

Scholar's Advanced Technological System - Chapter 788 - Open Secret

Chapter 788: Open Secret

Jinling Institute for Advanced Study.

Chen Yunhai stood in front of the dean's office and took a deep breath. He straightened his collar and gently knocked on the door.

After hearing "come in", he pushed open the door and walked in.

"Sir, did you ask for me?"

"Yeah, I did." Lu Zhou smiled at Chen Yunhai and stood up. He gestured toward the sofa and said, "Don't be so polite, come, sit down."

Chen Yunhai sat on the sofa and thanked the assistant who just poured him a cup of tea. He began to look at the stack of draft papers sitting on the coffee table.

He saw some complex calculations and symbols drawn on the draft papers, and beside the draft papers were proof processes.

Chen Yunhai had no idea what he was looking at. Lu Zhou walked over with a cup of coffee and sat down across from him.

"Just some personal hobbies." Lu Zhou placed the stack of draft papers aside and took out a freshly printed document. He placed it on the coffee table and said, "Two hours ago, we decrypted the signal sent from Mars to Earth. I'm sure you'll be interested."

Chen Yunhai suddenly became serious, and he quickly picked up the document.

The moment he saw the three letters, he was stunned.

"SOS...?"

Lu Zhou nodded.

“Yes, with what is happening on Mars right now, I think there’s nothing wrong with our decryption. I think New Virginia is in a bit of trouble.”

Lu Zhou paused for a second. He then continued, “But this could turn into an opportunity for us.”

Ideas flashed through Chen Yunhai’s mind, but he still shook his head.

“I know what you mean, but this might be difficult to execute... The White House would rather let the colonists die than to cooperate with us.”

If America decided to let China take over the rescue mission, not only would it damage America’s prestige and pride, but it would also bring risks such as technology thievery.

Even though this wasn’t politically correct, aerospace itself was a risky industry. The death of a few astronauts wasn’t significant enough for the White House to put down their ego.

Looking at the big picture, if the Americans couldn’t begin a rescue mission, it would be better for the three astronauts to die than for China to intervene on this matter.

At most, the Americans would prepare a special funeral for the colonists.

Perhaps Space-X’s stock price would take a hard hit after this. But this wouldn’t be the end of the Ares program. The Ares program researchers would learn from their mistakes and try again...

“I know.” Lu Zhou put down his coffee mug and nodded. He said, “Theoretically, that is true. NASA wouldn’t spend billions just to save three astronauts... Not to mention the rescue mission might go wrong. It might be in the interest of the United States to announce the ‘accidental’ death of the three astronauts.”

“That’s right.” Chen Yunhai nodded and said, “Therefore, it might be hard for us to capitalize on this opportunity.”

“Not necessarily.” Lu Zhou shook his head and said, “What if we told the Americans that we can save the astronauts?”

Chen Yunhai looked interested, and he said, “So what you’re saying is...”

“That’s right, leak the news from our side.” Lu Zhou nodded and said, “Then they will have to conduct a rescue mission. If they don’t...

“Then it’s no longer an accident, it’s murder!”

United States.

NASA headquarters.

At the Ares program ground command center, staff members were working hard at their respective jobs.

Director Carson stood inside the command center as he reported to the president on the current situation.

“We are now certain that the sandstorm on Mars is a global event, and our estimation is that the sandstorm will last for at least five months. Our colonists are facing—”

The president interrupted Director Carson and said angrily, “I don’t care what type of sandstorm it is. I just want to know one thing, what is your plan?”

Director Carson went silent for a while. He then said, “Sir... I don’t want to say this, but the chances are slim. Even if we launch the BFR rocket now and go to Mars using an unconventional orbit, it would take at least three months to reach Mars.”

President: “Can our colonists survive for three months?”

Director Carson paused for a second and spoke.

“It’s fifty-fifty... It depends on their survival skills.”

“We can’t let them know what the situation is like yet,” the president said. “Tell them that we are trying our best to rescue them and that they don’t have to worry!”

“But our rocket...”

Director Carson looked at the president’s gloomy face, and he suddenly knew what the President was implying.

“... I understand.”

Compared to bringing the astronauts back alive, asking them to keep this a secret was more important. They had to make the astronauts believe that NASA was doing their best to rescue them.

If the astronauts knew that they had no chance of survival, they could use the telecommunication equipment on Mars to spread the news across Earth...

That would be a disaster for NASA.

Suddenly, footsteps were heard from the corridor of the command center.

The White House secretary appeared behind them.

“Sir?”

The president turned over and looked at the tall man. He frowned and asked, “What now?”

The secretary gulped and replied, “The news was leaked.”

The president replied, “What news?”

“News regarding the New Virginia colonists...” The secretary took out a newspaper from his bag and carefully said to the president, “Look at it yourself.”

The newspaper was from the Everyone Daily Foreign Edition.

The president took the newspaper and squinted his eyes as he read.

The moment he laid his eyes on the newspaper, his heart sank.

A giant headline was right at the top of the newspaper.

[Mars encounters a rare global sandstorm, “New Virginia” colonists are in danger!]

WTF?

Chapter 789: Ion Thruster Propulsion System?

Normally, the United States was the one that criticized other countries.

The president didn't expect to be attacked by Chinese media like this.

[Mars encounters rare global sandstorm, "New Virginia" colonists are in danger!]

In this report, Everyone Daily quoted researchers from the Five-hundred-meter Aperture Spherical Telescope, who said the sandstorm could last for months.

The most significant impact was that the sunlight reaching Mars would be decreased by 70 or even 80 percent. This caused power generation problems.

The Mars colonists wouldn't have enough energy to sustain their daily activities.

This meant that the life support system wouldn't have any solar power!

If this problem remained, they would only be able to survive for another two months before the oxygen and methane tanks were depleted...

As soon as the news broke out, there was an uproar in North America.

New Virginia is being buried in a sandstorm?

WTF?

What angered Americans wasn't the sandstorm itself; instead, it was because this was the first time they heard about this!

Just a week ago, they were still sitting in front of their TVs, drinking beer and eating chips, watching the Mars Diaries program on Columbia TV. They envied the lives of the Mars colonists.

But now...

They weren't envious at all!

Many people who signed up for the Ares program were glad they were not chosen.

Not only did they regret signing up for the program, but they were also furious!

The day after Everyone Daily Foreign Edition released the news, intense discussions happened on major social media platforms such as Facebook.

People began posting screenshots of their withdrawal from the Ares program registration, stating that they were deceived by NASA and the US government. They said that NASA was conducting inhumane experiments!

The people that said things like “the Americans are already landing on Mars, yet China is still stuck on the moon?” quietly disappeared.

Of course, there were people who had a different opinion.

For example, those patriotic Americans who thought that “the BFR rocket will bring our heroes home!”...

Regardless, it was obvious that NASA tried to cover up this story.

On the other hand, the public interest for Space-X started to deplete. According to the statistics, the number of registered volunteers for the Ares program, which was originally announced on the official website, was close to the 20 million mark. However, in just one day, the number fell to 5 million, and it was still dropping.

Space-X and NASA had shut down the registration channels on their websites, and their websites no longer displayed how many people were registered...

Outside the NASA building.

Major media trucks filled the entire building parking lot.

Reporters with their cameras and microphones surrounded the building.

“Mr. Carson! What’s the current situation in New Virginia?”

“Why is this happening just two weeks after our colonists landed on Mars? Didn’t NASA inspect the climate before approving the launch program?”

“Is NASA even planning on saving our colonists? Why are there no rescue launch missions arranged? Are you really going to abandon our heroes?”

“We have the right to know the truth!”

As Director Carson looked at the microphones surrounding him, he began to sweat from his forehead, and he even began to feel a little nauseous.

He took a deep breath and tried to appease the reporters.

“We will release a statement shortly! But now is not the time! I can say that our colonists are safe right now! We have the world’s most advanced artificial biosphere technology. Even if this sandstorm lasts for a year, our colonists will be safe!”

However, most people didn’t buy what Director Carson was saying.

They thought about the suspended “Mars Diaries” program and had a rough idea of the real situation.

The situation in New Virginia wasn’t looking good.

Moreover, the colonists might not be able to survive for much longer...

...

It was difficult to keep a global sandstorm on Mars a secret. After all, any powerful astronomical observatory centers could point their telescopes at Mars and observe what was happening.

However, most space observatories didn’t think of the serious impacts this would have on the New Virginia colonists.

That was until the Everyone Daily Foreign Edition report, which revealed the truth...

Director Carson finally got rid of the annoying reporters. He walked toward the NASA building and went directly into the command center room. The secretary-general of NASA quickly spoke to him.

“The situation is not looking good. Julia is Dutch. The Dutch government has expressed its concerns regarding the latest developments of the Ares program. Last night, the French also publicly stated that if we can’t give them

an explanation of the New Virginia situation, they might consider closing their Ares program registration... The French president said that the citizens want nothing to do with New Virginia.”

“Sh*t, who cares if the French is involved or not!”

Even though Director Carson seemed like he didn’t care, his face said otherwise.

This was a diplomatic level problem.

Europe was an important ally of the United States, so they couldn’t just ignore their feelings.

Not to mention the real issue wasn’t the diplomatic relations, it was the overwhelming public opinion.

If they couldn’t save the colonists, the president wouldn’t be able to win the next election, which meant he would be fired as the NASA director.

Even though they wanted to save the colonists...

They were not able to.

Director Carson walked into the command room and took a deep breath. He thought about what to say to the staff members working here.

However, his assistant rushed over to him while carrying a laptop.

“Director, you have a video call.”

Director Carson asked, “Who is calling?”

“The IP address is from the other side of the Pacific Ocean...” The assistant gulped and said, “I think it’s from Jinling, China.”

Carson’s pupils narrowed. He had a rough idea of what was happening.

He opened the laptop and hit the enter button.

The video call was connected.

A familiar face appeared in the center of the video.

“Hello, Mr. Carson, it’s nice to see you. It looks like you’re in a bit of trouble.”

Director Carson stared at Professor Lu through the screen. He didn’t even bother asking how Professor Lu got his Facebook account. He said, “Yeah, but you don’t have to worry about it, we can solve it ourselves.”

“Oh, really?” Lu Zhou smiled and said, “By the way, 72 hours ago, you missed your orbit transfer window. If you wanted to send a BFR rocket now, the situation might not be optimal. I did some calculations on the flight process and uploaded it to arXiv. You can look at it if you want.”

Director Carson nearly spat out blood.

Doing some calculations for fun was fine.

But he couldn’t believe Lu Zhou posted it on arXiv.

Because of Lu Zhou’s influence on arXiv, by tomorrow, reporters would be swarming to his front doors with this new juicy piece of information...

Director Carson stared at Lu Zhou’s annoying face and asked, “Are you making fun of us?”

“Of course not, we are deeply saddened by your circumstances.” Lu Zhou shook his head and said, “By the way, do you want to learn about our ion thruster propulsion system?”

Chapter 790: You Need It

Ion thruster propulsion system?

Want me to learn about it?

Director Carson paused for two seconds after hearing Lu Zhou.

Then he spoke without hesitation.

“No, thanks!

“Everything at New Virginia is normal. Our life support system can guarantee that the colonists will survive the crisis.”

There's no way I'm letting the Chinese save us!

Imagine how embarrassing it would be if they rescued our colonists?

Also, the BFS spacecraft had all of the most advanced technologies from various aerospace companies. The research and development expenses were in the tens of billions of USD, not to mention the expensive life support system on Mars...

He couldn't trust the Chinese with his technology!

Looking at how resistant Director Carson was, Lu Zhou couldn't help but chuckle.

He spoke.

“Oh, really? The three astronauts in New Virginia don't think so.”

Director Carson frowned and said, “What do you mean?”

Lu Zhou cleared his throat and said, “We're very concerned about the colonists in New Virginia, so we looked at the electromagnetic signals from Mars.”

Suddenly, Director Carson broke out in cold sweat. He wasn't happy.

“You listened to our communications?”

“Don't get so riled up, you guys do that all the time, right?” Lu Zhou smiled and said, “Also, we happened to detect the signals during our normal astronomical observation activities.”

“But our communications are encrypted—”

Before Director Carson could finish speaking, Lu Zhou interrupted him, “SOS.”

“!”

Director Carson was dumbfounded.

In the beginning, he thought Lu Zhou was bluffing, but that was clearly not the case anymore.

Director Carson stubbornly replied, "We don't need your help..."

"No, you do," Lu Zhou said to Director Carson seriously. "This is three lives we are talking about. Think about it carefully before you answer my question."

Lu Zhou reached out and tapped on the keyboard, thus ending the call.

Director Carson went silent for a while. He pinched his eyebrows and felt a terrible headache.

*Three f*cking lives...*

Who cares about three lives?

However, he couldn't refute Lu Zhou's words.

If China decided to publish those communication messages...

It would be a disastrous blow to the credibility of the authorities.

Maybe the American public could ignore the death of the astronauts, but the White House couldn't ignore it, nor could he. Anyone who was personally involved in the Ares program would be impacted by the deaths of the astronauts.

Ten minutes ago, he was thinking about covering up the deaths with an accident or natural disaster, but he didn't have that option anymore...

If he didn't try his best to save the astronauts, he could be painted as a murderer!

The secretary looked at Director Carson and gulped.

"Sir? Are you... okay?"

"I'm doing great." Director Carson looked at the command center and paused for a second. He then looked at the secretary and spoke.

"Get the car ready... I'm going to the White House."

This was a decision that had to be made by the president.

The secretary paused for a second.

“Now?”

“Right now!”

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Jinling Institute for Advanced Study.

After the video call, Lu Zhou sighed in relief and leaned back on his office chair.

He wasn't particularly good at negotiating, but he knew that he accurately conveyed his intentions to Director Carson. If there was no official response from the United States, he would disclose the communication messages.

If the United States still didn't give an official response, the Lunar Orbit Committee would announce a humanitarian relief to save the New Virginia colonists.

After all, it wasn't like the United States could prevent other people from saving the colonists.

As for why China wanted to bring the colonists back alive?

Saving lives wasn't the main reason. Participating in the rescue mission would be a huge boost to the international prestige and reputation of China, even if the rescue mission were to fail.

Lu Zhou was also curious about the technology used in the life support system and the BFR spacecraft floating in Mars orbit. Sending a researcher there would be very helpful.

His computer signal light flickered, and a string of bubbles popped up on his computer screen.

Xiao Ai: [Sir, someone tried to send a Trojan to your computer.]

Trojan?

Is it from an intelligence agency, maybe the CIA?

Lu Zhou wasn't surprised. After all, Carson was a high-level official. Not to mention Lu Zhou used his personal computer to video call Carson.

Lu Zhou: "Is it a problem?"

[Not a big problem! ($\geq \nabla \leq$)]

Lu Zhou nodded and said, "Help me get rid of it then, and if you can, maybe teach them a lesson. This is a bit ridiculous."

Xiao Ai: [Okay, Xiao Ai will take care of it!]

The text bubbles disappeared.

The fans on the laptop spun for a while and gradually stopped.

Lu Zhou thought that the Trojan was probably removed. He took out his phone and called Hou Guang.

The phone quickly connected.

Lu Zhou began to send out orders.

"Tell the ground command center to calculate the launch trajectory. Within 12 hours, I need the fastest trajectory to Mars for an ion thruster propulsion system!"

"In addition, assign the rescue mission to Starlight. Tell them to prepare for the rescue mission. And tell them to refuel their resources on the Moon Palace space station, then stand by in lunar orbit."

Moon Palace had a special cargo bay that stored spare fusion batteries and the propulsion working medium. This space station was originally intended to be a "lunar docking port", therefore it had plenty of working medium supplies.

After hearing Lu Zhou's orders, Hou Guang immediately asked, "The United States replied to us?"

"I'm not waiting for their reply." Lu Zhou shook his head and said, "By the time they reply, it will be too late."

Chapter 791: The World Will Witness Again

If someone wanted to understand the advantages and disadvantages of ion thruster and chemical propulsion, they would have to have a fundamental understanding of a high school physics concept—acceleration.

On a short distance scale, because of the huge thrust produced by chemical propulsion, spacecraft could reach a very high speed in a short period of time, thus reducing the overall flight time.

However, if the distance scale was expanded to millions of kilometers or even tens of millions of kilometers, the situation would become drastically different.

Unlike ion thruster propulsion, chemical propulsion could produce a huge thrust in exchange for working medium consumption. However, ion thruster propulsion could reach speeds much higher than chemical rockets due to its continuous acceleration and large specific impulse.

It took the BFR rockets three months to travel to Mars.

However, for Starlight, which was orbiting in lunar orbit, it would only take one month.

Not to mention this was without using the Hohmann transfer orbit. If Mars and Earth were at exactly the optimal position, it would take less than a month for the Earth to Mars journey.

In the empty and dark space, the astronauts stationed on Moon Palace had just finished supplying Starlight with the working medium.

Sitting in the cockpit, Xu Zhenghong reached out and pressed his helmet, and he reported to the ground command center.

“This is Starlight, we have completed refueling. Requesting further instructions.”

“This is the ground command center. Congratulations on completing the mission. Please switch to cruise mode and await further instructions.”

“Roger that, switching to cruise mode.”

Sitting in the co-pilot seat, Liu Biao watched Xu Zhenghong switch to cruise mode.

“Are we not returning to Earth?”

“The ground command center is telling us to stand by.”

“Is it because of the Americans?”

“Yeah.”

Liu Biao couldn't help but feel emotional.

A couple of months ago, he saw the American spacecraft flying across space.

Before they could say hello, the spacecraft was already gone.

He didn't expect to meet the BFS spacecraft so soon.

The cockpit went silent for a while.

Xu Zhenghong closed his eyes and was about to take a nap when the cockpit signal light flickered.

Liu Biao said, “Signal from the ground command center.”

“I see it.” Xu Zhenghong opened his eyes and stood up. He then pressed his helmet button and said, “This is Starlight, heading to scheduled airspace, preparing to switch routes...”

“5,4,3,2,1... Fire!”

Starlight's five ion thruster propulsion engines burst into a faint blue arc as it slowly pushed the silver spacecraft...

...

15 minutes ago.

Facing this dilemma, the White House finally made a decision. The Chinese Ministry of Foreign Affairs received a phone call from the president of the United States. During this phone call, the POTUS formally requested help.

10 minutes ago, the news reached the Jinling launch site. The command center staff immediately started to get to work.

Starlight was performing a mission in lunar orbit. When they received the news, they immediately began to prepare for it. After they refueled their living and fuel supplies from the Moon Palace space station, they began their journey toward Mars.

It took less than 15 minutes between the president formally requesting help and Starlight heading toward Mars.

The world once again witnessed the efficiency of China.

On the other hand, the Lunar Orbit Committee held a press conference at Jinling Hotel. They publicly reported the progress on the latest rescue mission to various media journalists.

This made the Americans furious.

The Americans wanted to keep this low-key.

Yet the Chinese even invited reporters to the press conference!

The White House wanted to keep this whole thing quiet. They didn't expect China to make such a huge debacle over this.

The press conference made the NASA staff members' faces turn red.

They spent three days analyzing all of their options and solutions. However, they weren't able to make a final decision and missed the optimal launch window.

China, on the other hand, was able to send out a rescue team within 15 minutes of the president asking for help. China's efficiency was on another level.

However, NASA knew the rescue plan obviously wasn't made in 15 minutes. China was probably planning for this rescue mission long before the video call.

Even then, this type of efficiency was never seen before.

Not only that, but China's open, transparent, serious, and responsible attitude with regard to the rescue mission formed a sharp contrast with NASA's image. The public opinion of the Ares program changed overnight.

[I am ashamed of NASA.]

[This is unbelievable. If it weren't for the Chinese, we wouldn't have even known what our Mars colonists are going through right now? Does the White House plan on burying their bodies?]

[They dispatched a rescue team within 15 minutes... Jesus, how is that possible?]

[I seriously doubt NASA had any intention to save those colonists at all!]

[Now I know why the Mars Diaries was suspended. It's not because of communication costs, but purely because of the sandstorm. The White House wants to hide the truth from us...]

In order to save some face and demonstrate their determination in bringing the colonists home, the White House announced that they would bear the entire cost of the rescue mission.

In less than 15 minutes after the announcement, NASA received a bill from China.

US\$1.7 billion.

China was asking for a wire transfer.

After seeing the bill, Director Carson nearly spat out blood.

US\$1.7 billion!

They can build another damn Starlight with this money!

Do they think we're the ATM?

His assistant came over.

"Sir?"

"What now?"

The assistant looked at Director Carson and hesitated for a bit.

“I have some bad news...”

Carson said impatiently, “Hurry up, tell me.”

Seeing how his boss was irritated, the assistant said, “Okay! Half an hour ago, we found a documentary on the official Chinese website.”

Director Carson’s heart sank, he could feel something was wrong.

However, he couldn’t describe this feeling.

He opened his mouth and asked reluctantly, “What kind of documentary?”

The assistant replied, “I think it’s called... Mars Rescue.”

Carson: “...”

F*ck!

Chapter 792: Worst Case Scenario

In the end, the Americans didn’t make the transfer.

After all, such a large amount of money couldn’t be transferred at a moment’s notice. This had to go through a bank’s special transfer route.

Lu Zhou didn’t expect the Americans to actually pay...

“The Americans are actually paying?” Lu Zhou said to Director Li.

He thought about it carefully and realized that it made sense. This wasn’t about money anymore.

Not to mention the White House’s promise to pay the expenses, even if they didn’t make their promise, the White House wouldn’t have let China pay the money.

It would be embarrassing for America if they let China spend money to save their own people.

Director Li nodded and said, "The US treasury secretary summoned our embassy members in Washington this morning. They said the US\$1.7 billion figure was too high, and they are only willing to pay US\$1 billion."

US\$1 billion!

Lu Zhou felt his hands shaking.

He coughed and replied, "1 billion is enough."

However, Director Li looked a little unhappy.

"We'll try to get more for you, but the White House is only willing to pay 1 billion... Is that enough for you? If not, we can give you more."

This rescue operation greatly improved China's international image and national prestige. This was worth the money.

Even though Lu Zhou was the chief designer of the Lunar Orbit Committee, Star Sky Technology was his private company. If Star Sky Technology really had to spend that much money on the rescue operation, it was reasonable for the central government to subsidize his costs.

After all, high tech companies were the future of the country. China wanted these companies to thrive.

However, after hearing Director Li's words, Lu Zhou shook his head.

"There's no way it would cost that much. Including all of the expenses, it is at most two to three hundred million USD."

Director Li was shocked.

"Only two to three hundred million? Then the US\$1.7 billion bill was..."

Lu Zhou laughed.

"Exactly, it was a bargaining technique."

Director Li: "..."

Asking for US\$1.7 billion was indeed a bit too much, not to mention this was supposed to be a humanitarian relief mission.

Actually, Lu Zhou didn't plan on making money. He knew the Americans would give him a lower counteroffer, in which he would "reluctantly" accept the counteroffer.

He had no idea the White House would be so generous. Lu Zhou was almost embarrassed.

Lu Zhou thought for a while and didn't feel good about what he was doing.

"Should I change the price?"

"There's no need... You really are ruthless." Director Li thought for a while and said, "How about this... Just tell them we'll cover the remaining US\$700 million."

Remaining US\$700 million?

One billion is more than enough, what do you mean cover?

Lu Zhou suddenly realized what Director Li meant.

He sighed and replied, "I thought I was being ruthless... I didn't expect you to be even more ruthless."

Director Li said, "What do you mean... What if we have other hidden expenses? Like the 'Mars Rescue' documentary costs? Of course, when the media asks us, tell them that we spent US\$1.713 billion. The Americans covered 1 billion, and we covered the 0.713 billion..."

Lu Zhou couldn't help but ask, "Where did the 130 million come from?"

Director Li sipped some tea and replied, "It looks more legit that way."

Lu Zhou: "..."

...

On the other hand.

NASA headquarters.

Ares program ground command center.

The president stood next to the console with his hands behind his back. He stared at the flashing green dot on the big screen, as well as a green trajectory line.

That green dot was Starlight, flying toward Mars for the rescue mission. The president wasn't in a good mood.

It had been twenty years since the Columbia incident, in which all seven astronauts were killed.

Honestly speaking, the president would rather let another seven astronauts die than for the Soviets to obtain the wreckage of Columbia... He was sure that George W. Bush would have thought the same.

However, that was just a hypothetical situation; there was no way for the Soviets to obtain the wreckage.

However now...

It seemed like China was going to obtain the wreckage.

The president tilted his head and looked at Director Carson.

"What's the situation in New Virginia like?"

Carson said, "The colonists are in a stable mood. We already told them that there is a rescue spacecraft heading toward Mars and that they would have more than enough fuel for the return flight..."

The president nodded and signaled for Carson to stop speaking.

After a while, the president spoke.

"The second phase of the Ares program has completely failed. We need to start doing damage control.

"The BFS spacecraft is equipped with our most advanced space communications equipment. Boeing said that it would be better to crash the BFS spacecraft than to let the Chinese get their hands on the spacecraft."

It wasn't just communication equipment, but the spacecraft also contained environmental-control bio-security systems and cosmic ray shielding materials. These were all state-of-the-art technologies from America aerospace companies.

Although China might be ahead in the world in terms of the ion thruster propulsion system, the Americans dominated other aerospace technology fields.

The BFS spacecraft was the embodiment of the technology accumulated from hundreds of launch missions. If they allowed the Chinese to take that technology, it would be a huge loss to the American aerospace industry.

When Director Carson heard about the president's crazy plan, he began to sweat from his forehead.

He's talking about destroying a billion-dollar spacecraft!

Not to mention...

"But the high-power signal transmission equipment on the BFS is the only way we can get in touch with New Virginia. If we crash the BFS spacecraft..."

"The crash will happen after China's Starlight has reached Mars' orbit... We can make up an excuse and say the spacecraft has failed." The president continued, "No one will be on the spacecraft anyway. It'll just be a piece of metal falling out of the sky."

Director Carson said, "But... if the BFS spacecraft is destroyed, New Virginia will be completely isolated from our communication channel. This might make rescue efforts even more difficult."

"God will protect our heroes," said the president. He looked at the large console screen and muttered to himself, "If something goes wrong, we will give them our thoughts and prayers."

In fact, Starlight arrived 79 hours earlier than Lu Zhou had expected.

After 41 days and 2 hours of flying, the fiery red planet gradually appeared in the view of the Starlight porthole.

Liu Biao squinted and looked outside the porthole. He watched as the bright sun slowly rose from the edge of the fiery red silhouette. He watched the billowing sand waves tumble like a sea of fire.

“This is a mess... But the scenery is quite pretty.”

“Yeah.” Xu Zhenghong nodded and pressed his helmet. He said, “This is Starlight, we have entered Mars’ gravitational system. Successfully entered orbit a-1.”

They waited quietly for about five minutes.

A noisy unstable sound came from Earth, which was tens of millions of kilometers away.

“This is the ground command center, congratulations on completing your mission... Please begin active braking procedures and prepare to approach Mars. Orbital navigation will be handled by the onboard computer. Good luck.”

“Roger that.”

Since they were tens of millions of kilometers away from Earth, the ground command center obviously couldn’t control the spacecraft in real time.

The orbit change plan had already been coded in the spacecraft computer in advance. The pilot would complete the orbit change plan with the help of the onboard computer.

Of course, even though this sounded complicated, it was much easier in practice.

Starlight had a high degree of automation control. Unless an edge case happened, generally the pilot only needed to keep his eyes on the speed dial and make sure the spacecraft didn’t deviate from orbit.

Liu Biao: “Are we landing? Or are we waiting for them to come to us?”

Xu Zhenghong: "The New Virginia life support system has a return capsule. They will return to the BFS spacecraft using their return capsule. Then we will return to orbit."

They would also drop their "spying space probe".

Of course, this was a top-secret mission. This was personally arranged by Chief Designer Lu Zhou. Even Liu Biao wasn't told about this mission.

Liu Biao: "Ok... What if they don't come back?"

Xu Zhenghong said, "Then we'll give them our thoughts and prayers... Remember to take photo evidence, make sure the Americans don't blame us."

"No problems, I'll start taking photos now!"

Liu Biao smiled and reached out to press a button on the console.

"Not yet."

Xu Zhenghong smiled.

However, his face suddenly froze.

He looked at the silver-colored spacecraft outside the window. His pupils contracted. He placed his hand on his helmet.

"This is Starlight... The American spacecraft seems to be in a little bit of trouble."

Five minutes went by.

The command center voice came through the communication channel.

"What's happening?"

Xu Zhenghong squinted and stared at the silver spacecraft in the distance.

He didn't know why, but he felt like something was wrong.

Liu Biao looked in the same direction and turned on the ranging lidar, and he aimed the lidar at the target spacecraft.

Even though this device was used to measure the distance of meteorites, it could also be used to target spacecraft.

Xu Zhenghong looked at the velocity meter on the lidar and took a deep breath.

“BFS spacecraft is falling... I repeat, BFS spacecraft is falling!”

...

It had been more than a month since the distress signal was issued from Mars.

Accurately speaking, it had been 41 days and 2 hours.

Due to the lack of light and electricity, the crops in the planting area had withered.

In order to save energy, two weeks ago, they restricted their range of activities to the experiment room and cut off power to all other areas. The reason for this was because the experiment room contained the only control terminal that could receive and send data to the BFS spacecraft.

Even then, they were running low on resources.

They would die from hypoxia in the next 42 hours...

A trembling female voice broke the silence in the experiment room.

“Are they going to save us?” Julia helplessly glanced outside the window with a look of despair.

There was no chance of hoping the sandstorm would stop.

It seemed like the sandstorm would last for at least six months.

Johnson leaned on the window while holding a picture in his hand. He answered with a weak voice, “Definitely.”

Even though he answered enthusiastically, there wasn’t an ounce of optimism on his face.

“Maybe not,” Travis said. “Maybe they’d rather us die.”

Julia's eyes widened, and she asked, "Why?"

Travis: "Think about it. If we die, we will die as heroes. If we live, they'll have to give supplies and bring us home... It's a negative play for them."

"Enough!"

Johnson suddenly growled.

The cabin went silent for a second.

Travis frowned and spoke with an unhappy tone.

"Hey, is there something wrong with what I said?"

Johnson stood up and looked at Travis.

"I just want you to shut your f*cking mouth, stop wasting oxygen."

"What does that supposed to mean? We're going to die anyway. Oh, you want some of this? Come on, I've had enough of you." Travis rubbed his hands and clenched his fists.

Julia saw that the two men were about to fight, so she used all of her energy to stand up and tried to stop them.

"Enough, calm down you two!"

Suddenly, they heard a muffled noise outside the life support system.

The two men stopped and looked outside the porthole.

Despite the heavy sandstorm, they could clearly see a ball of fire burning on the ground. At the same time, they saw a green dot flashing on the control terminal. Finally, the dot turned red.

A line of words flashed on the upper right corner of the control terminal.

[Connection lost.]

Johnson gulped. He looked horrified.

"Sh*t, our spacecraft!"

Travis quietly muttered, “Jesus Christ...”

The silence went on for a long time.

The fire exhausted all of the remaining oxygen and was eventually swallowed by the sandstorm...

Julia looked outside the porthole and asked with a quivering voice, “Are we going to die?”

No one answered her.

The BFR spacecraft had enough fuel to float in orbit for twenty years, but somehow a “failure” occurred...

Johnson used his index finger to draw a cross on his chest.

God, please protect me.

However, deep down, he knew that there was nothing God could do; this was the land of Ares...

Suddenly, the control terminal started to ring.

At first, he thought it was static noise, so he ignored it.

That was until the ringing became clearer and clearer...

Johnson saw [Connection Request] on the terminal, so he quickly rushed over and pressed the button.

Could this be aliens?

He hoped he wasn’t imagining things.

It turned out it wasn’t his imagination.

The moment the communication channel was connected, a voice traveled through his ears...

“This is Chinese astronaut Xu Zhenghong, how are you doing, my Martian friends?”

BFR spacecraft is crashing towards Mars!

When Earth heard the news, they were already five minutes too late.

Lu Zhou was shocked; he didn't think NASA would be this cunning!

There was no way it was just a coincidence that the BFS spacecraft happened to crash right now.

Especially since it wouldn't be difficult to make a spacecraft self-destruct. They just had to drop the orbital height and let the gravity of Mars slowly pull the spacecraft to the surface.

Generally, after a satellite reached the end of its useful life, it would be manually guided to fall into the sea.

Lu Zhou didn't expect that the Americans would rather destroy the spacecraft than to let the Chinese astronauts have a look around the spacecraft.

Why are the Americans overreacting so badly?

1Inside the ground command center, Hou Guang was standing next to Lu Zhou. Hou Guang opened his mouth and asked, "What do we do now?"

Lu Zhou thought for a second and replied, "Do we know where the BFS spacecraft crashed?"

Hou Guang shook his head and said, "We don't know the specific coordinates. And we can't observe the Mars surface due to the global sandstorm. However, we can roughly estimate the impact area."

Lu Zhou immediately replied, "Mark the estimated impact area. I need to know its relative position to the New Virginia village."

"Okay."

Lu Zhou stood beside the console and waited quietly for ten minutes. Soon a three-dimensional composition grid image was displayed on the screen. The New Virginia village was marked with a blue point, using coordinates provided by the United States. The estimated BFS impact area was painted with a red circle, with an area of around 40 square kilometers. The distance between New Virginia and the center point of the red circle was around 30 kilometers.

It would take the Mars rover an hour to drive from New Virginia to the BFS impact site.

Lu Zhou stared at the image for a while and suddenly had an idea. He looked at Hou Guang and said, "Ask Starlight to contact the New Virginia colonists."

Hou Guang: "Then what?"

"Then take them home." Lu Zhou smiled and said, "But we're going to charge them for the return ticket fee."

...

"I repeat, this is Chinese astronaut Xu Zhenghong. How are you doing, my Martian friends?"

The voice echoed in Johnson's head. He grabbed the headset and put it on his head.

He quickly replied, "We are good! No, we're not doing good... Did NASA send you guys? No, I meant—"

The other end of the communication channel interrupted Johnson, "Not quite. We are helping you out based on humanitarian principles, and we are not employed by anyone. If you want to go home safely, please follow our instructions."

Johnson could tell something smelled fishy, so he frowned and asked, "What do you want us to do?"

Xu Zhenghong: "Please open the data transmission system."

Johnson hesitated for a bit before agreeing to Xu Zhenghong's request. He opened the data transmission system.

This was quite risky. If the other party were to implant a virus in the life support system, the other party could shut off their oxygen supply and kill them.

However, he was out of options.

If he wanted to go home, he had to follow the orders.

When the data transmission system was turned on, a progress bar popped up on the screen.

Johnson frowned and asked, "What is this?"

"We need to collect data to investigate the accident."

Why do you Chinese people have to investigate the accident?

However, now was not the time to complain.

Johnson looked at the progress bar and took a deep breath. He couldn't help but ask, "We just wait here until it is complete?"

"No, we need one more thing from you."

Johnson gulped and replied, "Yes?"

"The approximate location of the BFS spacecraft crash has been sent to your mission log. It is about thirty kilometers from New Virginia. Of course, I believe you have a more accurate way of determining the location of the BFS spacecraft. I don't care how you find the spacecraft, but I need you to recover the black box and sample the materials in the crash area..."

Xu Zhenghong paused for a second and spoke in a serious tone, "This is NASA's request."

Johnson gulped.

He didn't have time to think.

"But there is a sandstorm outside, we can't..."

"The atmosphere on Mars is only one percent as dense. There is nothing scary about a sandstorm. If you bring us what we want, we'll take care of you."

“That’s it.

“I look forward to your good news.”

The communication channel was closed.

Johnson looked at the screen and punched the wall.

“Goddamn it!”

Julia whispered, “Do you think NASA made the requests?”

Travis nervously said, “Hey man, who cares what they want, just give it to them. NASA abandoned us. Why else would they crash the BFS? Don’t tell me it’s an accident!”

Johnson went silent.

After a long time, he seemed to have made a decision. He slowly said, “Prepare the rover.”

“Okay.”

Travis obeyed Johnson’s order.

After all, this was his chance to go home.

Johnson looked out the porthole and suddenly sighed. He muttered to himself, “Whether or not this is NASA’s request, BFS is gone. We can only contact Starlight... We have to believe them.”

He still had a wife waiting for him.

And two beautiful children.

No matter what, he had to go home!

If NASA wanted to abandon them, then there was nothing wrong with working with the Chinese...

Chapter 795: Successful Rescue!

Mars’ orbit.

The cockpit was silent.

Liu Biao quietly waited for the other side of the communication channel to reply. He took a deep breath and suddenly spoke.

“Captain.”

Xu Zhenghong: “What?”

Liu Biao: “Are we doing the right thing?”

“What’s wrong with nations exchanging favors? They would do the same to us.” Xu Zhenghong looked at the red planet and said, “Not to mention we can’t just do favors for free.”

Liu Biao asked, “What if they don’t find what we want?”

Xu Zhenghong went silent for a second and replied, “Then it would be a loss for us.”

But they would still continue the rescue.

This was what Professor Lu told them to do...

...

On the surface of Mars.

The metal alloy doors of the life support system slowly opened. A red Mars rover drove out of the door and onto the billowing sand.

Johnson looked at the green dot on the radar. He was filled with a range of emotions.

Obviously, NASA wouldn’t issue them such a ridiculous task. The Chinese astronaut was obviously lying.

But if he wanted to go home, he had no other choice...

With the radar helping with navigation, Johnson quickly arrived at the destination.

The rover was parked near the impact zone. Johnson, who was already in his spacesuit, got out of the rover and walked toward the BFS with a toolbox in his hand.

“Sh*t... It’s completely destroyed.”

Johnson sampled the BFS spacecraft materials and stored them in a special sample box.

The closer he was to the impact center, the more debris there was.

He carefully stepped over the metal fragments. He took out a cutting gun from his toolbox and turned on the cutting gun. He soon cut a circular opening onto the spacecraft cabin.

Johnson sighed and put the cutting gun again.

“Sigh... Time to get to work.”

He grabbed the metal bars on the outside of the BFS spacecraft and slid into the cabin.

“Black box... Let me think... I think it’s under the pilot’s seat...”

Johnson turned on his spacesuit flashlight and wiped the sand and dust off his spacesuit helmet. He started walking toward the cockpit.

In fact, just like Lu Zhou had guessed, there was indeed a black box on the BFS spacecraft. The black box recorded a series of data such as the BFS spacecraft launch calculations, as well as communication records.

If the BFS spacecraft happened to crash on Mars, it was the colonists’ job to recover the black box.

However, it wasn’t the colonists’ job to hand over the black box to the Chinese...

Johnson found a green suitcase with a reflective strip under the pilot’s seat. He paused for a second, shook his head, and began to walk out of the cabin...

Thirty kilometers away, inside the life support system.

Julia and Travis were left behind in the experiment cabin. They anxiously waited for the news from their Captain Johnson.

Travis looked outside the porthole and didn't see anything except yellow sand.

Suddenly, the experiment cabin door opened. Johnson, wearing a spacesuit, walked in. He was covered in sand.

He was holding a green box and a small suitcase.

Travis smiled and walked up to him, but Johnson ignored him. Johnson walked straight to the console and connected the data cable to the suitcase. He then pressed the communication button.

"We have what you want."

Static noises were heard.

A clear voice came from the communication channel.

"Congratulations, you have earned your return ticket. Please enter the return capsule and begin ignition. We will be in New Virginia air space in five minutes."

"Roger that."

Johnson unplugged the cable and looked at his two teammates. He sighed in relief.

"We're going home."

...

The New Virginia escape capsule was located at the center of the life support system, directly above the methane generator.

During an emergency, the colonists would have to enter the escape capsule and begin the escape procedure. The oxygen and methane reserves in the life support system would be injected into the engine of the escape capsule. The escape capsule would then fly to the BFS spacecraft.

Of course, the BFS spacecraft was destroyed by NASA.

Even though Johnson had no evidence that NASA purposely destroyed the BFS spacecraft, Johnson knew NASA was behind all this.

He knew NASA purposely gave up on them.

This made him feel slightly better about helping China...

The silver-white escape capsule separated from the life support system, leaving dust and smoke behind.

This was the end of their failed colonization mission.

Of course, even though they failed, they gained experience and knowledge. This would pave the way for their successors...

The escape capsule headed toward the starry sky, gradually merging into orbit. After half an hour of floating, it was finally captured by the arms of Starlight.

The large and small spacecrafts slowly approached one another.

"New Virginia capsule is in orbit... Our oxygen levels are running low, we need help."

"This is Starlight, we have received your request. Please wait patiently for rescue."

The hatch slowly opened, and a thick and long mechanical arm extended out of the cabin and grabbed the escape capsule. The capsule was then slowly dragged into Starlight's cargo area.

This system was originally intended to be used for recovering space trash and dead satellites, but it was also technically feasible for fetching escape capsules.

On the other hand, in Jin Ling City, the lunar orbit project committee held a press conference with regard to the rescue operation.

When the reporters at the conference heard that the BFS spacecraft had crashed onto Mars, the conference room went into chaos. Johnson's wife, who came all the way to China, was in tears.

However, just a few hours later, everything changed.

News of the escape capsule entering orbit, Starlight arriving in their target airspace, and other news of the recovery operation slowly started to flow. Reporters, as well as members of the US embassy, at the scene held their breaths as they waited nervously for the result.

At last, when the news of the successful rescue reached Jinling's ground command center, it was instantly spread to the press conference. The big screen at the conference read "all three astronauts were rescued".

Everyone saw the words on the screen...

The press conference was filled with thunderous applause.

"Jesus Christ... Thank you! Thank you! I'm sorry, I don't know what to say..."

A crying woman held Lu Zhou's hand. Her legs felt weak. A staff member quickly supported her, and it almost seemed like she was going to faint.

Lu Zhou gave her a comforting look and told the staff member to take care of her.

Her husband was finally safe.

For the past month, her life had been nothing but torture.

Now that the knot in her heart was finally untied, she could finally get a good night's rest.

Chen Yunhai, director of the Lunar Orbit Committee organization department, stood in front of the camera and solemnly announced the victory of the rescue operation. He also announced the return timeline of Starlight.

The US embassy members were standing at one side, and they wiped the tears off their faces and began applauding.

The Americans had lost the space race; there was no doubt about it.

But...

They couldn't help but applaud...

Chapter 796: Finesse

After Starlight recovered the escape capsule, Starlight continued to orbit around Mars for a couple of days. It then began the return flight procedure and started to switch orbit.

Xu Zhenghong took out a key, inserted it into the console, then twisted it. A black item was released from Starlight's cargo storage and began to fall toward the fiery red planet.

Liu Biao caught a glimpse of the black object. He looked out the porthole, but he couldn't see anything.

"Did you see something outside the window just now?" he asked.

Xu Zhenghong stared at the speed diameter on the console. He reached out and pressed the main engine button.

"I didn't see anything, you must be imagining stuff."

Liu Biao was sure he saw something.

He was an ex-fighter jet pilot. He had the eyes of an eagle.

"Did they drop something?"

"No." Xu Zhenghong casually changed the topic, "Once we finish accelerating, go say hi to them. Give them a quick rundown of Starlight's components and place them in the guest cabin. Oh yeah, make sure to turn on your recorder and keep the black box safe."

Liu Biao smiled and gave a thumbs-up gesture.

"Roger that."

...

It took less than ten minutes between the escape capsule breaking through Mars' atmosphere and it being recovered by Starlight. The camera installed on the outside of the Starlight cabin captured this beautiful moment.

This twenty-minute long video was transmitted back to Jinling ground command center. It was then sent to the CTV "Mars Rescue" editing room, marking the end of the documentary.

The documentary was finally complete.

The day after the Lunar Orbit Committee announced the successful rescue mission, CTV released the full version of the "Mars Rescue" documentary.

The total length of the documentary was 120 minutes. After some digital processing, the distress signal from Mars detected by the Five-hundred-meter Aperture Spherical Telescope was restored. Everything from the White House's call for help, to the Communist Party of China giving instructions, to Starlight beginning its rescue mission within 15 minutes of receiving the distress signal... They were all captured in the documentary.

A digital version of the documentary was released on major video and social media sites in China.

The comment section of the documentary exploded.

[Starlight is nutty! Professor Lu is nutty! (national flag)]

[Fifteen minutes response time!]

[I want the Moon Palace to be open to the public! I want a chance to go to the Moon!!]

[The Americans sent someone to Mars, but we had to rescue them, hmm... Does this count as a victory for us?]

[I think it does...]

[I noticed that the rescue mission costs were US\$1.714 billion. The Americans only paid US\$1 billion. Why did we have to spend US\$714 million to save their people? Aren't we competing in a space race right now? If I were the chief designer, I would definitely force the Americans to pay the full amount!]

[Well then, thank goodness you're not the chief designer.]

[...]

The wave of comments flooded the website. The "Mars Rescue" was soon uploaded to YouTube.

Even though NASA's inefficiency throughout the entire debacle angered many netizens, the White House calling for help at the right time still earned them a lot of brownie points.

The generous and responsible attitude shown by China during the rescue mission also added a touch of respect and prestige to the country's image.

Even though there were competitions between the different nations on Earth, in space, everyone was from the same planet.

Regardless of the unknown motives behind this mission, being able to rescue someone from tens of millions of kilometers away was something worth remembering in history.

Of course, the Lunar Orbit Committee was the one that deserved the most praise.

With a fifteen-minute response time, the efficiency and speed of execution shocked everyone around the world...

Three days after the press conference.

Lu Zhou was drinking tea with Director Li inside his Jinling Institute for Advanced Study office.

They happened to talk about the comments on the Internet when Lu Zhou spoke emotionally.

"Sometimes I think that if you don't influence public opinion, someone else will. We have been too passive in this regard."

2The space race had been going on for more than 1 year and a half.

The Lunar Orbit Committee had been established for quite some time. They even sent a space station into lunar orbit. However, this was their first time receiving global praise.

Director Li nodded and spoke emotionally as well.

“Yeah, but that isn’t something we can change overnight.”

Lu Zhou nodded and didn’t say anything else.

Just like Director Li had said, some things couldn’t be changed overnight.

Whether it was constructing a tower or building up one’s public reputation, it all required time.

Director Li paused for a second. He then suddenly asked, “Oh yeah, speaking of which, did you get the BFS spacecraft black box?”

Lu Zhou nodded and said, “We did.”

Director Li went silent for a while and said, “I’m afraid this isn’t easy to deal with.”

They couldn’t conceal the truth.

There was no reason for the three Martian colonists to keep this a secret.

Even though they knew that this wouldn’t be a huge deal, it would still damage their reputation.

Lu Zhou smiled and said, “There’s nothing difficult. Just copy the data and give them the box back.”

Director Li suddenly replied, “Do an accident appraisal. Then send the accident appraisal report together with the black box.”

Lu Zhou didn’t know what Director Li meant at first, but he quickly caught on.

“You’re quite good at finessing.”

Director Li frowned and replied, “What is finessing?”

Lu Zhou coughed and said, “Nothing... It’s kind of like street smart.”

“Damn you millennial, speak normally.” Director Li smiled and stood up from the sofa. He said, “Okay, I won’t bother you anymore, I still have to go to a meeting at the launch site. Do you want to come as well?”

Lu Zhou finished his tea and stood up as well.

“I’ll send you out.”

“I knew you didn’t want to go.” Director Li smiled and said, “I’ll go by myself then.”

“Take it easy.”

After Director Li left the office, Lu Zhou took out his phone and looked at the time.

The black object he dropped on Mars should have landed by now...

Chapter 797: Crawling All Terrain Survey Vehicle

After Director Li left, Lu Zhou took the elevator straight to the second basement floor of the main building at the Institute for Advanced Study. He walked through the hidden sample room and entered the secret third level basement.

This was his underground laboratory.

All of the system debris rewards were stored here, which was managed by Xiao Ai.

The moment he entered the laboratory, a quad-rotor drone with a display flew over.

Lu Zhou looked at Xiao Ai and asked, “How’s the crawler going?”

The so-called “crawler” obviously referred to the all-terrain remote-control exploration vehicle on Mars. This was one of his past system mission rewards.

Unlike the carbon nanofiber clothes, this gadget obviously contained much more sophisticated technology.

According to the manual, its communication radius was 3 astronomical units. Even if Mars and Earth were at their farthest relative position, the all-terrain crawler could still be controlled.

Lu Zhou was very interested in the communication technology contained in this gadget. He tried to disassemble this thing, but he couldn't find a non-destructive disassembly method. The manual also clearly said it had a built-in self-destruction program, which could lead to unpredictable consequences.

This gadget was obviously similar to the nitrogen shield.

He could either shoot at it with the scanner gun, or just use it as it was.

Fortunately, unlike the nitrogen shield, this wasn't a one-time-use device. According to the manual, this gadget could be charged with solar and geothermal energy. When its energy level was low, it would automatically enter its low-energy standby mode and wait for its battery to recharge.

Considering the fact that Lu Zhou already had a space station on the moon, his only choice was to put this crawler on Mars.

That way, not only could he survey resources for future colonists, but he could also explore the New Virginia site and see what happened there.

1Xiao Ai: [It has successfully landed on Mars! We can begin at any time!]

Lu Zhou nodded and said, "Let's begin now."

Xiao Ai: [Yes, sir! (๑•̀ㅂ•́)و✧]

The control terminal of the "Crawler" all-terrain survey vehicle was a heavy notebook computer, which was also equipped with a signal transmitting and receiving device the size of a fridge. The signal transmitting and receiving device was installed by Lu Zhou beside the rooftop water tank. It was quite discreet.

However, even if someone felt like it was suspicious, they had no right to investigate.

This was because the Jinling Institute for Advanced Study played a crucial role in controllable fusion and aerospace research. Even the military research departments would have a hard time obtaining access to these buildings.

So far, the terminal of the crawler was connected and controlled by Xiao Ai.

Five minutes after Lu Zhou's order, a black prism-shaped box on Mars made a gas-leak sound.

The shell of the box slowly opened. A remote-controlled vehicle that was less than a meter tall with angular edges appeared. It followed its preset instructions and began heading toward the New Virginia site.

On the other hand, Lu Zhou, who was in his underground laboratory, made a cup of coffee for himself. He then sat down at the experimental table and opened the survey vehicle control terminal.

He quietly waited for the communication delay. Finally, the signal traveled tens of millions of kilometers and a dialog box popped up on his screen.

["Lightning" escape capsule activated!]

["Crawler" activated!]

[Terminal successfully connected!]

A crystal clear video feed was shown on the screen. Lu Zhou drank his coffee as he watched the crawler drive through the harsh climate.

Due to the five minute long delay, it was obviously impossible for him to control this vehicle. However, this vehicle had some built-in intelligence, and using its preset instructions, it could complete its tasks without any human intervention.

The person sitting in front of the control terminal only had to look at the signals sent every minute or even ten minutes, and to look out for edge cases.

Actually, Xiao Ai could do this job for him. But Lu Zhou was curious. That life support system was the embodiment of North America's state of the art biosphere technology. He wanted to see what it was like.

After a while, the outline of the life support system could be seen through the crawler camera feed.

Lu Zhou looked at the tragic "remains" of the biosphere. He thought back to the concept map published by Space-X and couldn't help but feel bad for the Ares program.

After the escape capsule was launched, the entire life support system was abandoned. The remaining power was enough to sustain the life support system for a period of time, but it wouldn't last long.

The escape capsule took away almost all of the remaining oxygen and methane. Not to mention the tail flame of the capsule damaged the shell of the life support system.

When the crawler drove through the gardening area, Lu Zhou could clearly observe through the camera that the vegetables had been destroyed by the escape capsule flames.

However, these were all just minor problems. After all, ever since the global sandstorm, the colonists had abandoned all of the crops.

The crawler drove up to the garage door, and it extended its arm and unlocked the garage door.

The crawler turned on its lights and went into the garage.

Lu Zhou looked at the life support system through the screen and couldn't help but think.

His "Garden" research project was attacked by unknown forces. He had doubts it was the CIA, but there was no evidence. He never would have imagined that he would obtain new artificial biosphere technology this way.

Maybe this was the so-called karma.

Even though he didn't believe in karma.

The crawler passed through the garage and went into the experimental area. Lu Zhou looked at the plastic bags and imagined what the last couple of weeks were like living here.

In order to conserve living resources and energy, the colonists moved into the same room. They stayed in the only room that had the communication terminal.

Lu Zhou couldn't help but feel sympathetic.

He imagined the poor colonists arriving on Starlight and finding out that they could finally take a shower in Starlight's guest cabin.

The crawler drove to the laboratory console. It extended its arm and inserted the arm into the console.

Soon, the screen lit up, showing a progress bar.

The progress bar was completed. The data was being transmitted to Lu Zhou, who was tens of millions of kilometers away.

Lu Zhou quickly looked through the files and had a serious look on his face.

He was even a little shocked.

“Interesting...”

Chapter 798: Traces of Underground Ice?

America's artificial biosphere technology was state of the art.

There were no problems with the design of the entire life support system unit. In fact, one could even make the argument that the design was perfect.

From the air circulation system to the water filtration system and automatic planting irrigation device, each resource was utilized to its maximum efficiency. The biosphere was on the boundary of science fiction.

There was even a three-meter diameter circular interface door on the side of the life support system, presumably for future colony expansion uses.

Space-X and NASA wanted to expand New Virginia into a hundred-person colony. They wanted to create an ecosystem cycle using the rich methane and carbon dioxide resources.

The only problem, or the only problem Lu Zhou could find, was that the Ares program was executed too hastily. They just happened to encounter a global sandstorm...

This was 70% nature's fault, and 30% human's fault.

If this sandstorm didn't come so suddenly, maybe the New Virginia colonists would have had more success on Mars. Once the geothermal wells and methane collection points were deployed, even during a sandstorm, these collection points could supply energy to the electric generator.

Of course, this was all in hindsight.

After Lu Zhou downloaded the data of the life support system, the crawler opened the sample library door.

The alloy door slowly opened, and highly concentrated carbon dioxide air immediately flowed into the experimental area. If there were a living person there, it would be difficult for them to breathe.

However, this wasn't a problem for the crawler.

The little guy drove through the dusty corridor and quickly arrived at the sample library. Rows of neatly arranged sample racks could be seen through the camera lens.

According to the labels attached to the sample rack, the rock samples of areas around New Virginia were stored. The numbers and letters represented the coordinates of the samples.

Even though these astronauts on Mars were called "colonists", they were more focused on scientific investigations.

These precious samples were part of their research tasks.

"It seems like the experimental area doesn't have a direct channel to the sample library... It's a pity we can't take these things away," Lu Zhou said as he looked at the samples.

If he could bring these samples back to Earth, it would greatly benefit humans' understanding of Mars.

Unfortunately, the colonists weren't able to take these samples into their escape capsule.

Xiao Ai: [Master, do you want to begin the scan?]

Lu Zhou nodded and said, "Yeah, begin."

After quietly waiting for five or six minutes, the Mars crawler drove to the first row of the sample racks. A searchlight-looking component slowly came out from the top of the crawler.

A clear blue light emerged from the searchlight, shining on the shelf samples.

The reflected light was received by the crawler and fed into a special processing algorithm. A series of physical features such as the size of the rock, weight, and element composition was sent to Lu Zhou.

Location and retrieval depth data of the samples were also sent to Lu Zhou.

Within 10 minutes, Lu Zhou saw a circular sample distribution map in front of him. The map was around 10-20 kilometers in diameter.

Lu Zhou looked at the map and suddenly seemed curious.

He was already satisfied with collecting the life support system data; he didn't expect to retrieve even more useful information!

According to the map, there were at least two methane gas emitting craters near New Virginia, as well as a possible underground ice layer!

In March 2019, the European Space Agency's Mars space probe found traces of liquid water under the Martian Antarctic ice sheet. NASA also previously published the discovery of perchlorate in craters. However, these resources were located in extreme conditions and difficult to retrieve.

If they could find a shallow underground ice layer, it would benefit the future Mars colonists!

"It seems like NASA has more information about Mars..."

Lu Zhou stared at the area marked with the suspected underground ice layer. He pondered for a moment before tapping the keyboard.

Xiao Ai immediately knew what he meant.

Xiao Ai: [Master, do you want to explore this area?]

Lu Zhou nodded and said, "Yeah, after the crawler finishes investigating the New Virginia village, tell it to explore that area. If it finds the underground ice layer, tell me immediately."

Xiao Ai: [Yes, sir! (๑•̥̥̥•̥̥̥) ✧]

Lu Zhou finally saw what kind of high-tech life support system NASA had, and his curiosity was satisfied.

He left the crawler alone because Xiao Ai could execute the orders for him.

After telling Xiao Ai to keep the life support system in its original appearance, Lu Zhou copied the life support system data onto a mobile hard drive. He then took the hard drive and returned to the first floor of the Institute for Advanced Study building.

He took out his phone, opened his address book, and called a number.

The phone immediately connected.

A husky voice was heard.

“Hello?”

Lu Zhou: “Is this Professor Hu?”

Hu Yang paused for a second and replied, “You are Professor Lu?”

“Yes, it’s Lu Zhou.” Lu Zhou paused for a second before asking, “Where are you right now?”

“I’m in the aerospace institute at the Chinese Academy of Sciences... Why?”

“Ok.” Lu Zhou skipped the small talk and said, “If you are free, please come to the Jinling Institute for Advanced Study. I can’t tell you why over the phone. We have to meet in person.”

Professor Hu held his breath.

He asked with excitement, “Is this related to the Garden project?”

Lu Zhou’s reply was exactly what Professor Hu wanted.

“Correct, it’s related to the Garden project!”

Chapter 799: "Bridge" to the Moon

Ever since the armed attack on Biosphere A, part of the experimental data was destroyed and the Garden project was stalled.

Even though none of the research institutes had terminated their cooperation with the Garden program, many foreign research institutes were considering whether to withdraw due to security reasons.

The project researchers had been reallocated to the Institute of Aerospace Technology at the Chinese Academy of Sciences. Biosphere A had already begun reconstruction. Local military forces had increased their presence. However, some of the losses were irreparable.

Nearly half a year of the Garden project's results were destroyed. Professor Hu, as the project leader, suffered the most and lost a ton of weight.

Even though no one was blaming him, he was blaming himself.

Therefore, after he received the phone call from Professor Lu and heard that Professor Lu had something important to tell him about the Garden project, he immediately left Beijing and rushed off to Jinling.

After a long journey, he finally arrived at the Jinling Institute for Advanced Study dean's office.

"This is what I wanted to give you." Lu Zhou took out a hard drive from his drawer and sat down on the sofa. He handed it to Professor Hu and said solemnly, "I hope you can make good use of the data."

Hu Yang looked at the hard drive and hesitated for a bit before asking, "What is this?"

"Data from Mars."

The office went quiet for three seconds.

Professor Hu gulped and asked, "Is this... legal?"

Lu Zhou smiled and replied, “Depends on how you use it. It’s definitely not legal to publish in a journal. You also can’t discuss it with any foreign expert. But anything else should be legal.”

Hu Yang reached out and tried to grab the hard drive, but Lu Zhou didn’t let go.

Professor Hu looked up at Lu Zhou with a confused expression.

Lu Zhou looked at Professor Hu and said, “Remember, once you have this, you could be on a CIA list.”

Hu Yang smiled and said, “Whatever, I’m probably already on a list.”

The moment China displayed their interest in colonizing space, the Garden project was bound to be targeted. He, as the leader of the Garden project, was doomed from the beginning.

He tried to grab the hard drive again.

This time, Lu Zhou let go.

Professor Hu looked at the hard drive and suddenly said, “Once the Garden plan is completed, we will be able to colonize the solar system.”

Lu Zhou smiled and said, “Forget about the solar system, we’ll be able to conquer much more than that.”

It was just a matter of time.

...

After Hu Yang returned to Beijing with Lu Zhou’s data, he immediately contacted several key researchers who worked on the Garden project and set up an independent research group. This research group was specifically dedicated to researching valuable experimental data.

On the other hand, Starlight, which was thousands of kilometers away, successfully entered the Mars-Earth return orbit. There was no doubt that Starlight would return to Earth safely, so the Internet discussion gradually cooled down.

After the astronauts returned to Earth, CTV would conduct an interview...

A lot of things happened on Earth during Starlight's month and a half long journey back to Earth.

NASA was going full force ahead with its Ares program and Lunar Gateway project. China, on the other hand, was focusing on Star Sky Technology and developing lunar resources.

The first phase of the Moon Palace project was complete. Once the six astronauts entered the lunar space station, human civilization would be on their way to colonizing the Moon.

The space station suspended in lunar orbit was like a global "spaceport". Maybe in a decade or two, people would look at the starry skies and see a populated Moon...

Of course, this was just the beginning.

After countless days of design and planning, Chief Designer Lu's "Earth-Moon orbital transport system" finally went from a blueprint to reality.

After soliciting opinions from the Internet, the first "Earth-Moon orbital transport system" spacecraft was named "Magpie Bridge".

The Magpie Bridge design was similar to that of Skyglow; they both had a single propulsion engine at the rear of the spacecraft. They controlled the propulsion direction by changing the speeds of various engines. However, instead of the five engines in Skyglow, the Magpie Bridge had four engines. The Magpie Bridge also went from a shuttle-shaped design to a rectangular parallelepiped, and the wings were removed.

It looked more like a bulky ship that was going to go back and forth between the Earth and the Moon.

The Magpie Bridge was deployed and sent into low-Earth orbit by the Long March 9 rocket. The Lunar Orbit Committee's Earth-Moon transfer capacity rose to a new level.

The transportation of materials from low-Earth orbit to lunar orbit would be completed by this ion thruster propulsion spacecraft, which was specifically designed for outer space navigation. The Magpie Bridge reached a carrying capacity of 500-750 tons!

So far, the Lunar Orbit Committee was considering whether to rent a unity module from the International Space Station to hold their “transit supplies”.

If this cooperation were to go through, the International Space Station would become a supply transfer station between lunar orbit and low-Earth orbit.

From now on, if someone wanted to send something to the Moon, they only had to send it to the ISS, which would then send it to the Moon by using the Magpie Bridge.

This way, smaller aerospace companies could participate in the lunar orbit project!

A high-thrust propulsion system would no longer be a requirement for the Earth-Moon transfer. The most difficult voyage would be done by Star Sky Technology’s giant “ship”.

Lu Zhou didn’t even realize that he was building an interplanetary transport company.

Most people would have never imagined that Space-X’s vision was being executed by a Chinese company...

Chapter 800: Mining

Jinling Institute for Advanced Study.

Aerospace Science and Technology Institute director’s office.

After Hou Guang saw Lu Zhou’s proposal, he hesitated for a second before asking, “Mining on the Moon?”

Lu Zhou nodded and replied, “Yeah.”

Lu Zhou didn’t seem like he was joking. Hou Guang put on his glasses and began reading through the proposal abstract.

After a couple of minutes, he placed the proposal on the table and looked at Lu Zhou.

“I’ve finished reading the proposal... So... You want to design a device that can automatically mine shallow ore deposits on the Moon?”

Lu Zhou: “Correct.”

Correct...

Lu Zhou is treating this so casually.

Hou Guang couldn’t help but smile.

“We have only just completed the first phase of the Moon Palace project, now we’re moving on the lunar mining... Are we moving too fast?”

Lu Zhou shook his head and said, “Not fast at all. The Moon Palace project itself is a project aiming toward the development of lunar resources. Now that the Magpie Bridge is in service, I think it is about time we move from lunar orbit to lunar surface.”

The 2020s was the beginning of the “Moon Age”.

If someone wanted to mine resources on the Moon a couple of years ago, it would be impossible to achieve. But in 2021, lunar mining was feasible.

NASA’s Lunar Gateway program, the Moon Express company receiving funding, the European Space Agency signing a contract with rocket manufacturer Ariane Group... These were all events that pointed toward lunar resource mining.

Take the MX series of detectors made by the Moon Express as an example. It was able to collect and retrieve 20kg of Moon rock samples. According to their research and development plan, they were focusing on mining shallow deposits in low gravity environments.

Of course, Lu Zhou didn’t care about his competitor’s actions; he just didn’t want to wait any longer.

The key to completing the second phase of the special “Control of Earth and Moon” mission chain was to build a semi-permanent scientific research station on the Moon.

If he only wanted to complete the main system mission, he could do it right now with Star Sky Technology’s current available technology.

However, he would be missing out on other rewards.

Some of the branch missions were impossible, but some might be achievable. Lu Zhou didn't want to give up those mission rewards too easily.

One of the branch missions was to mine and smelt 100 tons of titanium alloy on the surface of the Moon, as well as collecting 50 tons of lunar soil.

Now that the first phase of the Moon Palace project was complete, the second phase was about to begin. They would require a lot of construction materials. Fortunately, the Moon happened to have an abundance of titanium ore reserves.

If they could use the Moon's resources as construction materials and create a "self-sustaining" lunar construction system, they could greatly cut down the project costs.

Also, in Lu Zhou's opinion, this was his only chance at expanding the Moon production scale.

Once the second phase of the Moon Palace project was complete, the remaining phase would be to modify the lunar space station.

By that time, he would no longer need an abundance of titanium alloy materials...

Of course, even though lunar mining was theoretically possible, there were many hurdles.

The low-temperature and low-gravity working environment of the Moon, the high staffing costs, and the automation technology requirements... These were all barriers that they had to overcome.

Hou Guang scratched his head and contemplated it for a second.

Lu Zhou suddenly threw this idea in his face, so he didn't have any time to form an opinion. He said, "How about you leave the plan here with me? I'll do some research on my own... However, industrial production is not my expertise, so I'll have to consult experts."

Lu Zhou nodded and said, "I've already done my research. This was discussed at the weekly Lunar Orbit Committee meeting. The theoretical research has already been done."

He paused for a second before adding, "I'll contact Shenyang Machine Tool as well as the two state aerospace companies. We won't be alone in this project. The top industrial automation and aerospace equipment companies will help us. There will be at least three academicians involved, and I will be the project leader. You'll have to handle some of the more troublesome parts. If you need more people, feel free to tell me."

Hou Guang quickly said, "It's fine, there are enough people!"

One academician would have a group of noob researchers working for them, not to mention scholars from the Changjiang Scholars Program, associate professors, post-doc fellows, and PhD students. One academician had an entire research army behind them.

And they had three academicians...

Coordinating the project teams would be a difficult task in and of itself.

Hou Guang couldn't help but think.

Professor Lu is the only person in the world that can recruit three academicians so easily...

...

The same proposal plan appeared on the Chinese president's desk.

After the president read the proposal, he took off his glasses and looked at Director Li of the State Administration for National Defense.

"Did Professor Lu write this?"

Director Li nodded and replied, "Yeah."

"Has there been a meeting about this?"

"There has."

"What do other experts think?"

“Academician Yuan from the China Aerospace Science and Industry Corporation thinks this is worth a try. Chief Engineer Yang Zhongquan of Shenyang Machine Tool agrees. Even though it will be difficult, it is not impossible. It will greatly help our country’s automation industry,” Director Li said.

After hearing Director Li, the president nodded.

“Our country is honored to have a scholar like Professor Lu.”

He picked up the pen from his table and signed the document. He then stamped it with a bright red stamp.

“Approved!”