



Tom Swift's — Mine-Ore Decisions

By T. Edward Fox

The twelve astronauts who walked the surface of Earth's satellite brought back several hundred pounds of assorted rocks and dust from the Moon, which turned out to contain a new mineral, Armalcolite. Named for the three Apollo 11 astronauts—Armstrong, Aldrin and Collins—it has long known to be a titanium rich mineral with a unique crystalline structure. When a researcher at Enterprises discovers one exceptional characteristic, this rare mineral suddenly becomes in high demand.

Rather than simply give Swift Enterprises unlimited rights to mine the mineral, the Government decides to limit them to a short period of time. Tom is determined to locate and bring back sufficient quantities of Armalcolite to meet the new demand without bringing back just raw lunar material, and that means setting up mining and smelting operations on the Moon.

It is a hostile place to begin with, but when an unscrupulous billionaire decides to cash in by sneaking up there, Tom must find a way to complete his mission in time and to rescue the incredibly stupid man.

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This story is dedicated to people who are always looking for a way to strike it rich. Blessed with almost zero gumption, and often fewer brains, many of these characters have a spurt of hard work followed by lots of alcohol and other things, then end up with little to show for it. But, there is always some jerk who make a fortune off of the backs of the others. This story is NOT for them.

A SWIFT ENTERPRISES INVENTION STORY

Mine-Ore Decisions

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FOREWORD

There are very few things Tom Swift cannot do if left to his own devices. That isn't to say that he does things all by himself—quite the contrary, and he is the first to credit those around him for their hard work—it is just that he works best when outside distractions are absent.

That usually goes for working out of the public spotlight.

This story is about one of those instances. Tom finds himself embarking on an exhausting project to bring back something practically nobody knows about from the Moon. Unfortunately, personal greed rears its ugly head and almost ruins his chances for success.

Too bad everything is happening in the one place that has been deemed to be "...For All Mankind."

I always hoped that there would be some fantastic discovery coming out of the Moon program. Little did I know it would have to wait the better part of a half century.

All in all, though, I'm glad I hung around to see it all happen and I am very proud to say that it was Tom Swift who came to the rescue, once again.

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Victor Appleton II

PART 1**“I May Have Found Something”**

TOM SWIFT, blond-haired young inventor, had used the phrase so many times himself that it sounded strange when uttered by the young technician and metallurgist sitting across the desk from him.

“Mr. Swift? Tom. I may have found something,” Peter Douglas was saying to him. “I was sort of playing around trying to synthesize a fairly rare mineral and made a mistake.”

“Well,” Tom told him, thinking that an apology was coming, “we all make mistakes at times. Sometimes they aren’t so bad—”

“But, that’s just it. This seems to be good. Really good. Maybe,” Peter said lowering his eyes and looking at Tom’s desk, “too good to be true.”

“You’d better tell me about it.”

“I’m not certain if you know what Armalcolite is. Do you?”

Tom thought and then said, “As I remember, that was a crystalline mineral the Apollo astronauts found on the Moon and brought back in some of the rocks. That stuff?”

“Yes. Well, it has some really interesting properties including a very high melting temperature. It takes up to fourteen hundred degrees Celsius to get the components

into liquid form and then it has to set at about twelve hundred for a couple days before quickly lowering the temperature to properly set up and not fracture into separate components.”

“Remind me what it consists of, please.”

“Oh, magnesium oxide, titanium oxide, iron oxide and a few rare earths. The special thing about it is that it grows metallic crystals that are more than a few millimeters long, gray in color and is very hard to get right. However, if you get things right, you have a rare mineral.”

“I have to ask you why you were making it in the first place. We certainly do not use it here at Enterprises.” Tom was referring to the four-mile-square research and industrial facility located in Shopton, New York.

Douglas began looking uncomfortable. “I was trying to prove to one of the other metallurgist that I could do it before she could.” He blushed.

Tom grinned, realizing that it was more than just a challenge between colleagues. “Alright. So you succeeded I assume.”

“Yes. But, then I did something really stupid.”

“Was she in the lab with you when you did this really stupid thing?”

Douglas blushed even more furiously.

“Tell me what happened.”

Peter cleared his throat and then looked up at Tom. “I had it down to under one thousand degrees and it was

crystalizing correctly when she told me she needed to leave. I grabbed the first metal flask I could find and pored the Armalcolite into it. It turned out to be aluminum and everything sort of reacted.”

Tom frowned. He knew that unintended reactions could be dangerous, even deadly, and needed to know more. “What happened next?”

“I’m not exactly sure. You see,” he continued when Tom gave him a little scowl, “I, uh, we left the lab just in case of an explosion or whatever. So, I never saw the exact reaction.”

Tom nodded before asking, “What happened to the flask and your Armalcolite?”

“When I came back the flask had disappeared!”

“What? Gone?”

“Not exactly. See, where the flask had been was this solid puddle of... of... something.” The scientist’s eyes went wide and he shrugged at Tom. “But that’s not the really strange part.”

“This ought to be good,” Tom said with a sharp laugh.

Peter Douglas opened the notebook he had set on Tom’s desk and extracted a dull thin sheet. Placing it in front of Tom, he pointed at it. “This is all that was left. If it hadn’t reacted with the aluminum like this I could have fractured the Armalcolite out into its component minerals and then just put things back into storage. But,” he again pointed at the metal as Tom picked it up, “I can’t get this to melt back down.”

Tom turned the lightweight piece over and over, looking at the front and back and along the thin sides. It was less than two millimeters thick. “Tell me, Peter. How much of the new mineral did you make and how big was this flask?”

“Um, I ended up with just over thirteen grams of Armalcolite—less than half an ounce—and the flask should have weighed in at about ninety-five grams.”

Tom tried to bend the metal. It was too solid to bend by hand, so he placed it over the edge of his desk and tried it again. Nothing. He looked up at Peter. “What have you tried with this? I mean, have you performed any experiments?”

Peter nodded. “I tried to bend it like you did. I even put it into a bending machine over in Art Wiltessa’s construction shop. It took over ninety-eight hundred pounds of force to get it to bend.”

Tom held up the slim sheet and looked across it. It was totally flat. He looked at his metallurgist and raised a questioning eyebrow.

“It snapped right back into place as soon as Art took the pressure off. Also, it is bullet proof, at least up to a fifty-caliber round which is the largest I tried. It won’t melt even up to twenty-two hundred degrees. And, strong acids and alkalis won’t etch it.”

Tom continued to turn the piece over and over. Finally, he asked, “So, what do you think we should call this new, potential miracle metal of yours? And, what can we do with it?”

Peter Douglas looked his employer directly in the eyes. “Tom. I’ve got a kid brother who’s in the Army. He’s stationed over in the Consalian Republic in Africa. Where we’re helping the rebels fight to regain control from a viscous dictator. He’s a gunner in a tank and tells me that the despot’s army has been purchasing depleted uranium-tipped rounds for their portable canons. Those can go practically though the armor in our best tanks. After I tested that sheet I began thinking that it might work as armor plate for tanks and other vehicles. Even fighter jets.”

“Is it practical?”

Sadly, Peter shook his head. “Not really. That little piece cost more than a thousand dollars. Oh, I’ll repay Enterprises. It was my mistake.”

Tom smiled at the man. “If there were some way to make this commercially, it would be a great thing, especially if it turns out to be as strong as I think it is.”

“Yeah. I just had a moment of hope for my brother. He’s only nineteen. Practically a kid—” He stopped, looking at the youth across the desk who was still several months shy of his own twentieth birthday. “Sorry, Tom. I didn’t mean—”

“Not to worry. I’ve been accused of a lot worse than being nineteen!”

After Peter left his office, Tom sat deep in thought. It would be, he considered, a great thing to be able to add a super metal alloy to the Swift Enterprises list of products. It might also fill a gap left when Tom had discovered that

his father’s eponymous Tomasite super plastic had a weakness that kept it from being suitable as an armor covering. Under intense and repeated contact from gunfire, it could suddenly lose structural integrity. And, Tom’s durastress was so costly to manufacture that Enterprises generally only used it as a strengthening coating for composites such as carbon fiber and spun-steel epoxy.

He got up and left his underground lab and office, and then walked over to the Administration Building. He greeted the secretary he and his father shared in the large double office, then walked through the door.

Damon Swift was sitting at his desk, looking very serious as he scanned the computer screen on his desk. He looked up. “Hey, Son. Give me a minute. Okay?”

When he switched the monitor off, he motioned for Tom to come over and take the seat across the desk. “What’s on your mind?”

Tom told him about the mishap during the experiment and what amazing properties the result had. As he talked, his father’s initial look of concern changed to one of amazement and then finally one that featured a very broad smile.

“That is fantastic news, Tom. Really and truly fantastic. You see, I’ve just been going over a new Defense Department request and was despairing that we didn’t have anything even in the pipeline that might meet their needs. You see, they are thinking right along with your metallurgist. Current vehicle armor is too heavy and often can be overcome by some of the nastier devices and

weapons out there. And, while they aren't mentioning tanks in particular, they are very serious about protecting troops and supplies on the ground."

"Then, if we can find a way to manufacture enough of the Armalcolite, and at a price that makes it economically feasible, we might get the contract to make the armor sheets. The thing is..." and he told his father about the cost of making even a single ounce.

"Ouch!" was the response. "I'm afraid that we are going to have to find a natural source for your miracle mineral then. If I remember correctly, Armalcolite is very closely related to several other crystalline metal alloys. Some are even found in fair quantities right here in the United States. Get your men on this and see what they can come up with. In the meantime, give this first piece a thorough testing!"

Tom went to his desk and placed a call to Peter Douglas. "I just wanted to make sure you're in your lab. I'm on my way over."

When he arrived it was to find a very nervous Peter Douglas. "Am I fired?" he asked with a woeful look on his face.

Tom laughed out loud. "Hardly, Peter. If anything, your new found expertise is invaluable right now. I want you to head up a team—you pick one or two others—to first make certain you can repeat the synthesis of the Armalcolite. Co controlled experiments with aluminum as well. Then, I want you to go out and find several of the other similar mineral combinations. Do you know what those might be?"

"Well, there's Ilmenite and Brookite and I seem to remember one called something like Karrooite. Why?"

"Because dad suggested that you experiment to see if any of the other's can give us the same results. There appears to be a DOD request for someone to supply a new class of light and super strong armor for ground vehicles."

"Tanks?"

"You're lucky Bud isn't here to tell you, 'You're welcome.'" Tom grinned. "To answer your question, I don't know about tank applications, but it would seem to be a natural."

During the next three weeks the metallurgists did their experiments testing more than thirty different combinations. None had the tensile strength, lack of flex, and lightness. Not by a high degree.

Tom's own tests began by trying to get a thin sliver of the metal compound for use in the scanning electron microscope Enterprises had for research. He ruined two diamond-tipped blades before realizing that a micron-thick piece just wasn't going to be possible. He settled for a small piece that he nicked off.

The view of the structure was astounding. On the greatest magnification possible Tom could see both the crystal nature of the metal as well as the way in which it had combined with the aluminum to form interlocking crystals. The surprising thing was the uncountable number of microscopic bubbles in the metal. It wasn't until that evening when Sandy told him, "It sounds like if you take soda pop and flash freeze it. We did it in physics

class. Fill a small balloon with lemon-lime soda, drop it into liquid nitrogen, and then cut away the balloon. You can see millions of teeny, tiny bubbles in the soda. Then, when it heats up enough, they sort of blow the whole thing apart.”

Tom jumped up and kissed his sister on the forehead. As she pretended to rub it off in mock disgust, he said, “That’s it! As the hot Armalcolite and the aluminum combined, all those extra oxygen atoms from the oxides must have sloughed off and were captured inside the solidifying metal. Thanks, San!”

He picked up his cell phone from the desk in the front hall and dialed Enterprises evening switchboard operator. “Mary? It’s Tom. Can you patch me through to Peter Douglas’ voice mail, please? Thanks.”

He waited until the outgoing message had completed and then left a message detailing the possible connection between the strength and the oxygen bubbles, if—he added—the microscopic bubbles were actually oxygen.

As the metal experts experimented with infused oxygen, Tom completed his strength tests. The small sheet had been able to take on any and all tests until Tom took it to a military firing range in Pennsylvania and had them shoot a high explosive bazooka round at it. The result was that the sheet had been badly deformed as it absorbed both the kinetic and inertial energies of the projective, as well as the intense explosive heat.

Bent, scorched and scratched but not broken!

PART 2

Setting Up Shop

JUST ONE week later Tom found himself sitting opposite a group of Senators and Congressmen in Washington D.C. giving them a briefing on the possible uses for the new alloy.

“Swift Enterprises would like to keep this as confidential as possible to avoid unscrupulous individuals and unfriendly foreign governments from exploiting their own people and even destroying natural resources in the name of trying to mine the small amounts of minerals here on Earth that are the equivalent of Armalcolite.”

“So, you want all the glory and all the money for yourselves?” asked a junior Congressman from Nevada. “Surely you can’t expect this body to grant you unlimited access? Can you imagine what horrors might be visited on any area subject to uncontrolled mining?”

Tom suppressed a small smile. “Why, sir, it would probably be exactly the same as what occurred in Nevada when silver was discovered.”

All the other panel members burst out laughing. The man from Nevada, however, gave Tom a piercing glare, but said no more.

“Actually, sirs, we believe that the supplies of native Armalcolite to be so scarce and so difficult to get to that we want it kept secret to protect all of the Earth.”

“Well, now, son,” said a gruff, older Senator Tom recognized as Senator Quintana from New Mexico—an old friend of Tom’s father— “if you don’t want it mined on our planet, and you feel the need to tell us about the amazing properties when turned into the amazing alloy of yours, what are you actually telling us?”

Tom took a deep breath. “I am formally requesting permission to set up a mining operation on the Moon, sirs.”

There was an intake of breaths and mumbling amongst the met at the table.

Finally, another Senator asked, “Are you saying you want to tear up the Moon? Is this Armal-whatsit that important? Can’t your geniuses just whip up a substitute?”

“To answer your second question, sir, while it is possible to synthesize a group of existing minerals into a viable substitute, it is cost prohibitive. By that I mean that to create enough Armalcolite and make the alloy with is to produce a single breastplate of lightweight body armor would cost about sixty thousand dollars. Full body protection would run a quarter of a million at best, so outfitting even a typical platoon of fighting men properly would cost the taxpayers in excess of ten million dollars!”

A hush fell over the room and the politicians all stared at Tom.

“To answer the first part of your question, we are asking for permission to set up a small mining and refining facility on the Moon, in the Sea of Tranquility, about a

mile from the Apollo 11 landing site. We would limit our digging to an area of just two thousand meters by twelve hundred meters around that central point.”

“But the cost—”

“The cost to be borne entirely by Swift Enterprises, sirs. We will refine the Armalcolite and create the incredible alloy, and then sell it at cost plus just five percent directly to the U.S. Government. You can then sell in on to the proper company or companies that can manufacture the armor.”

In a somewhat churlish tone, the Nevadan asked, “Why don’t you just make it and sell it to us. You ought to be able to high enough profit margins in there to make this worth your while—”

“That is *enough*, Mr. Pink!” bellowed Senator Quintana. “Swift Enterprises does not do that sort of thing!”

“It’s Pinqué,” the Congressman said pronouncing is like ‘pin-kay.’

“Whatever. You are only on this ad hoc committee as a favor to your Speaker. She thinks that it is important to give young members of your party such positions *regardless of their capabilities*.” He turned back to Tom. “Assuming that the majority of us agree, that leaves the when and how and what questions.”

“Well, Senator and gentlemen, I believe that we can repurpose a smelting and refining mini-factory we originally built for use in Africa. That should take a month. Transporting it to the Moon will be accomplished

over about three days and setting it back up a few more. How? My repelatron-powered spaceship, the Challenger, may be able to take it up in three pieces and the rest of the equipment and shelters in another three or four trips. Each one will take just a couple hours up and a couple more coming back. May I ask what you meant by ‘what?’”

“I meant can you bottom line this for us? If synthesizing what you need cost a quarter million per man, what would your Moon-mined alloy cost?”

“Assuming that our calculations are correct—and that is predicated on the fact that the further away from the Tranquility Base Armstrong and Aldrin collected samples the higher the concentration of Armalcolite—we believe that the per man cost of outfitting between thirty and thirty-five thousand men and women would be about eight thousand dollars per person. Even if all you do is have the transport vehicles armored in it, you would still be talking perhaps fifteen thousand per eight-man vehicle.”

The men at the table agreed they had much to discuss and thanked Tom for his time.

Just two days later a call came in from Senator Quintana. “Tom. Damon,” he said when they came to the phone. “It’s a go! The committee agreed, with a single exception, to authorize you to mine the area of the Moon you described to us with only two stipulations. First, the U.S. Government will be allowed to purchase up to ninety-five percent of the alloy your create—and no less than eighty percent, by the way, with a minimum delivery of eight thousand pounds of semi-pure alloy—and that

you limit your digging to just sixty days, start to finish. Tops and no extensions. Can you live with that?”

Damon looked at his son. Tom looked slightly disappointed, but he shrugged and nodded. “Well, it’s a tight window and an almost too aggressive delivery, but if that’s what it takes to get the contract, then we live with it.”

“Good. We’ll get the contracts to your office in the next week.”

“I hate to be a bother,” the senator said, “but when can you officially start the digging and processing?”

They place him on hold and discussed the matter for a couple minutes. Finally, they brought the politician back in and told him, “We can take off in six weeks, take a week to set everything up, and then start the dig.”

“Okay. That’s what I like to hear. Say,” he added almost as an afterthought, “what are you going to use to get everything up there?”

A small smile came to Damon’s lips. Even Tom had no solid idea of that part of the logistics.

“Pete? The only way we can get everything up there in one shot is to haul out an old piece of equipment, give her a little spit-shine and a lick of paint. We’re going to rebuild my old *CosmoSoar* rocket!”

Tom sucked in a sharp breath. His father’s giant rocket had beaten Tom’s own attempts to get a private rocket into space. Of course, it had been through a hijacking and unauthorized launch, and Tom and Bud had needed to

use Tom's own rocket, the *Star Spear* to save the hijacker's life.

Built in a series of ring-shaped stages—each one nested inside of the previous stage like a set of round cookie cutters—it took off using the largest, or outer, ring. Once that stage's fuel was expended, it dropped away and the next ring ignited. In theory, it could have six or even seven stages, but had been built with just five. And, though not nearly as tall as a giant Saturn-5 Moon rocket, it was more than sixteen times as wide.

When the call ended, Tom asked, "Can we rebuild it? I mean, after that rat, Rotzog, plunged it into the atmosphere. The control capsule was destroyed."

His father nodded. "I know. But, we'd never be able to use that smaller capsule to haul up everything. No, what I plan to do is to go up with just four stages plus a little borrowed technology." He winked at Tom. "How do you feel about letting your old man use your Solarizer and fuel kicker?"

Tom's eyes went wide in amazement. His Solarizer was able to harness the Sun's power at higher altitudes to super-charge the oxidizer thus giving his fuel much more power than it would normally provide, and the kicker was an accelerator that literally flung the fuel mixture backward to the motors so quickly that it added to the forward momentum of Tom's *Star Spear* rocket.

"Gee. I'd really like that. So, you believe that that'll let you use just four stages to get up and back?"

The smile on Damon Swift's face changed into one of

serious contemplation. "No. In truth I believe it will just give us enough to get to the Moon and onto the surface. The weight we save by not having that fifth rocket stage wrapped around the central capsule will be mostly accounted for with the increased weight of the payload. I'm almost certain that stages one, two and three will get us into orbit. Stage four will not only get us heading to the Moon but it will have enough fuel to get us into low Lunar orbit and at a speed fast enough to keep it up in orbit just twenty miles or so from the surface. The entire central cargo capsule will have enough fuel to land, but that's about it."

A thought struck Tom. "So, we'll use cargo rockets or even the *Challenger* to take up the fuel necessary for it to take off and head back home?"

"Yes. We won't need much. Remember. We'll be landing with a payload of about nineteen tons of equipment but only taking off with eight to ten tons of processed alloy."

Tom's face clouded. "But, what about the final module. The one that was destroyed?"

Mr. Swift smiled. "We have the backup and training module out at Fearing. It will be relatively easy to outfit it for our needs."

Plans were underway even before the contracts had been delivered. The first four stages of the *CosmoSoar* had been recovered by parachute and put into storage out on Fearing Island. These were brought out and reconditioned during the first week of the rebuild.

At the same time, the Swift Construction Company went

to work building the new, much larger central module. At more than forty feet wide and six stories tall, it would hold everything the small crew would need to get to the Moon. Once there, the upper twelve foot tall, twenty-two foot wide section would be detached and lowered to the surface by a collapsible crane arm. It would become the crew quarters for the estimated eight men that would work the new mine. When time came to take off for Earth, it would be reattached and resume its function as the command and crew capsule.

The same crane arm would be used to partly dismantle the side of the landing stage so that all the equipment could be removed.

Tom planned to meet them on the surface in the *Challenger* and to provide them with supplies, fuel, and a change of crew every week for the duration of the dig. Because the final smelting of the alloy would not take place until the final few days—and would result in a single, heavy puck of metal—it would not be possible to bring back any of it in the repelatron-powered spaceship.

Takeoff day arrived with Fearing Island hosting about thirty men and women from the U.S. Congress and the Joint Chiefs of Staff.

One General who had been present when the first version of the giant rocket had been stolen remarked to Damon, “I’m hoping that today will hold no repeat surprises.”

“Well, General. We’re hoping that the real surprise will come in a few months once the new alloy starts to be used to create protective shields and new armor.”

On schedule, the ground vibrated and the giant ship took off in a rush of flames and smoke. Two minutes later, the fuel for the first stage burned out and everyone could see the set of parachutes deploy that would lower it into the Atlantic Ocean about five miles out to sea.

By the time the second stage detached, the *CosmoSoar* was too high for the naked eye to detect.

After shaking his father’s hand, Tom joined Bud in the control room of the *Challenger* and took off just ten minutes behind the rocket.

With no need to build up speed by making a full orbit of the planet, the *Challenger* headed straight up for the Moon, landing there just hours later.

“Do we unpack yet, or just wait?” Bud inquired. The five other men of the crew leaned forward to hear Tom’s answer.

“We’ll go out and drop the locator radio marker, but I want to wait to unload until she arrives just in case the touchdown point is a bit off.”

Bud volunteered to take the three-foot disk with its four stubby antennae out to the point a hundred yards away that would be the landing site.

When he removed his helmet he grinned and remarked, “I’d forgotten what fun it is to just sort to trot and glide along out there. So, if you think I might be off in placing that disk by a foot or so, just say the word and I’ll go back out!”

Fifty-one hours later the cargo and command capsule

touched down just a few yards off of the center point. While her crew began the process of placing the quarters on the surface, Tom, Bud and their crew mates wheeled out and lowered five large containers to the surface. One by one, these were placed onto one of Tom's repelatron donkeys and carefully walked over to the place where an inflatable habitat tent would be erected to form the storage depot. That completed, they began working with the *Cosmo's* crew to get the larger equipment detached from their mounts and ready to be pulled out for setup.

The *Challenger* hosted a dinner that evening for all hands before Tom and his team left to return to Earth for the first of three fuel cells that would be needed in a couple months.

PART 3

BUMPS IN THE ROAD

"YES... YES. I find that very interesting, indeed. My thanks to you for your generous provision of information. I will reciprocate with a generous donation to your boss' re-election drive later this year with a little something in there for you. Good bye!"

With that, the weather-beaten hand of Cyrus Murphy set the receiver gently back into its cradle. He sat at his large, mahogany desk looking out of the fiftieth-floor office he kept in Manhattan. His fingers were steepled and drumming against each other as he thought over what he had just been told.

"A new metal worth more than gold," he muttered to himself as his eyes narrowed. "All just up there for the taking... a whole planet full of it. Green cheese be damned. The moon's full of treasure and it's there for the taking."

He made several phone calls that included both veiled and outright threats. He wasn't used to being told that something was "impossible," or that he "didn't have the means" to do it.

Means? Means!! He had all the means he needed. His empire was built on means, and means meant ways. As surely as night followed day and that God made little green... well, whatever green things he made, Cyrus Murphy had MEANS!

A light on his phone flashed twice. He picked it up.

“Go!” he barked. Cyrus Murphy had no time for pleasantries.

“Mr. Murphy?” the voice asked.

“Just who the hell do you think would be answering this phone. Now, get on with it!”

“I did as you requested. They say that it is still in the experimental stage and that they don’t have Government authorization. It will take about two more years—”

Murphy exploded. “Two years! Never! You get back to them and double the offer. All it has to do is get me up there along with a shovel and a big bucket. At thirty thousand bucks a pound, all I need to do is dig for a day and bring back a ton. That’s sixty million dollars. They get twenty to just look the other way. Tell Rube Gentry that I know his costs for equipment are less than that by a third. If he tells you anything other than, ‘Yes,’ then tell him I’m calling in my loan and he has three days to pay or to agree!”

Cyrus Murphy set the receiver back in its cradle. He never slammed it down no matter how agitated he became.

Ten minutes later he set it back in the cradle. There was a very satisfied smile on the face of Cyrus Murphy.

This would, he believed, be the first of a thousand flights to the Moon, each one bringing in a profit of at least forty million dollars.

* * * * *

For three days prior to the start of the sixty-day mining operation, Tom and Bud, along with three other two-man

teams spread out and took core samples every hundred feet from the surrounding area. In the end, Tom had discovered two things: first, the field of Armalcolite extended just a few thousand feet to the east of their position and five or six hundred feet north and south—at least this ‘field’ of it did—and then at least a mile to the west; second, he and Bud came around a large rock on day three to find that they were just about a quarter mile from the *Eagle* landing site, and the location of man’s first footsteps on the Moon.

Bud was all for racing over for a look but Tom shook his head. “That’s a monument spot, Bud. A place of honor. We won’t go disturbing it.”

On examination, most of the corings showed that a rich vein of the mineral was running from about a foot below the solid part of the surface—a few inches below the dust layer—running down at least five feet in most places.

Tom estimated that they would be able to dig up about fifty percent of this field in the allotted two months. This would yield somewhere between twelve and fifteen tons of semi-pure alloy. If they were able to get that much, he might need a fourth fuel tank delivery.

The dig took place around the clock with three backhoes loading one electrical mini dump truck. That left two men from the eight to run the initial smelting and separating equipment and two men to be off-shift at any one point. Within the first few days Tom realized that the crew needed to be twice the size so he brought up a second inflatable habitat and nine more men.

Next, it was decided that the unused slag from the first smelting was going to be a problem, but taking time off

with the available equipment would negatively effect the rest of the operation, so Tom brought up the backup backhoe and extra mini truck that had been constructed as replacements if necessary.

Even with the additional manpower and equipment, a large pile of debris was building up to the north of their camp.

By the end of the first thirty days they had enough of the first smelt produced to be able to purify into the first five tons of semi-pure allow.

Then, the first almost disaster hit.

Backhoe number three manned by Red Jones, normally a Swift pilot but also one of Tom's hardest-working men, discovered an air pocket under the surface.

Unfortunately, Red found it with his backhoe and he plus machine dropped almost twenty feet into the hole. It was only due to his being firmly strapped in and the lower lunar gravity that he escaped with nothing more severe than a broken right forearm.

The equipment fared far worse. Once they were able to raise it from the hole two days later they could all see that the lifting arm was also broken, but that a simple cast would not allow it to continue to work.

They were now one piece of equipment short.

Two days later, the constant maneuvering, driving over small rocks and into dips in the surface took their toll on the original mini dump truck. The rear axel, made from a Durastress and carbon fiber composite for lightness, snapped. Tom took it into the *Challenger* and looked closely at the break. Although he had no proof, he

believed that the combination of torque, almost constant stress and the incredible cold had weakened the material. No matter the cause, it now meant that they were back to a single truck.

Production was slowing. Eight thousand pounds was looking less likely by the day.

* * * * *

It neared midnight. Standing outside in the middle of the New Mexico desert just beyond the pool of light that spilled from the futuristic hangar at what had become the world's first civilian spaceport a few years earlier, a shadowy figure took a final draw on a cigarette, held the smoke for a few seconds and then let it out with a satisfied hum.

The burning ember at the end was stubbed out on the bottom of a shoe and dropped next to the building. It would be his last cigarette for about a week. He had planned to bring a couple cartons but was told that he would make a one-way voyage if he wasted oxygen like that.

It was the first time Cyrus Murphy had been told "no" in about twenty years where he hadn't been able to bully or buy his way to a "yes."

He coughed up a glob of phlegm, spat it into the night air, and walked back inside the hangar.

Fifteen men and women were lined up next to a sleek, gleaming white craft that was to be his home for a week. A man Murphy believed he recognized—*probably works for me*, he thought—was handing out envelopes and telling his somber audience that their absolute silence in this

entire matter was imperative.

Cyrus Murphy believed he knew people better than his employees did, so he interrupted. “Your silence and amnesia about this evening is mandatory. You have all taken payment for this. You will not be allowed to return it. I hope you get my meaning about that!”

Minutes later he was being strapped into the combination jet and rocket. He had studied the controls in his office and believed he knew them better than the man who was nervously showing them to him.

“Yeah, yeah, yeah! Fly it like a jet to seventy thousand. Press button A to eject turbines. Press button B to ignite central rocket motor. Don’t touch buttons C, D, and E. I get it! C’s for landing. D’s for taking back off and E’s for skedaddling home. Get out!”

The man gave Cyrus Murphy a look that spoke of nothing but pity and disdain. As the door closed and was sealed and the outside lights were doused, he saw the man cross himself and then walk away giving Murphy a rude gesture over his shoulder.

Murphy smiled. He liked that sort of attitude.

Five minutes later, Cyrus Murphy took off from the darkened runway and was on his way to becoming the first unlicensed pilot/astronaut.

He pulled the nose up and pointed it at the rising Moon.

* * * * *

Tom and Bud were returning to Fearing to pick up a few replacement parts; the few that were available. They were also bringing back eight men who had been working the

mine for a week, plus Red Jones.

As they streaked down for home Bud called out from the RADAR screen. “Something just went past us, skipper. Really small and too fast to get more than a couple blips out of.”

Tom shrugged. He was tired. After being back and forth a dozen times and on the lunar surface for more than half of the fifty-three days of the mining operation, he really just wanted to lay down in normal gravity and sleep.

“It could just be some old satellite that we or they are sending into high orbit. Unless it turns and comes rushing back at us I say we just forget it.”

They landed on Fearing at just past three in the morning. As Red went to the Dispensary for his arm, the rest of the lunar crew all tumbled into beds in the employee’s quarters. It was well past one in the afternoon when Tom walked into the commissary for lunch.

Bud was there waiting for him. “Good morning, skipper. It seems that some Fearing elves worked during the night and got the Challenger restocked. It also appears that Papa Elf, AKA your dad, had the Enterprises folks working overtime to get few new things over here for us to take up.”

Sitting down, Tom looked at Bud. “That’s great. My brain is a little frazzled right now but give me a couple cups of coffee and a blueberry cheesecake pastry and I’ll get with the program.”

Two hours later they lifted off with the final replacement crew and the repair parts. A few hours after that, they came down for a landing. Slim Davis, who had

come up to replace Red on the previous crew change, came bounding over to greet Tom.

“Hey, skipper. You look a lot better than you did yesterday. Get some sleep?”

Tom nodded. “How are things going?” he asked feeling a small trepidation as he did so.

Slim made a face, lips pursed but canted to one side of his face. “Uh... well, the good news is that we haven’t had any other breakdowns.” He made the face again before continuing. “The not-so-great news is that we’ve hit a little snag with the smelter.”

“I thought you just said there have been no breakdowns. What gives?”

“It’s like this. We’ve been running it on the first of its two settings. Right? So, for every ton of ore we are running through, we’re getting about six hundred pounds of partially-clean ore, twelve hundred pounds of outright slag and a couple hundred of it is lost in the vaporizing process.”

Tom nodded. His portable smelter had been developed to support a Swift expedition to the Congo a year earlier. Originally designed to extract gold and platinum from the mineral-poor soil it used a variation of Tom’s own atomic earth blaster technology where the incredible heat from its nuclear reactor was used to super-heat the rock and dust put inside allowing any metallic substances to melt and to be collected. Rocks and other non-metals were partly vaporized and partly skimmed off as slag—unusable “junk” materials.

Tom asked, “Isn’t that what it’s designed to do?”

Slim nodded, but looked a little sheepish. “The problem is that we can’t get it out of that mode, Tom. It’s almost as if the machine has decided that it only *has* the one setting. It’s put us a full day behind schedule.”

Slim, and anyone else on the open radio frequency could hear Tom take a deep inhalation and then let it out through his nose.

“Okay. You take over the unloading of the Challenger and I’ll see what I can do.” Tom trudged away, barely taking advantage of the low lunar gravity.

Arriving at the smelter he signaled the operator to cut the power. Since they could not proceed with the second smelting of the ore it had been decided to just continue with the first process. This meant that the machine would be too hot to work on for at least fifteen minutes, so Tom next entered the crew quarters.

He made a radio call back to Enterprises. “Hi, Dad,” he said with a noticeable lack of enthusiasm.

“Oh-oh. I sense something isn’t going to plan. What’s happening, Son?”

Tom told him of the latest hit to the schedule. “If we can’t get the smelter running properly within the next twenty-four hours, I’m pretty certain we’ll miss having enough alloy to meet our contract.” Tom sighed.

“Just keep at it. I’ll let Senator Quintana know what’s going on.”

Tom tried to remind his father of the “no extensions” part of the agreement, but the older inventor just replied, “You let me worry about that.”

It took Tom the remainder of the day to trace the trouble with the smelter. A circuit board had cracked, breaking the traces and interrupting the flow of power. It was an unexpected break, and Tom had no replacement board. It had never been considered a possible problem.

He spent three additional hours building a new board from components he had onboard the Challenger, installed it while his head was spinning from exhaustion, then fell asleep as soon as he returned to the ship.

When Tom awoke, it was ten hours later but the crew had not been idle. The smelter was now fully tested and powered up to reprocess the ore for extraction of the alloy.

Even though it was a day before the scheduled start, Tom felt it was vital that they begin as soon as possible. They had almost no more time for delays.

One of the backhoe and truck teams kept bringing in raw materials—in case there was any leftover time to process them—while the others were kept busy hauling away slag and in collecting lunar dust that Tom insisted they use to cover up the pile of discarded materials, making it appear more like a natural mound than a garbage heap.

By the time the smelter had run for a full twenty-four hours, and with just three full days plus nine hours to go before the end of their approved mining period, the machine had disgorged its first two-thousand pound puck of alloy. Rather than make a mold from lunar dust and rocks large enough for a single, massive puck, Tom decided weeks earlier to make a smaller mold and to load the lighter alloy chunks one-at-a-time.

The first one was hoisted up into the hold of the return stage and strapped into position. Assuming they managed to make three more in the allotted time, they would be placed so they balanced each other. It could be done with three, but Tom hoped they would be returning with at least five of the one-ton pieces.

The following day saw a slight drop in productivity when Tom felt it important enough to halt smelting for two hours to do a thorough systems check. He was glad he did it as he discovered a second board in the control module that had developed a crack.

“It has to be a combination of the cold, the vacuum and the vibrations,” he told Bud over cocoa that evening.

“But, you fixed it?”

“Yes. I soldered a brace from one side to the other. It will hold for the remaining time, but I’m going to have to rebuild all the boards in the thing with Durastress and possibly Tomasite if we are going to get the opportunity to mine here again.”

Bud grinned. “You think Sandy and Bash will let us abandon them for another two months?”

Tom looked thoughtful. “We might need to make arrangements to bring them along next time,” he admitted.

“Assuming there is a next time,” came the voice of Slim Davis from behind them.

Spinning, Tom asked, “What do you mean?”

Davis shook his head. “We’ve got troubles!”

PART 4

What To Do?

TOM'S HEART sank. "What sort?"

"The sort that start with 'You have an uninvited visitor,' and end with, 'He's in trouble and we don't know where to find him.' That sort."

* * * * *

Cyrus Murphy opened one eye. It refused to focus. He found that it was difficult to raise his hand to try to wipe at it. A raging spike of pain shot up his right arm and exploded inside his already throbbing head.

He managed to open the other eye and, after a moment of additional pain, got his left hand up to it to wipe away whatever it was that was sticking the lids together. When he pulled the hand back and got it into focus he saw what was so sticky; his partly-congealed blood. He felt up his forehead and found the deep wound that had occurred when—

He couldn't remember when. Had he been attacked? *That must be it*, he thought. *I was attacked. But, by whom?*

He lay back, trying to get his head to clear. Obviously, someone had taken exception to him. That list was in the millions. He had enemies all around. Even some of the people who worked for him. He knew that they all hated and resented him. That was fine. Hate meant fear and fear meant loyalty that could be paid for.

Cyrus Murphy liked paying for loyalty. He believed that

for every dollar he spent buying the loyalty of an employee, he derived at least that many seconds of pure pleasure.

A thought hit him. He knew who attacked him, It was that man back at the—

Back at the—

Where was that? Some sort of building. And, night, he remembered.

He wanted a cigarette very badly. Reaching up with his bruised left hand he patted his shirt pocket for the inevitable pack. It wasn't there. He was about to curse the attacker for stealing his cigarettes when he realized that his shirt pocket wasn't there. Neither was his shirt. He was wearing some sort of rough nylon jumper.

A hospital gown? No, he knew it wasn't that. But, what was it?

Murphy lay back and thought about his situation until he fell into a troubled sleep five minutes later.

* * * * *

Tom was alarmed. "What?" he practically demanded.

"All I know is that we just got a call from Enterprises. Someone called the FAA to report the unauthorized flight of an experimental private rocket from the New Mexico Spaceport a couple days ago. All that they said was that some ultra rich guy paid them millions to turn a blind eye on the flight. Name of Murry or Murphy."

"Cyrus Murphy?" Tom cried, jumping up from his seat and sending himself up and into the ceiling of the habitat.

“Yeah. That’s the guy.” Slim helped the inventor back down and into his chair. “Anyway, they’re pretty certain he was heading up here. Just brought food and air for a week along with, get this, a shovel and a big plastic bin to haul back some Moon rocks, they said.”

“Wonderful,” Tom moaned, both because of having hit his head as well as the thought of having a run of lunar prospectors heading up. “Where is he now?”

“That’s just it, skipper. This source says that they lost contact with his ship about the time it was due to arrive here. Just a faint emergency beacon from somewhere possibly three hundred to five hundred miles to our west.”

Tom got on the radio and was soon speaking with Harlan Ames back at Enterprises.

“That’s really about all we know, Tom,” the Security man told him. “He took off in the dead of night and should have touched down about six hours ago. Didn’t any of your instruments pick him up?”

Tom thought a moment and then snapped his fingers. He told Ames about the mysterious blip that Bud spotted on their approach to Earth. “That must have been him, but we passed so quickly that all we got were a couple blips and then we were out of range. I’m not sure what we can do as long as he stays away from us. We sure can’t spare the time to do a search and rescue on someone who isn’t even up here legally. Does dad have any thoughts?”

Ames put the radio mic down and picked up the phone. Five minutes later he was back with Tom.

“Your dad says to see if you can spare the *Challenger* to do a sweep for a few hours over the approximate area. I’ll

have the radio guys here figure out the coordinates for you and let you know.”

Tom ended the call and went back to talk to Bud. He explained the situation.

“Jetz! That jerk had no rights coming up here. What the heck could he have been thinking?”

Tom shrugged. “The one time I ran into Murphy he was strutting around a Congressional meeting like he owned the place. Or, the committee. Anyway, he was trying to pull a contract away from another company and I was there to support the little guy. I’m afraid our Mr. Murphy and I had words and he is not a member of the Tom Swift fan club.”

“He lost?”

“He lost,” Tom affirmed. “He evidently doesn’t like to lose and is most ungracious about it.” Tom grinned. “He’s most ungracious even when he *wins*, evidently.”

Bud agreed to take the *Challenger* up once the coordinates came through. It took another eight hours for them to arrive by which time both Bud and Tom were sound asleep.

When he awoke, Bud wiped himself down and got into his coverall. With just two other crewmen he took the *Challenger* up about three miles had headed northwest of their current position, toward the center of the possible area where Murphy’s signal beacon might be broadcasting.

Ten minutes into his flight the radio crackled to life with a call from Enterprises. The news was potentially grim. The signal beacon had stopped sending an hour

earlier. Bud felt miserable about not insisting he be awakened once the coordinates came in. If the man had died because of the seven-hour delay, he was going to feel responsible.

He overflowed the area for five hours, criss-crossing and expanding his pattern with each pass. Twice they detected flashes he thought something might be on the surface. One turned out to be the crashed remains of an old Russian Moon explorer and the other ended up being an outcropping of some shiny rocks that had reflected the sunlight.

They returned to the base having made no sighting of Murphy or his downed rocket.

“Do we even know if this is real or some sort of hoax?” Tom asked his father when they spoke shortly after the *Challenger* returned.

“Well, when I spoke with Pete Quintana he told me that a Congressional Page has admitted to the FBI that he tipped Murphy off on the Armalcolite discovery and how the Government was going to be buying as much as you can bring back. Turns out he may have overstated the value, though. He says that Murphy believes that a ton of Moon rocks will net him tens of millions of dollars. Leave it to Cyrus Murphy to see flashing dollar signs and pull a bone-headed stunt like this.”

“So, the FBI is certain that he’s not just hiding out somewhere having a good laugh?”

“Since you spoke with Harlan earlier, it turns out that most of the team out in New Mexico have come forward. They all swear they saw him board the rocket and take

off.”

“What am I going to do, Dad?”

Damon Swift thought a moment. “You do what Swifts have always done. You put human life ahead of financial gain, something Cyrus Murphy may be learning at the expense of his life.”

With the exception of the two men running the current batch of ore through the smelter, Tom called everyone together for a conference in the *Challenger’s* large control room.

He explained the situation to them, including past troubles between the billionaire and Swift Enterprises. He outlined a plan for searching in a more detailed manner using both the ship as well as all ground vehicles.

“We’ll pick up each of the trucks and the backhoes and carry them out to the search area. Two men per vehicle. We have enough digital binoculars onboard to outfit each team with one pair. Bud and I will take *Challenger* back up and do another sweep, perhaps traveling outside of the initial search area. If anyone sees anything, get on the radio immediately and we’ll get right there. Questions?”

Although he could sense that some wanted to ask why try to rescue Murphy at the expense of completing their mining operation, nobody spoke up.

It required the rest of the day to prepare the vehicles, including swapping out partly-depleted Solar Batteries for new ones and giving all the men a chance to get eight hours of rest.

At the equivalent of six a.m. Shopton time the next morning, they set out. It took two hours to transport the

vehicles, one at a time, to their start points. Once deposited and checked for full functionality, Tom left each crew to start their portion of the search.

* * * * *

His eyes flickered open, or at least as much as the now dried blood would allow. He was painfully reminded that his right arm was in horrendously bad shape when he tried to bring that hand up.

The pain did two things. It made him scream and set off a string of curses, but it also proved to clear his mind. It all came back.

The take-off, the boring trip out including the flash fly-by of something he couldn't identify, and the moment of horror when he discovered that something was seriously wrong with the retro-rocket that was supposed to lower the rocket to the lunar surface. Safely.

At a height of almost one hundred feet it had stopped, all of the fuel expended with no reserve to lessen the force of impact. He had cursed the team that built the rocket for not making it plain that he was not to fire that motor until the rocket had come within four miles of the surface. Things had seemed to be going too quickly, so he hit the C button at a height of almost five miles.

Just before impact he made a mental note to have the technicians sued for their incompetence. He'd take everything they had ever owned. That would show them—

Then, came the crash and the blackout.

But now, he realized that all was not lost. The rocket obviously was not a complete mess. It still held air and he could hear the electrically operated circulation system

working.

What he wouldn't give for a cigarette right now.

Murphy looked at the watch strapped to his left wrist. The crystal he noted with disdain, rated at five-hundred feet of diving depth, had been cracked, but the instrument was still working. Murphy brought his good hand up to his face and rubbed both eyes, clearing out the dried blood. He blinked and looked more closely at the watch. What he saw was impossible.

He had been on the Moon for more than two full days.

He had supposed to be there for less than twenty-four hours.

Even if he took off right now, he would be a day short of oxygen for the return trip. He made another mental note to ruin the lives of anyone responsible for not providing him with enough air for an emergency. *Criminy*, he thought. *Haven't they watched that Apollo 13 movie?*

Murphy took a personal inventory. Along with the head wound, which had stopped bleeding, his right arm was a mess as was his right knee. He glanced down and could see the ragged tear in the coverall and the skin and blood that had been scraped onto the underside of the control panel.

But, everything else felt okay. He eased himself into a more comfortable position and looked at the instruments.

Most were dead. The lights in the cabin were out so all the light must be coming from the ten view ports paying passengers would normally be looking out of.

He clicked a couple switches and reset all of the fuses he

could see. The only thing he managed to do was to get half of the interior lights on and to re-energize that part of the panel that showed the condition of the air circulation systems.

It didn't look very good.

What looked particularly bad was the indicator that showed that the radio had no power. He was lost!

* * * * *

It took all that day and seven hours of the next before the team of Slim Davis and Alan Carpenter spotted the crumpled rocket in a deep ravine. Slim called to Tom and the ship was sitting next to the crash within ten minutes.

Slim used his backhoe and a metal cable to swing out over the fifty-foot-deep trench and to be lowered down to check the wreckage.

“You are absolutely not gonna believe this,” he radioed, “but that lucky son of a— well, there's one lucky and alive man in there. He's got his eyes closed but I can see his chest rising and falling.”

Slim knocked softly on the hull.

Cyrus Murphy jerked awake and then winced sharply as the pain from his arm and leg shot through the rest of his body. His eyes were crusted with blood but wide open as he turned his head to the left to see the helmeted face of Slim Davis staring in at him.

He nodded, unsure if he was seeing something real or an apparition, then turned away thinking, *About damn time!*

Tom believed that moving the wreck might breach the

hull, killing Murphy in the process, so he had Bud and the *Challenger* crew pull out the last of the emergency habitat tents.

Tom, Slim and Bud took it down into the trench and used a special silicon foam sealant to adhere the bottom edge to as much of the wreck as they could. Bud went in through the airlock and waited to plug any leaks as the habitat was inflated enough to give them maneuvering room.

An hour later and with a spare pressure suit in hand, he and Tom pried the hatch of the stricken rocket open and pulled Cyrus Murphy out.

With no pain-killing medications available, it had proven to be so excruciating that Murphy passed out before they could get him fully out of his seat. They pulled and tugged him into the suit, sealed the helmet and pushed him out the airlock into the waiting arms of three other of Tom's crew.

Minutes later they were onboard the *Challenger* where one of the crew trained in first aid administered a powerful sedative.

It took the remainder of the day to retrieve all of the other crews and equipment and to return to the mining base.

Tom had been so busy with the operation he hadn't radioed their discover or the rescue back to Enterprises. As he sat in front of the radio telling his father about everything a small alarm went off. He glanced at the clock.

“Well, that's it, Dad. We've officially run out of time.” He

was downhearted.

“How much of the alloy were you able to get, Son?”

“Just over seven thousand pounds. A good half-ton short of the Government’s order and none for us. I’m sorry I failed, Dad.”

“But, you haven’t failed, Tom. I’ve got to put you on whatever the radio equivalent of hold is for about five minutes, but I think it will be worth it.” When he returned, Tom was discussing his feelings with Bud. “You there, Tom?”

“Yeah, Dad. I’m here. I’m still miserable.”

A new voice came over the speaker. “Tom? Pete Quintana here. Listen. In light of the, uh, delay you encountered saving the worthless neck of Cyrus Murphy, the Select Committee on Government Contracts—Moon Mining Group—had a special meeting last night. Over three very nice bottles of single malt whisky it was unanimously decided to extend your mining rights for one full week. Assuming, that is, that you can get the contract completed plus enough extra to make all this worth Swift Enterprises’ time and effort. Failing that, I am authorized to purchase another three bottles and get the committee to agree to a further week or so. Well?”

Tom was now all smiles. Bud slapped him on the shoulder and mouthed the words, Right on!”

“Uh, Senator? I believe that a period of seven to ten days will be more than sufficient unless there are any more surprises heading our way. I do have one question, sir. Does the original sixty days and this add-on cover everything we’re doing, or just the actual mining?”

There was a chuckle from the other end. “Far as *the committee* is concerned, it’s just for the digging phase.”

He signed off a few moments later with a final thanks.

Twelve days later the *CosmoSoar* cargo capsule with eleven and a quarter tons of alloy lifted off from the lunar surface. It was necessary to leave the equipment behind, but Tom had placed electronic immobilizers on everything and a alarm system to radio back to Earth should anyone or anything come within a thousand yards of the mining base.

It took just two months for the first of the new armor plates to be produced and shipped to one of the most troubled areas of the globe. Five days later it was reported in the news that a group of three personnel carriers had come under heavy attack, but nobody had been hurt.

Tom and Bashalli were sitting on a towel by the shore of Lake Carlopa when the report came on the radio. They had spent every weekend together since his return from the extended Moon project and she was determined to make the most of every minute.

“Your Moon metal?” she asked.

Tom gave her a hug and nodded. He was a very satisfied young man.

Epilog

THE WEATHERBEATEN hand of Cyrus Murphy set the receiver gently back into its cradle. He sat at his large, mahogany desk looking out of the fiftieth-floor office he kept in Manhattan. His fingers were steepled and drumming against each other as he thought over what he had just been told.

“A new oil strike in Mongolia of all places,” he muttered to himself as his eyes narrowed. “All there for the taking... a whole desert full of it.”

He made several phone calls that included both veiled and outright threats. He wasn't used to being told that something was “impossible.”

Hell, he thought to himself. Impossible? I've been to the Moon! What's a stinking desert?