

# RETURN TRIP

A Science Fiction Tale

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Yang Bai threw his pencil across the room, hitting a staffer in the head.

“These calculations are all wrong,” Bai shouted. “I want them fixed and I want them fixed now!” His voice had an irritating and demanding quality the rest of the staff had come to expect as normal for day to day operations.

The staffer with the bleeding forehead sounded most contrite. “Yes, comrade, Chief Administrator. Right away.”

Cheng Shui casually walked over to him. He’d been with the program as a design specialist since the government had announced Phase Four of the Shenzhou program, planting the Chinese flag on the moon. The other parts of the Shenzhou program put the first Chinese astronaut, Yang Liwei, into space in 2003. But the government, like Chief Administrator Yang, was impatient. Shui knew a moon landing was far more complex than anything they had attempted before, but he also knew this fact only made the government more anxious. “Let’s look at it together,” he told the staffer. “I’m sure we can arrive at a satisfactory solution.”

The lights in the Beijing Aerospace Command and Control Center were harsh. Almost as harsh as the atmosphere. The fact everyone was wearing identical white lab coats, simply added to the unforgiving lighting reflections in the room. Everyone was on edge as the deadline drew nearer. The government wanted to take the world by surprise, so they would not be allowed any testing. The first mission had to work without a flaw. After all, the government insisted, “The Americans have already done all this. What do you need to test for?”

China was used to strict injunctions by the government; impossible schedules and restrictions. And the Chinese people had always pulled together to achieve their goals. Even in the face of government intractability. Shui and his staff started pouring over the data. The Beijing Aerospace Command and Control Center resembled a classroom with long rows of consoles facing a large projector screen. There was even a podium up front which Chief Administrator Yang Bai used to admonish the staff. Right now, the monitor was showing the giant spacecraft on the pad, liquid oxygen gas pouring out of the sides of the craft. The Long March 3L Rocket was a monster, as space missiles go, with over 150 engines. Atop this structure was the latest version of the Shenzhou, the ‘divine vessel.’ The ship which would take three Chinese astronauts and allow them to set foot on a different heavenly body. The first people to have visited it this century. Surely after this event, no one would be able to deny China’s place in the family of nations.

Practically spitting on his console, the engineer’s face was red with frustration. “Why did they insist the whole capsule be able to land on the moon,” Zhelan protested. “We should have a separate lander.” He insisted.

“Because the Americans couldn’t manage to do it,” Shui smiled back at him. “They want us to do something the American couldn’t do. Besides this eliminates the need for testing a docking mechanism between the main capsule and the lander. And since we can’t test anyway, this seems like a better plan.”

The engineer smirked. “Yes, but the added weight,” Zhelan protested.

Cheng Shui gave him a stare. “Wasn’t this the reason you gave to build the ship out of carbon nanotubes? Because they were lighter?”

“Yes,” the engineer sighed.

“And the government listened.” Shui patted him on the shoulder. “All the American got to use was aluminum. Much heavier and only half as strong.”

“Yes, but I still think it’s too heavy,” Zhelan protested.

Shui’s face lit up. “Ah, here’s your problem!” He snapped his finger on the paper, pointing to a fuel value. “You forgot to add in the auxiliary tank. They should have more than enough fuel to lift the main capsule off the lunar surface for the return journey.” The engineer nodded his head slowly in agreement. As with the capsule, Shui could see a great weight had been removed from the engineer’s shoulders. Second-guessing was a popular pastime at Manned Space Engineering as well as the Jiuquan Launch Center. It always gave Cheng Shui a cold feeling in his bones. Everyone in the room knew what would happen to their families if this mission failed. The government could be most unforgiving.

Still, he felt a surge of pride. China was only the second nation to send a manned mission to the moon. He had no desire to live anywhere else. He knew the American’s had forgotten about the moon. But not the Chinese. They would go back to the lunar surface. Then they’d be the first to set foot on Mars.



Yin Zhen leaned back in her launch couch. She was filled with pride. Why not? She was about to become the first human female to set foot on the moon. The capsule was quiet. Beijing Aerospace Command would let her know only the things she needed to know. She was not a party to their conversations. Chinese command and control principles didn’t involve the astronauts in discussions where they could have no effect on the outcome. Zhen glanced at the readouts. Everything was proceeding according to the preplanned landing procedures.

Naturally, there had been some concern about mission failure. The moon was an important feature for the Chinese. It wouldn’t do for the citizens of the new China to look up at the sky and see the moon, knowing there were three dead Chinese astronauts on its surface. Yang Bai, the chief administrator, was especially concerned about this as the Chinese space program was the only program which had not yet lost an astronaut. Mention it was bound to happen someday and you could witness the administrator have an explosion. Usually in the perpetrator’s direction.

Several warning lights lit on the display board, indicating a fuel pressurization problem. Zhen didn’t even have to clear them, they were removed by a signal from ground control before she could have even reached the button. They’d had problems with the pressure when building the capsule on the ground. Quite a few of the tanks had over-pressurized and exploded. Yin Zhen sighed. She’d know either way in a few minutes. Maybe this one was a false alarm.

Lian Hua glanced over at her. The Astronaut-Orbital Engineer had even less to do than Zhen. Nothing but sitting in the landing couch. Unlike Zhen, Hua’s hands were balled up in a fist, the knuckles turning white. Glancing to the other side, Hua saw Jia Ru, who like Hua, had nothing to do. Ru, however, was

calmly looking out the window. It was Ru who broke the silence. "Better get ready to use the manual abort."

Zhen smiled. "Not yet."

The capsule went back to silence. Hua's voice was shaky. "Control, radio check. Please respond." There was an eerie silence. "Control, radio check."

Zhen ignored the silence and looked out through the window again. Below she could make out the large crater which marked the outside of their landing zone. Zhen was expecting to see it, but what she wasn't expecting was the realization of its depth. If something went wrong now, if they landed in the crater, well best not to think along those lines. The radio started to life, "215, flight control has been passed to manual."

This was it. All the simulated landings had failed if the ship was controlled by the ground. As of now, she was permitted to be a pilot. She was responsible for safely landing a ship, the size of a bomber, on the moon. Her reply was terse. "Accepted, command."

Hua didn't look any less nervous. "Do you want to abort?"

Zhen glanced at the control system and gripped the maneuvering thrusters handle. "Forty-one forward. Altitude 3,000. Two-point five meters per second." She started sweating in her suit. None of the warning lights were on. This had never happened in the simulator. Yin Zhen began to suspect ground control had turned them all off. They were going to make her fly blind and alone. Somehow, the realization only made it worse.

"Attitude steady. 2,000 meters." She paused. "Control ready for the go signal. Control do you read? Control?" The radio only issued static. "Fifteen hundred meters, control. Twenty-one forward. One point five meters. Ready to abort, control." Her finger hovered over the lit abort button.

Yin Zhen's remarks were answered by more static. "Thirty seconds of fuel. One thousand meters, control. Eleven forward. One meter. Ready to abort. Control? Control, we are reaching our maneuvering limit. Control?"

The radio crackled to life. The first part of the message was garbled, but the second half was clear: "[static][crackle]... permission to land." Zhen threw the craft over to level the landing gear. Her voice was shaky. "Land gear extended, control. Fifteen seconds of fuel remain." Yin Zhen flipped the switch to activate the secondary engines to slow their descent. The capsule was filled with the roar of the engines. They burned fuel at an increased rate. The ship rocked and shook. Everyone was thrown back in their seat with violent force. Hua's eyes were closed.

The final sound was a loud crunch. The kind you hear when you step on something and it breaks under your weight. Only this sound was louder. Yin Zhen hurriedly flipped several more switches. Ominously the abort button light went from red to black. The light was gone as if someone had pulled the plug. The engines shut down and the roar inside the ship was replaced with cold silence. Both Hua and Zhen glanced at the panel. The large fuel gauge read empty. Zhen flipped off several more switches, as Ru calmly took off his safety belt.

The radio crackled. “This is People’s Republic Party Headquarters, Lunar One reporting. Landing successful. Ship stable,” Yin Zhen announced. A cry of exuberance could be heard on the other end of the radio.



The sky looked odd to Yin Zhen. A deep starless blackness surrounded the three of them. The ground was a fine powder. With the sun reflecting off it, each grain had its own shadow, which gives a lunar surface its uniform gray color. She felt light. But it was a good feeling. A welcome change from several days of weightlessness. She practiced hopping across the surface. Yin Zhen left deep footprints where ever she landed. It was possible to move four or maybe five regular steps on the surface with a single leap.

“Feels good,” Lian Hua announced.

“It does,” Zhen responded. She scrutinized the horizon. Zhen could see their intended target. They were less than five hundred yards away.

“Nice Job,” Jia Ru patted her on the shoulder. “I don’t know anyone else in the program who could have landed us any closer. You deserve a medal.”

Yin Zhen smiled. I was only a short distance away. “Do you have the camera set up? Beijing was quite explicit on this point. They want the event recorded.”

“It’s all set up,” Ru replied.

“Did you test it?”

“It’s working fine. I checked with control, they are getting a good signal. Stop worrying.”

“Are you ready for mission point one?”

“Anxious to get going, comrade. Shall we?”

The two bounded off across the lunar powder. It gave way under their feet, but there was no cloud of dust created as a result of their movement. Yin Zhen and Jia Ru led the way, with Lian Hua carrying the package following behind. They crossed the space in only a few minutes. Their target was clear, unchanged since it arrived on the moon. Well, at least it hadn’t moved. It looked faded. It was not as vivid as she had expected.

Ru Pulled it up with one hand. Looking back at the camera he placed it over his knee. It snapped like a dry trig. He threw both parts to the ground. Then, in full view of the camera, he ground the material into the lunar dust. Gray slit soon covered the red and white stripes. Ru happily proceeded to grind the faded blue field with its fifty white stars into the lunar soil.

Yin Zhen checked on the rest of the primary task’s progress. Hua was busy attaching the explosive charge to the remains of the American lander. In a few hours, nothing would remain. The evidence would be gone.



The American president sat stunned in the oval office, watching the scene unfolding on the monitor. He threw a pencil across the room, hitting a staffer in the head. “Get me the NASA administrator on the phone. We’re going to Mars. We’re going to get there first. I don’t care what it costs!” He yelled.