is watching on television!

HE *WAS* WATCHING ON TELEVISION, OF COURSE. DUE to the time difference, it was early evening in America when the live coverage began. A dozen scientists

crowded around the television in the living room of the Missouri farmhouse with Egg and Rip.

"It'll be okay," Egg muttered to Rip, who didn't respond. He was intent on the television, listening to the commentator, ignoring everyone around him.

The countdown went smoothly. There were two minor holds, for only a few seconds each, and the commentator didn't give the reasons for either.

The spaceplane looked weird with the two huge external fuel tanks attached to its side. This particular ship, *Jeanne d'Arc*, was a proven platform, with three round trips to the moon already in her logbook. Rip thought about that now, reassuring himself that everything would go well, that Charley would come back safe and sound.

Still, better than anyone else in the room, he understood the dangers involved in space flight. Not to mention going back and forth to the moon. The French lunar project was mankind's biggest leap yet off the planet, akin to tackling the Atlantic in a rowboat.

His heart was pounding and he was covered with a sheen of perspiration when the first glimmer of fire appeared in the nozzles of the spaceplane's rocket engines. The flame grew steadily until it was as bright as the sun, overpowering the television camera's ability to adjust for light.

The roar came through the television's speakers, a mere shadow of the real thing. Still, it filled the living room and drowned out the last of the conversations.

The spaceplane began moving. Faster and faster, accelerating. The nose wheel stayed firmly on the runway as the ship accelerated past a hundred knots, then two hundred. A small number at the bottom of the screen reported its increasing velocity.

At 264 knots the nose rose a few feet off the pavement. At 275, the ship lifted off. Seconds later the landing gear began retracting.

The nose kept rising, up, up, up. The ship was exceeding four hundred knots when the nose reached fifty degrees above the horizon and the autopilot stopped the rotation.

Soon the fireball from the engines was all that could be seen on the screen.

It gradually became smaller and smaller as the sound faded . . . until it was merely a bright point of light in the heavens.

The camera followed the light until it was out of sight, then returned to the tarmac. The cameraman focused on the spot where the spaceplane had begun its roll, a spot now empty.

"She's on her way," Egg said.

Rip Cantrell took a deep breath and exhaled very carefully. He surreptitiously wiped at the tears that were leaking down his cheeks. "Yeah," he whispered. "She's on her way."

INSIDE JEANNE D'ARC CHARLEY PINE MONITORED the instruments as the ship roared away from the earth. To her left Jean-Paul Lalouette was similarly engaged. Her duties were to bring any anomaly she noticed to his attention. Her eyes swept the panel again, looking for warning lights, errant pressures, a gauge indication that hinted something, anything was not as it should be. Yet all was precisely as it should be, perfect, as if this were a simulator ride and the operator had yet to push a failure button.

Both pilots wore their space suits, complete with helmets, in the event the plane lost pressurization during launch. They planned to take them off after all the systems checks were completed in orbit.

The acceleration Gs felt good, pushing Charley straight back into her seat. The voices of the French controllers passing information about the trajectory and data-link information sounded clear and pleasant in her ears; the background was the low rumble of the rocket engines.

When the external tanks were empty, they were jettisoned explosively. The engines then began burning fuel from the internal tanks as the spaceplane continued to climb and accelerate.

Charley's eyes flicked to the windscreen, four inches of bulletproof glass. At this nose-up angle the night sky filled the windscreen, full of stars and a sliver of moon. As they climbed through the atmosphere the stars became brighter and ceased their twinkling, and the crescent-moon gleamed more starkly against the background of obsidian black.

She had little time to enjoy the scenery. The next task was rendezvousing with the orbiting fuel tank. She became engrossed in the problem, watching the display that depicted the spaceplane and the orbiting tank and the three-dimensional course to intercept.

When she realized that the join-up was working perfectly and Lalouette had everything under complete control, she glanced again at the moon. For some reason it seemed larger than it did standing on the surface of earth. Now it appeared as what it was, another world.