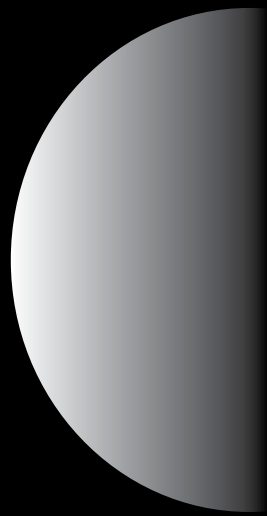




# **Lunar Spaceport**



**WT Rogers**

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# Chapter 1

The tramp solarship *SSA Gold Digger* has just arrived back at lunar orbit during the two-week-long nighttime on the near side of the Moon. The gray and black aging ship has returned from mining precious metals. The crew found gold on three larger asteroids orbiting ninety million miles beyond Mars in the direction of Jupiter. But several things about the tramp ship's arrival seem unusual. The spaceport usually lists the names and times of ship arrivals and departures on an electronic screen; it didn't list anything for the arrival. The crew as usual were brought down to the surface on a shuttle or lander ship. Later, one of the deckhands brought down got into a noisy argument with a stranger at one of the lunar hotel bars. An hour later that deckhand was found laying lifeless out on the airless lunar surface that at the time was -230 °F.

The lone peace officer at Lunar Village is Noah Sebastian, who was recruited from the Sydney Australia police. The spaceport manager spotted the body on a security video and has just told Sebastian about it.

Sebastian asks, "Did you move the body?"

Manager Adams says, "No. We can go out there but we'll have to wear spacesuits."

The two don the heavy spacesuits and go out onto the lunar surface through one of the spaceport's airlocks normally passed through for doing outdoor maintenance work. They carry the frozen corpse back inside to a refrigerated vault and cover it with a blanket. The body shows a knife wound surrounded with frozen blood.

Sebastian now has a knife attacker to find and so interviews the worker with whom the dead deckhand had been arguing. But that person seems to have an ironclad alibi. The suspect was hanging out with several others at a hotel cafe from when the verbal argument ended until an hour or so after the body was found. So the list of suspects is now zero. They say the deckhand left the bar and went somewhere.

Sebastian decides to inspect the just-returned orbiting solarship without any idea about what might be of interest on it. But the ship has been quarantined. When asked about the quarantine, a staff member says there's probably nothing wrong on the ship, but the management isn't taking any chances. When the peace officer asks who decided on the quarantine no one knows.

Why would the people running the mining ship act in such a wary manner? Actually everyone the peace officer interviews has been ordered from above to say nothing. Could they have an abject fear about some horrid existential threat? Have they misused their responsibilities to the mining-company investors to make themselves personally rich with gold? Have they damaged the ship due to negligence?

Down on Earth in Zurich Switzerland, a Professor Snider gives lectures for an undergraduate course on space science. Today's topic is about things in space dangerous to people when exposed to them.

A student asks, "Our textbook says electromagnetic radiation is sometimes harmful to people but can also be useful. I'm not clear on how it can be both things."

The professor asks, "Can someone explain what electromagnetic radiation is?"

A student in back says, "You don't have to be a scientist to understand it. Light that our eyes can see is one type of electromagnetic radiation. When you hear a radio it's getting radio waves. They're another type of electromagnetic radiation."

A third student says, "Well reflected light isn't usually harmful it let's us see things. And radio waves let us hear things. But I know that some of the other types could be harmful. Microwaves can be dangerous if you get too close to them when heating food."

Professor Snider adds, "X-rays can harm you if you get too many of them for medical tests. But gamma rays are the most harmful radiation out in space. They're used to study from a distance what things make up a planet. The waves we've just mentioned all rain down on us from the Sun. Recently space scientists have been really excited about two other things. One they call dark matter and the other they call dark energy. Many of us are convinced these two mysterious things really exist. But they're invisible or more accurately undetectable. We really can't study them because we can't locate them. Maybe they would be harmful if you came in contact with them and maybe not."

Meanwhile back on the Moon, the peace officer wants to have an autopsy done on the deckhand stabbed to death. There are no doctors officially working at Lunar Village, but a guest who is a doctor agrees to do a very basic autopsy. They don't have the equipment for more intricate procedures.

The body is still laying in the refrigerated vault where it was left covered with a blanket. The doctor and the peace officer put the body on a nearby table that will have to serve as a makeshift autopsy stand. After some messy cutting the doctor says the deckhand was very likely unconscious when the fatal stabbing took place. There's no way to do blood tests here on the Moon to see what might have been used to render the victim unconscious. There are no wounds that could have brought about unconsciousness. So the cause of death is listed simply as fatal knife wound that passed through the heart.

Later the peace officer visits the control tower that was built here on the Lunar Village surface to ask

about the gold-mining ship.

The ship-traffic controller says, “The ship’s no longer in orbit here.”

The peace officer asks, “Where did it go?”

“I don’t know,” the controller says, “It’s just not where it should be. I called the ship’s management and was told they don’t know exactly where it is. I can’t track it probably because it’s now too far away.”

Noah Sebastian says with a smile, “I suppose it could have been hijacked, or sent somewhere. Maybe it just disappeared.”

The traffic controller says, “The one thing I can tell you as that no one was on-board because I didn’t send a lander up to lunar orbit. All I can say is that the ship’s on autopilot and heading somewhere.”

Sebastian asks, “Could they have given the autopilot a destination without being on-board?”

“Yes, one easy way to bury a ship is to send it to a gas planet like Jupiter where it would sink and be crushed downward into the planet’s gases and overwhelming gravity.”

Someone at a scandalous news sheet here at Lunar Village has a take on the solarship that returned under mysterious circumstances. The ship may have brought back something dangerous. Noah Sebastian is not quite clear on what to do next. He can file a report on Earth about the mystery, but that won’t solve the case.

Just to avoid being accused of covering up things he sends a report explaining what he knows to the local authorities at Rocket City, AZ. The space shuttles between Earth and the Moon come up from Rocket City.

Savannah Rolland is one of the managers of the shuttle that brings passengers from Rocket City to Lunar Village and back. She’s very concerned about the missing solarship story that’s gotten around.

Savannah sees Sebastian having coffee at the High Noon hotel cafe. She had spoken to the peace officer once before at a meeting where the hotel owners were promoting a new colony on Mars.

He invites her to sit down.

She says, “I guess everyone wants to hear about the missing ship and the gold that was on it.”

Noah says, “There’s not much I can tell people. I don’t know what happened.”

Savannah says, “I overheard someone using the phrase existential threat to the Moon.”

The Moon’s only peace officer says, “That’s a pretty scary phrase to use. But I’m not sure what existential threats a solarship could bring back from mining gold on asteroids between Mars and Jupiter.”

Savannah says, “Some probably are imagining a disease without a cure that could kill everyone here on the Moon. At least that could be controlled by not letting anyone fly back to Earth until the threat has subsided.”

Sebastian asks with a grin, “What other interesting threats with horrid solutions can you name?”

Savannah says, “Asteroids! The only thing I can imagine is the ship having accidentally altered the course of some asteroid so that it will collide with the Moon or with Earth.”

The peace officer says, “Let’s hope the astronomers who track asteroids can clear that one up. Someone in Australia with a space science background told me an asteroid’s course can be altered by sending a rocket with a nuclear bomb that would blow up next to the asteroid and alter it to, or away, from a deadly course.”

Savannah smiles and says, “Let’s hope it doesn’t come to that sort of a crap shoot.”

Noah says, “Well all we really know is that someone was murdered with a knife and that a solarship company has mislaid one of its ships, maybe intentionally.”

Sometimes what you don’t know that you don’t know can be a big problem. What the pair doesn’t know is that the argument between the deckhand and the pub patron involved three individuals not two. The third was an agent from an aggressive country on Earth looking to cause trouble for the world.

## Chapter 2

The story about a solarship deckhand stabbed to death at Lunar Village has made it around the news services that cover international news on Earth. That the ship has disappeared created some spicy details for the story. The deckhand's corpse has now been shipped back to Rocket City, AZ where it remains on ice because no relatives have come forward. There still are no suspects for the stabbing or motives for the crime. And the ship's whereabouts are still unknown.

Professor Snider in Zurich Switzerland has allowed a reporter to sit in on today's class about asteroids; also in attendance are 11 students registered for the class.

The reporter is asking, "How serious is this murder and missing gold-ship story on the Moon?"

Snider says, "That depends on how and why the ship has gone missing. These ships are worth huge amounts of money to build. So what would cause its owners to lose it? The story I read mentioned that an incredible amount of gold was found on the mining mission out to the asteroid belt. There was no mention in the story about where the gold went. I'd say we the people are entitled to know what's happened."

One of the students says, "They say when you've got a mystery, follow the money."

Snider adds, "We need an open investigation where everything that can be found out is made public."

Several days go by and Professor Snider gets a call from the head of the department. The popular professor has just been placed on temporary leave. The class is now indefinitely cancelled even though seven sessions have been taught. The department head did not want to suspend the professor but had been give a direct order to do so from above. The dean giving that direct order also did not want to do so, but the temporary-leave directive came from even higher powers. Actually the decision was made by the heads of three governments.

The student, AX who had expressed following the money is talking with one of the other students in the class that's just been canceled.

AX is saying, "This really makes me angry. If there's a problem up on the Moon we shouldn't be hiding from it with secrecy and censorship."

Student BY says, "I agree. Why don't we take the shuttle to see for ourselves what's being done or not done about the matter?"

AX says, “ It will cost us plane fare from Zurich to Rocket City, AZ in America and we’ll have to pay the shuttle fare and at least one hotel night. But let’s do it.”

BY asks, “Should we go ourselves or invite some others?”

AX says, “I’d like to ask our now x-professor to go with us. That wouldn’t be good; we don’t have jobs to lose by saying or doing what the powers-that-be don’t like. I know another student who will want to go.”

All three students were born to wealthy families and have generous allowances with which to pursue their educations in class or out.

The next day three students fly to Rocket City, then pay the fares and board the *Lunar Express* to the Moon. They haven’t yet booked hotel rooms on the Moon. There normally is not a security check-in for passengers reaching Lunar Village, but something has changed.

As the passengers make their way to the Lunar Village arrival lounge someone acting like a security official approaches just the three students and says, “Why have you come to Lunar Village?”

AX says, “I don’t know why you’re just asking us that question. But if you must know we want to see what’s being done about a gold shipment and a disappearing solarship. More important we’re concerned that some existential threat to the Moon may have come about.”

The security official says, “I’m sorry but we can’t let you enter Lunar Village. The three of you will have to take the next flight back to Rocket City.”

BY says, “Don’t we have a right to just ask some questions about what’s being done?”

“No!” answers the official. “If you don’t board the ship voluntarily we’ll have to arrest the three of you and you’ll go back in handcuffs.”

AX says, “From what I understand there are no laws regarding what goes on here on the Moon.”

The official says again, “That’s true. If you don’t board the ship voluntarily we’ll have to arrest the three of you and you’ll go back in handcuffs.”

Not sure of what their legal rights are the three reluctantly book the next flight back to Rocket City. On their way back to Zurich they change planes at the New York Airport next to a place called Jamaica Bay. When their plane landed it briefly passed over a small island in Jamaica Bay. At the moment it did, someone named Sewlo didn’t look up at it because low-level landings and take-offs are such common and noisy events here.



Sewlo is a modern-day hermit who lives on a tiny island called The Raunt in Jamaica Bay. Awhile back a job seeker at the airport was asked to show their writing ability with an original short essay. It read as:

*The Raunt is barely a railroad station here. The electrified tracks run in a straight line, five feet above the marshy bay to the ocean. On one side of this God forsaken station is the seawater of Jamaica Bay. The small bay island from which the station gets its name sits near the other side of the station. Raunt station has no platforms just gritty sand spread along the sides of the tracks. Both sides of the station have a sun-baked open wooden shed big enough for about ten people to huddle during bad weather.*

*Several dozen ramshackle houses were originally built on wooden stilts on Raunt Island. There's no fresh water, sewage, gas, or electricity. The people living in the shacks had to row over to a more populated island to get supplies. They use pails to trap rainwater for drinking and to grow feeble amounts of whatever vegetables they can.*

Sewlo is the last resident on Raunt Island and lives in a one-room small shack with a single window and door. The roof has several layers of tar paper. The hermit uses an older laptop to track what's going on in the world. The laptop uses a small older solar panel just strong enough to recharge its battery when needed. Passing the island is an occasional small fishing boat and many jet planes landing at or taking off from the nearby airport. Sewlo has just learned of the missing solarship at Lunar Village. Sewlo's cousin worked as a deckhand for the mining company now in the news. The deckhand was Sewlo's cousin.

## Chapter 3

The tramp ship that had mined asteroids for gold is now gone from the Moon. But the gold was unloaded shortly after the ship made orbit here. The ship's owners have had a serious conflict to manage. One matter was their fear they had caused some terrible threat to the Moon. The second matter is that they had brought back several hundred million dollars worth of gold, which has been selling recently at nearly \$3000 an ounce. Would they send the gold off on the ship to self destruct in a place like Jupiter? Or would they offload the gold to a warehouse at Lunar Village and later ship it down to Earth. They chose to bring the ore down where it could be sold to the gold brokers. The gold is now in a well protected but obscure warehouse in Los Angeles a mile away from Paramount Pictures on Melrose Avenue. The brokers who purchased the gold have no idea about any possible threat it might represent. One bit of good news is that so far there have been no disasters on the Moon or Earth.

The authorities at Rocket City have just sent Detective Sebastian some background information on the deckhand who was stabbed to death on the Moon. They mention the deckhand has a relative named Sewlow who lives somewhere in New York City. This won't help the peace officer on the Moon. And Sewlow won't arrange for the deckhand's body to be buried; that would be more money than the hermit living on tiny Raunt Island can afford. Sewlow did get angry when reading about the mystery on the web. Why would someone kill a deckhand on a solarship? Like the three students from Zurich almost did, Sewlow would like to go up to Lunar Village to ask questions. But like the three students he won't get there, albeit for a different reason.

Sebastian the detective, has just asked a question by lunar radio phone to someone working at the telescope on the far side of the Moon.

He's saying, "Could we look through your telescope and see a solarship heading away from the Moon toward Jupiter?"

The astronomer asks, "You mean the one that took off in some unknown direction?"

Noah says, "Yes, maybe two days ago."

The astronomer says "We can see larger objects. For example details of things on Mars are impressive. But space is a super-huge place. If you don't know the ship's course it would be almost impossible to focus on the right spot. Plus, we're a radio telescope so you won't see things the way they look visually. Our images are

somewhat like radar; you can see the composition, structure, and motions of something of interest.”

Noah says, “I don’t know what I could learn if the ship was spotted.”

Several hours later Noah and Savannah are at Aqua Tulip hotel; the peace officer needs a bit of off-time.

Savannah is saying, “The designer created a flower-vase shape for this building; it’s narrower at the bottom and wider at the top. The vase-shaped building’s floors have differing numbers of rooms. Flowing up from the top of the vase are three towers that look like tulip stems.”

Noah says, “I’m surprised your Aqua Tulip Hotel doesn’t fall over.”

Savannah adds, “The weak gravity on the Moon and absence of weather made it possible.”

Noah says, “I like the idea of an elevator—or as I say a lift—riding in a shaft inside each tower. The tulip shaped crown with a cafe under the stars is spectacular. I could sit for hours and look at the ceiling video-screen showing the Universe. ... But I don’t.”

Just then Leah Smyth arrives. Smyth owns 10% of the Lunar Cavern Hotel built entirely underground.

Leah says, “I hear we’re going to get a doctor and a nurse soon.”

Noah says, “The stabbing caused the powers-that-be to hire them.”

Leah is also from Sydney and knew Noah before they each came to work at Lunar Village.

*The Lunar View* is a scandal sheet at Lunar Village that entertains tourists with outrageous stories.

They’ve come up with an explanation about the solarship that’s disappeared after its gold was removed:

### ***Pirates steal gold and solarship***

*The Lunar View has learned why a solarship laden with gold has disappeared. Some had originally believed it contracted an unidentified existential threat to the Moon and left Lunar Village before the threat would be unleashed. But an anonymous source has informed us that the SSA Gold Digger, a gold-mining ship, encountered a solarship full of space pirates. The pirates forced the solarship to give up the gold it mined on asteroid 1343Cash&Carry. Not only did they get the gold but they also have the SSA Gold Digger now in orbit around Jupiter’s moon Europa.*

*It’s not known what pressure was brought to bear on the owners of the solarship to give up their multibillion dollar ship. Blackmail may have been involved. What the pirates will do with the solarship is not known. Peace Officer Noah Sebastian stated that he won’t rest*

*until the culprits have been brought to justice. As of the time of this writing no ship had been commissioned to go after the pirates to regain the SSA Gold Digger. We'll report more on this as information becomes available.*

This *Lunar View* scandal story is not the first that has tried to scare people about threats to the peace. Other reports have talked about forces that turn bodies turned inside out, about universal blindness of the world's entire population, about the loss of gravity on Earth where everyone floats upwards toward the sky, and about the aging process where you grow younger back to birth. There's a hefty market for these stories.

When Officer Sebastian read the report about the space pirates he is said to have lost control in a fit of laughing. The owners of the solarship *SSA Gold Digger* have so far said nothing about the news report.

Back on Earth in Zurich, Professor Snider, now on an unpaid leave, has told anyone who'll listen that the existential threat probably isn't dark matter that would threaten the Moon or Earth. According to Snider dark matter is made of particles too small to be seen even with a powerful microscope. But it does have a gravitational force. The university where he had been teaching released a statement also saying there is no evidence that the *SSA Gold Digger* encountered any dark matter.

At a rare press conference one college official said, "Dark matter has been a favorite topic of science fiction writers since the 1960s. The subject was first spoken about by Fritz Zwicky in the early 1900s. Professor Snider shouldn't have said that dark matter is not involved here. Just mentioning the phrase is a problem."

To date there are four hotels on the Moon. Daniel Moreau manages the High Noon Hotel, Emma Baker the Aqua Tulip, Merle Kumar the Ski Lift, and Akira Tanaka the Lunar Cavern. The four managers are at an emergency meeting, because of the stories floating about in the last few Earth days. Savannah Holland a manager for the shuttle service from Earth to Moon is also at the meeting. They're worried the tourist business be harmed. Leah Smyth a ten percent owner of the Lunar Cavern Hotel is also in attendance.

Daniel Moreau is saying, "The missing gold story is probably good for us. Some tourists may imagine being the one who locates the gold. But this dark matter story is dreadful."

Leah Smyth says, "Probably the best thing to say about dark matter is that if you can't see it or touch it, or smell it, it probably doesn't exist."

Manager Tanaka adds, "I think the assertion that an asteroid is heading to destroy the Moon, or maybe just Lunar Village is a much bigger problem. People can imagine a huge rock smashing into the surface."

Savannah says, “That one came from that serial magazine called *We Believe*. But it’s science fiction.”

Manager Kumar says, “I’m not worried. I think all these stories will just give people more reasons to imagine they’ll find adventure here on the Moon.”

The tone is different at the company that owns the SSA *Gold Digger*. Lucas and Amelia Miller, the couple who own the gold mining company have called a meeting in their suite at the. Their grown son Elijah and the company’s general manager Charles Martin are in also attendance in their suite at the Lunar Cavern hotel.

Charles is saying, “We’ll have to handle this delicately. Our biggest problem is that we don’t know what happened on the ship and don’t know who killed our deckhand or why.”

Elijah’s father, Lucas says, “This has to be handled quickly. The longer it festers the worse it gets.”

Amelia says, “No. Each step we take has to be the correct one. One mishap and our world blows up.”

Elijah their son says, “Yada yada yada. Money talks everywhere and we’ve got it.”

The mother Amelia rolls her eyes upward and says, “I’m not sure you should be at this meeting.”

Trying to get the group back on topic Charles says, “Problem one is explaining what we might or might not have brought back on our ship. Problem two is explaining how the ship launched itself without a crew aboard. Problem three is finding who killed our deckhand and why. Problem four is dealing with the press. And problem five is dealing with those who want to investigate the matter as if we were criminals.

Amelia says, “Saying the ship had problems noticed on its flight back here is the truth.”

Elijah says, “W’d say its autopilot somehow launched the ship on a random course.”

Lucas says, “Now that’s a good idea Elijah. You can be a help when you want to.”

The meeting breaks up with the four deciding on their first step. The schedules manager will make a public statement that the location of the ship is unknown and probably far away by now. The manager will also say the crew had come down to the surface to get some needed rest.

One advantage with this explanation turns a wrong procedure into a convenient one. The autopilot on the SSA *Gold Digger* had been used to bring the ship into lunar orbit. The rules at this spaceport include that a ship leaving orbit or joining orbit must be done by the ship’s pilot, not its autopilot.

Someone named Nivactt is in Nicosia Cyprus getting ready to file a story about the missing gold. The story is mostly about the methods used to mine gold on an asteroid. It reads very clearly, one reason being that Cyprus has many of the best educated people among Europeans:

***There's Gold in Those Rocks!***

*They get gold from asteroids that orbit between Mars and Jupiter. Their ship will orbit near an asteroid, almost touching it. Several crew members wearing spacesuits leave the ship to test what the surface of the asteroid tell's them about what's beneath surface. When they find gold using ground penetrating radar the mechanical digger comes out from the ship and powerfully cracks and brushes away the unwanted surface stone.*

*Then the digger pulls out gold the way a dentist might pull out a loosened crown from someone's tooth. The gold is transferred to the ship.*

*This can be a very profitable business considering what gold costs. On the other side of the ledger are the investment and operating costs of a solarship and its crew. Apparently the profits are large. Would a company that mines for gold on asteroids let millions of dollars slip through their hands?*

There is someting the peace officer is not likely to learn about that had happened at one of the bars at Lunar Village. After leaving the pub where the deckhand had a verbal despute, the deckhand went to a nearby lounge to sit and relax. While there the deckhand had overheard a stranger mention something odd during an end-to-end encrypted phone conversation between the Moon and Earth. The stranger mentioned the words dark matter although the deckhand didn't hear how the phrase was being used. The dead deckhand later made the mistake of asking the stranger what dark matter was and was somehow induced to go to an empty storage room near one of the hotel's airlocks. Skie Steel there knifed the deckhand to death. Steel waited for the right moment and donned a spacesuit kept in the storage room and used the nearby airlock to move the body to where it was later found frozen by the spaceport manager.

## Chapter 4

The agent Skie Steel sent by a hostile nation on Earth to promote an existential-threat story is keeping a low profile at the golf range. Meanwhile Detective Noah Sebastian is again talking with Savannah Rolland at a small table in the coffee shop at the Aqua Tulip Hotel.

Sebastian is saying, “The murder of that deckhand might be related to the mysterious ship movements of the SSA *Gold Digger*. But it might just have been a stupid grudge argument that got out of hand.”

Savannah asks, “What’s happening with the story about an asteroid heading here?”

Sebastian says, “I’ve been told it’s not a larger asteroid but just be a smaller meteor that will fly near us. The astronomers at the telescope on the far side here should be able to tell us if the meteor might cause some damage. They say the Moon’s been hit by many meteors and asteroids over its life as you can see with all the pockmarks on the surface here. I didn’t know that meteors break off from asteroids as chunks.”

Savannah says, “We have no atmosphere here. At least on Earth the atmosphere burns up most meteorites before they land. But I’m not worried.”

Sebastian says, “I’ve gotten a heads-up from the spaceport manager that some movie star is coming here soon. The manager says there’ll also be a private security crew. Several of the paparazzi will be coming too.”

Savannah says, “I haven’t heard anyone use that word in a long time. I know they take flashy news pictures of high-profile people going about their private lives.”

The peace officer says, “What bothers me is that the uncertainty about the gold ship might give them an opportunity to create some wild stories about the Moon under attack.”

Savannah asks with a smile, “What’s your next move. I’ll be happy to be a deputy if necessary.”

Noah says, “I want to talk with one of the officers on the SSA *Gold Digger*.”

Savannah says, “One of them is staying here at Aqua Tulip. The bartender was asking about what went wrong with the ship. The officer said, ‘Our ship usually runs very smoothly. But on the trip back it was shaking at times and went off course as we got near the spaceport here. We couldn’t explain what was happening.’”

The movie star FH has arrived with a six-person security crew and the star’s current significant other. The spaceport manager is just greeting the entourage at the arrival lounge.

Manager Adams says, “Welcome to Lunar Village.”

The head security guard says, “We’ll be available for autographs just before dinner.”

Adams thinks sarcastically, “Yea we’ll all be there.”

The movie star says, “But the thing I most want to do is a trip on the lander to see what’s out there. And I’d also like to take a walk on the Moon in one of your mega-million-dollar spacesuits.”

Adams explains, “You’ll have to speak with the appropriate managers about those things.”

The significant other then says, “The thing I most want is dinner. I didn’t eat much on the trip here because I was afraid I’d get an upset stomach in the weightlessness.”

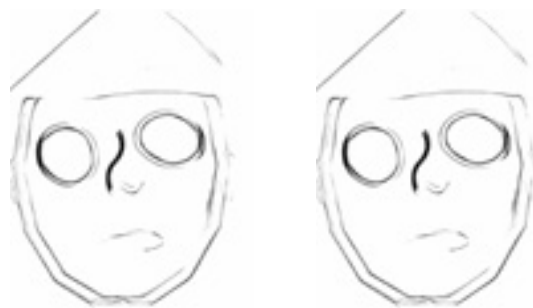
The head security guard waits for a moment to speak with Manager Adams in private and asks, “Is there anything to these rumors about something dangerous coming back here from some mining ship?”

Adams says, “I’d leave if I thought there was something to the rumors. The news outlets are probably making a bigger thing about the ship than warranted.”

The head security guard says, “But what about this thing they call dark matter?”

Adams waits several seconds and says, “They’re not even really sure that stuff actually exists.

But a few people here on the Moon at Lunar Village do worry when the phrase existential threat is used. So far nothing bad has happened since the SSA *Gold Digger* orbited the Moon then left. Most don’t worry about such things. Some even find humor in outlandish things. For example, a recent magazine report claimed that several dozen computers are walking around on Earth that can easily pass for people. But these computers all have the exact same appearance. The cynical reporter made a sketch of one of them and duplicated the sketch. The story shows an ersatz wanted poster with two identical sketches that says:



Contact authorities if you see either of these two

The agent, Skie Steel who recently arrived here on the Moon was prepped by scientists at the hostile country on Earth about what dark matter is believed to be. It can’t be seen, heard, touched, or smelled. Space scientists believe it’s made of tiny particles smaller than what atoms are made of. But if it exists it does have gravity. Dark energy is less well understood. It too can’t be detected. But it pushes actual matter apart rather



than pulling it together like dark matter is believed to do. Nothing is known about the dangers of dark matter or dark energy to people who might get too close. This lack of facts is what gives the mining solarship that came back to the Moon and then quickly left its potential as a serious story.

If a meteor were to reach the Moon the hopes of everyone would be that it lands anywhere but at Lunar Village or at the radio telescope on the far side of the Moon. Given that the two sites together are a very tiny percentage of the Moon's total surface, the odds would seem good that nothing terrible will happen. After all the Moon has been hit numerous times yet still stays along side of Earth like a loyal pet dog stays by its owner when a stranger approaches.

While existential threats don't worry most people here, the story that's still on the minds of everyone is the unsolved murder of the deckhand and the mining solarship that's disappeared. A reporter named Madison Cairns from a mainstream news service on Earth has just arrived to get a story about the mysterious solarship.

Cairns is asking the spaceport's manager about the mining ship story and says, "What's your best guess as to where the ship has gone?"

Adams says, "The only ones who know that are the people who own the ship."

Cairns says, "I'll talk to them. Who is the peace officer here?"

"Noah Sebastian."

Cairns tries to get an interview with the mining-ship people but is refused. So Cairns finds the Moon's peace officer, Noah Sebastian.

Cairns asks, "Where do you think the ship is now?"

Sebastian thinks for a second and says, "I can't prove this but in my gut I think the ship has flown to Jupiter and is now a tiny new melted part of the gas planet."

Reporter Cairns then asks, "Have you made any progress toward finding the deckhand's killer?"

Noah says, "I have no suspects. But someone who saw the deckhand arguing tells me there were three individuals in the argument, the deckhand, the one who was the initial suspect, and a third who said nothing but seemed to be egging on that first suspect. So we have one ex-suspect who has been cleared by several people who gave strong alibi's. The other suspect has not been identified."

Cairns asks, "Did the suspect who's been cleared say anything about the second suspect?"

Sebastian says, "The first suspect admits standing next to the second, but that's all."

Cairns says, "So you really don't know what this second suspect looks like?"

“No one remembers anything specific about the person beyond average height, average weight and medium length brown hair.”

A bit later the reporter Cairns is at one of the bars in the High Noon Hotel and asks a bartender about the crew on the gold mining ship.

The bartender says “Several of them come here occasionally when their ship is in. There’s one over in that booth ordering something,”

Cairns walks over and says, “Hello I’m with *The Last Word* news service. The bartender mentioned you’re with one of the mining ships. Could I ask how ships mine for things in outer space?”

The ship’s crew leader says, “OK. What would you like to know.”

Cairns asks, “Is it dangerous working on a mining ship in the Asteroid Belt?”

The crew leader says, “There are maybe two million large asteroids and many smaller ones. We sidle up to one, keep the ship parallel with the asteroid, put on spacesuits, and go digging on the surface. There’s good money out there, but the costs of running a solarship are very large.”

Cairns says, “I’ve just arrived here at Lunar Village. What happened to that ship that seems to be lost.”

“You asked one question and I’ve given you an answer. Either talk about something else or leave.”

Cairns says, “Sorry,” and gets up to leave.

Noah Sebastian doesn’t gamble. But Noah is watching several players at the baccarat table in the High Noon Hotel’s casino. Baccarat is a little like blackjack, although it seems classier to some. The billionaire who just arrived at Lunar Village has just entered through the front door to the casino with a staff of six.

Sebastian walks over and says, “Welcome to Lunar Village.”

One of the security staff misreads Noah’s posture and steps between the two. A second member of the staff reads the situation correctly and nods side-to-side to the first in a way that says no problem here, back off.

The peace officer, who has an extremely good mind for noting detail says to the billionaire, “There’s an interesting thing about the ten wealthiest billionaires on Earth. Nine of you have last names that begin with one of the first 13 letters of the English alphabet (A to M) and only one of you has a last name where the first letter that begins with a letter in the second half.”

The billionaire whose last name begins with a first-half alphabet letter says, “I can’t imagine why that would be. The odds of that happening don’t seem very good.”

Sebastian says, “Well, maybe it goes back to school days when the roll is called. Maybe being called

early in the roll offers a kind of positive reinforcement.”

As a joke the billionaire says, “You can call me First-Half if you like.”

Lunar Village’s only peace officer says, “If that doesn’t bother you, I will.”

Skye Steel’s passport is a forgery. One reason for the alias is that the agent’s actual name would be a clue to the country of origin. The second, of course, is to remain anonymous. The first name Skye, although somewhat unusual, has been used by people over recent decades. Agent Steel has laid the foundations for the hostile mission by making several comments to people engaging in bar talk.

In one instance Steel said, “The deckhand was equally guilty in that fight. I saw it happen. One of the two was going to be stabbed, depending on who was quicker.”

Steel did see the argument occur but doesn’t admit to egging on the eventual knifer.

First-Half, the billionaire now vacationing at Lunar Villag understandably likes to spend money At the moment billionaire and a member of the security staff are in the cafe at the High Noon Hotel. When the security associate gets up for a drink at the bar Skye Steel walks over to First-Half.

Steel says, “My name is Skye Steel. I overheard you asking the lander scheduler about renting a lander to go over to see the radio telescope. Would you mind if I came along? I’d pay half the fee.”

First-Half says, “I don’t see anything wrong with that. Give your hotel phone number to my associate and we’ll give you a call when the trip is set.”

Steel says, “That sounds great,” and walks over to First-Half’s security asseciate to explain what the billionaire has just said.”

The suggested arrangement to see the telescope with the billionaire gives Steel a bit of respectability. The trip, should it take place, probably offers the billionaire no particular advantage. What steel doesn’t imagine is that the billionaire will probably ask the pilot of the lander to do some extraordinary things.

First-Half, a security associate, and Skye Steel have just boarded a lander-taxi. The pilot gives them a quick tour and explains the rules passengers must follow during the flight. Soon the ship is soaring one thousand feet above the lunar surface. The ride is exciting. They first fly to Mare Tranquillitatis where Apollo 11 astronauts spent sevral hours in 1969. They’re close enough to see the remnants of that landing still sitting where the astrounauts left them. They then visit Plato Crater that’s 67 miles wide and nearly a mile deep. They’re now flying several miles above the surface in a low orbit.

First-Half says to the pilot, “Can we take the ship down into the creater like we were a World War 2 fighter plane making a dive on a target on the ground?”

The pilot says, “No. We fly level with the ground and make changes in course very carefully. Why don’t we fly over to see the huge radio telescope.”

First-Half asks, “Would you mind if I took control of the helm for a bit?”

The pilot says, “You must have a pilot’s license to run this ship.”

First-Half says, “Would \$10,000 make a difference to you?”

“No.”

“Twenty-five thousand dollars?”

“No.”

The agent Skye Steel has remained quiet during the shenanigans carried out by the billionaire.

Finally Steel says to First-Half, “I’m with you for more excitement. But we still know so little about what things here on the Moon could be dangerous. There might be radiations in some places that could ruin the ship and who knows what else.”

The pilot glances at Steel and thinks, “I don’t know what unknown radiations there might be. But if the thought quiets down the one with all the money, so much the better.”

When the taxi gets back to the spaceport Steel makes it over to the High Noon hotel suite where the *Lunar View* scandal sheet has its office. Now talking with an editor Steel claims to be a space scientist who’s come to the Moon on a grant to study the vulnerability of the Moon to some poorly understood radiation that doesn’t reach Earth because Earth has an atmosphere.

The editor asks, “Have you come because of the worry among some that the gold mining ship brought back something dangerous?”

“Exactly,” says the agent actually from the hostile country on Earth. Our big concern is that whatever it brought back can’t be detected. But it can still be a danger even if it’s invisible.”

The editor asks, “Are you saying the ship brought back dark matter?”

Steel says, “Not necessarily. But dark matter is on my short list of suspect things.”

The editor, asks, “Are you speaking for the record when you say the ship brought something bad back?”

The agent says, “Because of the stipulation in the grant I’ve received I can’t make public statements. But feel free to attribute what I’ve said to sources soon to be named.”

“That we can do.”

Steel then adds, “I’ve got a picture you might use in your story.”

The photograph shows a solarship with a halo fitted around its frame where the wings would be on an airplane. The halo is thick and misty.

The editor says, “The halo looks s a flat washer used to hold a screw flatly in place. We’ll go with it in our next issue. Thanks.”

## Chapter 5

Jupiter, the fifth planet from the Sun is a giant planet made of gas. If it has any solid material it would be deep down in its inner core. It has no solid surface. To appreciate how big it is, its mass is more than two and a half times that of all the other planets in the Solar System *combined*. It's the oldest of the Sun's planets. Despite not having visual evidence from telescopes, ancient Roman and Greek astronomers saw Jupiter as the god of the sky and thunder, a thunderbolt of almighty power.

Into this incredible part of the Solar System an aging gray and black solarship has just reached the outer edge of Jupiter's gas atmosphere. The ship finally got to where its autopilot has directed it since it left lunar orbit. Within a short time the ship is crushed, melted, and vaporized as it disappears down into the depths of lethal gas. What or who was on-board is a mystery to all but the asteroid-mining company. What dangerous substances might have been attached to the ship are likely also gone. Jupiter has gained an additional tiny bit of mass that has become part of this gas giant. Jupiter is ever ready to take on almost all comers. But not the Sun, which is still master of the Solar System, despite any aggressive growls just seen near the fifth planet.

Savannah Rolland, Noah Sebastian, and Madison Cairns the reporter from *The Last Word* are having wine and cheese at the Lunar Corkery in the Lunar Cavern Hotel. It's a darkened smaller pub with candles set on its dark wood tables. On opposing walls are racks with bottles of wine including the basic to the exotic and expensive. The snacks include softer goat cheese, sharp and aged cheddar, and brie.

Cairns is saying, "I haven't found much for my missing solarship story. I spoke with one of the officers on the crew of the SSA *Gold Digger* but that conversation about the missing ship went nowhere."

The conversation slows while a waiter places several dishes of cheese on their table.

Savannah asks Noah, "Has anything developed in the deckhand murder case?"

Sebastian answers, "There was a third person at the dispute with the deckhand. I have no evidence that the third person did anything, but I'd sure like to talk with the person. The problem is that no one can remember the person's name or general appearance. What I got was medium height, medium weight and brown hair. That might describe half the people here on the Moon."

Cairns says, "I overheard in a bar-room conversation the phrase dark matter. The pair were talking as though it was an existential threat to the Moon that went away when the ship went away."

Noah says, “People who vacation here on the Moon get a kick imagining space adventures. Someone came recently to my office to report that the heliopause was shrinking, as if I should do something about it.”

Savannah asks, “What’s the heliopause?”

Noah says, “I looked it up. It’s the border where our Solar System ends and outerspace begins.”

Savannah says, “That sounds like a map border more than anything else.”

Madison says, “That’s exactly what it is.”

Actually the heliopause is the boundary between where the Sun’s radiation borders with the collective radiation in deep space. One way for the boundary to shrink would be if the Sun became weaker, which isn’t very likely for at least a more billion years.

Back on Earth in Zurich Switzerland, Professor Snider has still not been reinstated. But a new professor has been hired to teach the classes Smith usually taught. The students who were in Snider’s class when it was closed down have been invited back.

The just hired Professor Silver is saying, “I hope to be as well liked by the eleven of you as Professor Snider has been. We’ll continue where the class left off.”

A student sitting in back says, “We were discussing dark matter.”

Silver says, “We’ll have to put that one on hold for a bit.”

A second student asks, “Can we ask if it was fair for Professor Snider to have been put on leave?”

The new professor says, “I’ve not been made aware of the reasons for Snider’s removal.”

The first student says, “So now it’s removal. It started out as temporary leave just after we had been discussing dark matter.”

The professor says, “One thing I’m sure of is that dark matter has not been definitely proven to exist. But I’d like to talk today about whether gravimeters can provide some answers at least about the internal conditions below the surface here. Can someone explain what a gravimeter is?”

The student in the back says, “They’re used to test the force of gravity. They’ve been used on Earth to locate things that might be mined. One researcher said they couldn’t find dark matter on Earth. The researchers did concede that it was possible that extremely weak amounts of dark matter might exist on Earth that wouldn’t be detected with a gravimeter.”

Silver says, “That’s a fair statement. But we won’t be able to answer questions about dark matter until we’ve tried to measure it in deep space.”

Another student asks, “Don’t space scientists think dark matter exists by showing that the gravities of a group of stars wouldn’t be strong enough to hold them together in some pattern. But if there was dark-matter type gravity also present the stars would hold together.”

The professor says, “I wouldn’t argue with that.”

The student who first spoke asks, “So why was Professor Snider fired for saying the things we’ve just been saying here with you?”

Silver says, “I don’t know. Let’s end this session, I have a meeting to attend with the dean.”

Meanwhile on the Moon the powers-that-be of the errant solarship are having a meeting in their office suite at the Ski Lift Hotel.

Manager Charles Martin is saying to the Miller family’s three members, “I can report that the SSA *Gold Digger* is no more. It crashed into Jupiter. If there was anything on it that might have created an existential threat to the Moon it has I hope also been destroyed.”

Amelia Miller asks, “Will the insurance company pay off?”

Martin says, “That depends on whether we call it an accident or admit we intentionally junked the ship out of fear it had some terrible force within it.”

The son Elijah asks, “How would we describe such an accident?”

The father Lucas, “We’d have to say the autopilot somehow took the ship out of lunar orbit and somehow flew to Jupiter with no one aboard.”

Martin says, “According to the crew there were serious problems as the ship made its last trip back here. At one point it was shaking badly and at another point it went off course. I suggest we get several affidavits from crew members about the problems with the ship on its way back. I don’t think we should mention any terrible forces that embedded themselves in our ship. That would sound like science fiction.”

Lucas says, “Still I had an eerie feeling something had gone terribly wrong with the ship.”

Elijah adds, “If something had embedded itself in the ship it probably happened in the asteroid belt. Could the same thing happen to the next ship we acquire?”

Amelia Miller says, “Let’s not worry about that until we get our next ship. The crew will be on temporary paid leave.”

Lucas says, “If we can sell the errant autopilot explanation to the insurance people we should have the money for our next ship within a short while. I know of a ship that’s probably for sale.”



Back on Earth Sewlo the hermit on Raunt Island in Jamaica Bay, NY is getting ready to do something very unusual. Sewlo has some money stowed in a coffee can. He'll make a rare trip away from Jamaica Bay to Manhattan where they sell telescopes at a store on Ninth Avenue near 34<sup>th</sup> Street.

Sewlo has just bought what the clerk said was a reflector telescope. Sewlo plans to spend time looking at the Moon in hopes of spotting Lunar Village where the cousin stayed when the solarship was back in port. Fortunately for Sewlo, Lunar Village was built on the near side of the Moon, which can be seen from Earth. Sewlo won't be able to see small objects such as things left at the Apollo 11 site. But the used telescope will see a broad view of Lunar Village on a clear night because the vacation mecca spans five miles of land on the Moon. Sewlo doesn't know the cousin's body is back on Earth. Sewlo thinks it was buried near Lunar Village.

First-Half and the head security associate in his entourage are at a bar indulging in the incredibly expensive Taste of Diamonds champagne. The associate is saying, "There's an odd thing about that Skye Steel on the lander trip."

First-Half says, "And."

"He uses an end-to-end encrypted phone."

First-Half asks, "How does it work?"

The associate says, "It maybe something you should use. It keeps your phone conversations secure. No one can understand what you say in your phone conversations even if they can hear what you say."

First-Half asks, "So the guy on the lander trip uses one?"

"Yes. I also learned that the name is phony. All we did find out that his trip here began somewhere in Asia. But I can't get read on who the person actually is. "

The reason for that difficulty is the agent Skye Steel has come equipped with a number of useful tools besides that special phone. Steel has access to whatever funds are needed, has weapons, and has access to whatever information the home base can supply when requested by phone or other means. Steel is also good at getting help from strangers without their knowing why they're being used. The agent's purpose is to help the home country by destabilizing the rest of the world on Earth. When the destabilization succeeds the home country can embellish its power at the expense of the rest of the world. The destabilization mainly is to trick the world into thinking that an existential threat is about to happen. The agent and the home country would then take self-serving actions to get what it wanted. But is there some real threat the agent doesn't know about?

The *Lunar View* scandal sheet has just finished preparing its next issue, paper copies and electronic ones are now both available:

***What's Out There?***

*There is reason to believe that something dangerous may exist here at Lunar Village that scientists can't explain. At first they thought it was evidence of dark matter or dark energy. But at this time they no longer think it's either of these. Instead there's some proof that black holes can reach out to grab things much further away than previously believed*

*Black holes have such strong gravity that nothing in their grasps escapes, even light. But can black holes pull things in much farther away than previously thought? The missing solarship SSA Gold Digger may have been scooped up at one point by a black hole situated an incredibly far distance from the Moon. Is the Moon the next target?*

*We hope not. And if the Moon were the target, could Earth be next? Our sources won't say for certain that the solarship was reeled in by a distant black hole. They also won't commit themselves on the Moon being the next target. But they wouldn't deny these possibilities either. More on this will be posted as details become available.*

Savannah is speaking on a normal radio phone with the boss down in Rocket City.

The boss has just asked, "We've been hearing crazy things about Lunar Village."

Savannah explains, "There's a local scandal sheet that prints wild things. Their recent issue claims a solarship here was scooped up by a far-away black hole."

The boss says, "How has the story been received?"

Savannah adds, "The people who work here see the story for the fake that it is. But I'm concerned about tourists deciding to not come out of fear about dangerous things can happen here."

The boss says, "What we must do is expose the sheet for what it is. The best way is to say loudly and clearly that the story is faked because it has no sources. They're making up sources that don't exist."

Savannah says, "I can start saying that. Is there some way to get our rebuttal out to potential customers for our shuttle service to Lunar Village?"

The boss says, “Our promotions can explain that the scandal sheet is there for entertainment. We can list some of the other things they’ve printed that were not true or did not come about as predicted. We won’t sound like we’re at war with them. We’ll sound like they are helping us get business with humorous stories.”

Noah Sebastian may have found a clue to who murdered the deckhand. The police at Rocket City as requested sent up tools needed to examine a crime scene for fingerprints. Noah of course is familiar with fingerprint evidence from having worked at the Sydney Australia police department. The peace officer went to the airlock that was used to take the dead deckhand to the outside lunar surface. Sebastian searched the two spacesuits that are stored next to where the body passed through the airlock to the outside.

Noah was able to lift three different fingerprints from the two suits. One of the three prints is Noah’s own print that got on when Noah got into the spacesuit to go outside. Noah is hoping that one of the other two prints is from the spaceport manager when they used the spacesuits. If so, that might mean the third print, may have been made by the murderer when taking the corpse outside.

The spaceport manager has now voluntarily let Noah take a fingerprint. It matched one of the two remaining prints lifted off the spacesuit. Now the question is to whom the third print belongs. It could belong to the murderer or to someone unrelated to the crime.

## Chapter 6

Professor Snider formally of Zurich Switzerland, has experienced a psychological transformation. Now without a job Snider has gone to live with relatives because the teaching salary has stopped. Snider now lives in a single room in the attic of a nine room house. The fired professor has become obsessed with identifying a form of radiation not known to anyone who practices in the various space sciences.

Snider now believes there is one more form of radiation beyond the common forms known since the early 1800s, such as: radio waves, microwaves, infrared rays, visible light rays, ultraviolet rays, X-rays and gamma rays. For Snider there is also something called dark radiation. It's different from the dark energy some talk about. Those who believe in dark energy think it's an opposite expansive force to dark matter. Dark matter is said to pull things together and dark energy pushes them apart. A minority of scientists don't believe in either. For Snider dark radiation neither pulls things together nor pushes them apart. Snider believes that dark radiation is the Universe's 'suicide' feature because it destroys anything in its path. The most powerful known energy in the Universe are gamma-ray bursts. These deep-space storms are so powerful they generate more energy in a single burst than the Sun will emit over its entire 10-billion-year lifetime. And these giant gamma-ray bursts occur every day. Could the bursts be the source of dark radiation that travels widely, unseen by its targets? Snider believes the gamma-ray bursts are the energy source for dark radiation.

Snider sent an essay about the dark energy proposal to a science journal where it was turned down. But a secretary at the publication passed the idea to a relative who lives in the country the secretary's family originated from. The dark radiation idea now in the hands of the relative's bosses is what caused the agent Skye Steel to be sent to Lunar Village. Steel's job is to warn that dark energy is about to destroy the Moon. Will respected scientists begin to worry about dark radiation? Not likely. But will politicians consider the potential of such an idea to have strong political repercussions? Maybe. Will sensationalist publications that the *Lunar View* run with the story? Yes. Skye Steel's managers are betting they can start a world-wide crisis with the idea. Will they? If they do succeed their status in the world and their wealth may grow exponentially. Both things will increase because they'd be the only ones to not panic. They'd gobble up resources no longer being protected.

Back on the Moon, there are astronomy reports that a meteor is heading toward the Moon. Savannah Rolland and Noah Sebastian are talking in the peace officer's small office suite at the High Noon hotel.

A vacationer enters and asks, "Have you made preparations for what we'll do when the meteor hits?"

Savannah says, "From what I've heard the meteor won't get near us for two weeks."

The vacationer says, "I'm glad I asked, we'll be leaving by next week. But aren't you worried about the people who will still be here in two weeks?"

Noah says, "We still don't know if it will hit the Moon. And if it does we don't know whether it will hit on this side of the Moon or the far side. I think it's now believed to be smaller than originally thought."

The still distraught visitor adds, "But aren't you going to have drills on what to do if it does land here in Lunar Village. A long time ago when people worried about a nuclear war, the children in schools practiced sitting on the floor in the hallways with their hands covering their heads. Do you have an air-raid siren you can start if the meteorite gets near?"

Savannah says, "Stop worrying! If the worst is predicted, my shuttle company will make the needed flights to take everyone down to Earth over a period of two or three days. Then no one will be hurt."

Noah adds, "You can relax. Everything will be handled right if necessary."

The vacationer smiles curtly and leaves.

Noah says, "Thank goodness that's over. I was about to say that I'd immitate Will Kane and shoot down the evil meteorite on Main Street."

Savannah smiles and asks, "Who's Will Kane?"

The peace officer says, "Will Kane is the hero of the 1952 film *High Noon* where the just married lone town marshal has a gun battle with four violent outlaws seeking deadly revenge for a long-ago prosecution."

Later Madison Cairns from *The Last Word* news service on Earth is in Noah Sebastian's office talking about the still unsolved murder case.

Cairns is asking, "Have you established a motive for the attack?"

Noah says, "I have just one clue. One of the participants at the verbal dispute in the pub claims the deckhand had used the term dark matter. I don't know how such a phrase could lead to a murder?"

"I understand your first suspect has been cleared," says Cairns, "Is there anyone else on the suspect list?"

"No. The attack apparently took place near an airlock mechanism. As far as I know no one other than the perpetrator and victim were there at the time."

Madison asks, "Has the knife been located?"

"No. But I have a fingerprint which may belong to the killer. But I can't ask everyone here at Lunar

Village to volunteer to have their fingerprints taken.’

“How did you get the fingerprint?” asks the reporter.

Noah explains, “It was on one of two spacesuits stored near the airlock. Actually I lifted three prints, one was mine and the other was the spaceport manager’s. Those two prints occurred when we donned the spacesuits to go outside to retrieve the frozen corpse.”

Madison says, “I once covered a murder story in Rome where the police claimed they had identified the perpetrator from a list of five suspects. They then waited for one of the five to try to leave the city. One did and they arrested the suspect. The person was eventually convicted of the murder.”

Sebastian says, “So you’re suggesting that I flush out the perpetrator by claiming I know something about the murder that I really don’t. That sounds clever. I’ll give it some thought, although I don’t yet know what I’d claim about the murder.”

Cairns adds, “Maybe you could claim you have a partial security camera video record of the murder. You could say you have a good view of the perpetrator’s back and clothes worn.”

The lone peace officer says, “That sounds interesting. I’ll give it some thought.”

Agent Skye Steel has dreamed up the first of many things that will happen over the next bit of time to worry people possible existential threats. Steel has written an essay using the pen-name “William TC” The essay is about a Domesday Book where people were to be judged without any possibility of appeal. William says in the essay that the first description of an existential threat to the world was the Domesday Book (today spelled doomsday). The essay has been submitted for publication to the scandal sheet *The Lunar View*. It reads:

***Domesday*** by William TC

*The word ‘doom’ sounds very old to the modern ear. Yet it was used in the year 1086 on Earth in medieval England. People back then worried they would be finally judged as having been good or bad. They also worried their world could be destroyed by fire.*

*Today people usually don’t see things using such awesome religious worries. But it’s becoming clear that terrible things can happen to us here. These terrible things might occur, not in religious ways, but in extraterrestrial ways. Powerful forces do exist in the Universe beyond our Solar System. These forces include things like gamma-bursts that*

*occur every Earth day that could demolish our Sun in a split second. It's also emotionally difficult to contemplate the destruction of the Universe. And if the Universe self destructs so will our Solar System and so will Earth and its Moon.*

*So let us hope for the best. Or to Use an older way of speaking, God Save Us from the forces that lurk just beyond the world we live in!*

Savannah Rolland has just read the Domesday essay. The space shuttle manager is somewhat amused and somewhat angry. Why would anyone want to engage in such fear mongering. Savannah is certain that the people she works with can easily see how absurd such an essay is. But Savannah always worries about what potential passengers on the shuttle will think about booking a trip from Rocket City AZ to Lunar Village. Savannah thinks for a minute about writing an essay on fear mongering and writes:

***Response to Domesday by Savannah Rolland***

*Fearmongering is often part of a campaign of psychological warfare for the purpose of influencing people for some group's personal gain. Yes the Universe could self destruct, but how likely is that. And even if it did, how likely would that occur in our lifetimes when the Universe is at least 14 billion years old?*

*More importantly, what good is there in worrying about some unlikely event that can't be prevented. A better approach is to spend more time accomplishing what needs to be done and enjoying the fruits of what we accomplish. Amen.*

Savannah submits the response to the *Lunar View* and learns within an hour that the essay has not been accepted for publication. Was it poorly written? Was it not an interesting thought? Or did it not fit with the narratives of the *Lunar View's* business model? Well, 'Freedom of the Press' includes the freedom to not publish something worth publishing.

Lucas, Amelia, and son Elijah Miller are again meeting in their suite at the Lunar Cavern hotel with Charles Martin who manages their space-mining operations.

Lucas is saying, "The insurance company has paid off. We have the money to buy a replacement for the SSA *Gold Digger*."

Martin asks, “They bought the mechanical problems explanation for how the ship was lost?”

Amelia says, “We did have problems.”

Martin says, “But the ship didn’t leave lunar orbit on its own doing.”

Lucas says, “We’ll have to keep that a family secret. And Charles, your family.”

Elijah the son asks, “Did they ask what happened to the gold?”

Lucas says, “I told them the truth. We took the last shipment down to LA. So we weren’t claiming a loss on that matter. I think that we didn’t lose the gold made them feel a little better about handling the claim.”

Amelia adds, “Let’s all agree to be very careful when talking with others about our loss and the insurance payment. There’s just four of us in on the secret. Let’s keep it that way.”

Elijah giggles and says, “Well here on the Moon there aren’t any laws. What could they do to us?”

Martin points a finger at Elijah and says, “But there are laws for any of us back on Earth. Would you want to spend the rest of your life here on the Moon?”

Noah’s investigation of the stabbing of a deckhand has not gone very far. So reporter Madison Cairns is spending some time examining the crime scene. The stabbing apparently took place in a 20 by 20 foot storage locker. There’s nothing there now but the two spacesuits held in racks used for going out onto the lunar surface through the nearby airlock. Cairns is thinking about the knife that was used.

Madison asks no one in particular, “What would I do with a knife I had just used to murder someone? Would I take it back to my hotel suite? Would I toss it into the nearest refuse receptacle on my way back?”

There’s not many things in this area of the ship. But there is another storage facility about 30 feet away from the one with the spacesuits. The two storage areas don’t have door knobs they have spinning handles. Madison tries rotating the handle on this second storage area and the door or hatch opens. Inside are several boxes with various supplies and smaller pieces of equipment. But behind one of the boxes is a knife. It’s squeaky clean. But Madison picks it up gingerly to not smudge any fingerprints that might be on it.

Several minutes later Madison Cairns is entering Noah Sebastian’s office carrying the knife.

Cairns says, “It was in a storage locker down the way from the locker with the spacesuits. I found it stashed behind one of the boxes. I couldn’t see the knife until I looked behind the box.”

Sebastian says, “Great! It looks like it’s been wiped clean but we’ll check it for fingerprints. The doctor who did informal autopsy may be able to say whether the wound could have been made with this knife. The body’s down at Rocket City. But we do have several photos taken of the wound.”



Sebastian is not the only one concerned with photos taken. Savannah has been asked by the shuttle service accounting people down at Rocket City to rectify a problem. The credit card Skye Steel used to pay the fare to Lunar Village has a hold on it. Steel is using the identity of a deceased person who's family noticed someone has been using that person's identity for financial transactions.

Savannah is talking on a land-line phone from her suite to Skye Steel's room.

She's saying, "There's a problem with your credit card. Some family on Earth has complained that your account actually belongs to a dead relative of theirs."

Steel, a fast thinker, says, "I've had this problem before. Apparently there's been a mix-up somewhere. The last time this happened the service I was using was able to clarify the problem in a day or two."

Savannah says, "Yes that may be. But we haven't received the funds needed to pay your passage. The credit card people put a hold on future transactions."

The agent says, "Maybe the best solution this time is for me to send the cash needed in a wire transfer to your account. Will that be OK?"

The shuttle ship manager says, "That's OK but we'll need payment for both ends of the trip. I don't know if you'll have a problem with your hotel bill. But that's not my concern."

Savannah gives the errant bill payer the needed account number for the wire transfer. Several hours later Savannah is informed from Rocket City that the round trip fare has been paid. The associate who gives Savannah the heads-up on the payment also mentioned that the name used for the wire transfer is not Skye Steel. It's one of those names that's difficult for English speakers to pronounce. Savannah makes a note in her records about the duplicate names used by Steel.

Meanwhile the professor who was fired for saying sensational things about existential threats has taken money out of a life savings account to pay for a trip to Lunar Village. Snider has just arrived at the High Noon hotel but doesn't yet know what the first step will be. So without a clear plan the ex-professor goes back to the spaceport everyone uses when they arrive on the Moon. Finally Snider thinks of something to do.

He's asking the spaceport manager, "Do you know what happened to the mining ship?"

Manager Adams says, "Information like that is above my pay-grade."

Snider says, "Don't you manage arrivals and departures from the spaceport?"

Adams says, "Yes. You'll have to speak with our peace officer or the company that owned the ship."

Snider says, "Thanks for nothing."

A bit later Snider is having lunch at a lounge at the High Noon hotel. As it happens Leah Smith 10

percent owner in the Lunar Cavern hotel is also having lunch there, to check out what the competition's menu is like. Leah and the professor are at tables next to each other.

The ever friendly Leah asks Snider, "Are you enjoying your stay here at Lunar Village?"

Snider says, "I came to find out what happened to the missing gold mining ship. The manager at the spaceport told me nothing and the people at the company that owns the ship wouldn't speak to me."

Leah asks, "Are you a writer looking for a story?"

The ex-professor says, "I hadn't thought of that. Yes I am a writer looking for a story about the ship. I haven't started the story. Well yes I have, just this minute, talking here with you."

Smyth says, "Well I can't help you. I'm not sure anyone can except the two owners Lucas and Amelia Miller. Well there's also their son Elijah, but I wouldn't take him too seriously if I were you."

Snider says, "They have a secretary who told me they don't sit for interviews with anyone."

Leah asks, "Since you're just starting out as a writer, what have you done previously?"

Snider says, "I taught space science at a college in Zurich Switzerland. But they fired me because I insisted on having academic freedom to say what I believed."

Smyth says, "You must have said something pretty controversial to get fired. Don't you have the job protection they call tenure?"

"No I didn't have tenure. But I believe there is an existential threat looming that could do a lot of damage to Earth and its Moon."

Leah says, "Oh."

The one-time professor continues, "Do you know what dark matter is?"

Leah says, "Leah tells a lie and says no."

Snider says, "It's matter that can't be seen, heard, touched, or smelled. But we believe it exists because it does have gravity that can be accounted for."

Leah says, "You mean dark matter has been identified with a machine of some type?"

"No," says Snider, "You have to assume it exists."

Leah says, "Oh."

Snider gets up and leaves the High Noon hotel's lounge before the order is served."

When the waiter arrives with a sandwich Leah says, "I think your customer has left."

The waiter says, "Oh my."

## Chapter 7

An asteroid A201R in the asteroid belt between Mars and Jupiter had its orbit around the Sun altered when it was hit by a rogue asteroid flying straight rather than in an orbit. A meteor without a name was sheared loose from the orbiting asteroid. The sheared loose meteor is now heading on a course toward Earth. It's no longer orbiting the Sun, so it's a rogue meteor. The rogue is currently 25 million miles away from Earth and traveling at 75,000 mph. This cigar shaped piece of rock is 100 yards long with a 60-yard irregular circumference at its widest point. The meteor contains, iron, nickel, iridium, platinum, gold, magnesium and some water ice. If you were riding the meteor's surface in a spacesuit you would experience night and day every four hours because the meteor is rotating quickly as it hurtles toward Earth.

Given the course and speed of the meteor it would likely lose 95% of its mass falling through Earth's atmosphere. It would hit the ground there as a 15 feet long, three feet wide, three feet thick meteorite (relatively harmless unless it hit a building or something alive). But if it hits the Moon, the meteorite will smash with its massive 100 yards length into the lunar surface. Still, even at 100 yards in length the meteorite can't damage the Moon more than just creating yet another large pock mark. But if the giant stone hit a hotel in Lunar Village it would do deadly damage. The meteorite's destruction of that one hotel would probably doom the nearby hotels also via ground vibrations. Fortunately Lunar Village and its surrounding areas are a tiny percentage of the Moon's total surface. Would anyone worry if the Moon became the meteor's likely target? Some would. But the Moon's total surface is about 14 million square miles. Lunar Village is built on a one square mile site. The odds of a hit on a Lunar Village hotel are extremely small.

Professor Snider has gotten around to reading the essay Skye Steel wrote for the scandal sheet *Lunar View*. Snider would like to talk with William TC. But the essay used a nom de plume for the author's name. The *Lunar View* editor won't help Snider find Steel. So Snider pens a response to Steel's essay strongly supporting it. Snider includes a hotel room number for the anonymous writer to contact, signs the essay as Snider, and adds a spaceMail.com address. The editor prints the reaction and Steel has a decision to make. The partisan agent wants to remain anonymous but also senses a disciple for the existential-threat political campaign.

Steel sends an electronic message to Snider. But the spaceMail message goes to a contact of Steel's on Earth who bounces the message back to Snider on the Moon. This way Steel has remained anonymous. Snider

returns a spaceMail and mentions having been a professor of space science who no longer has a job. Steel now is convinced Snider can serve as an anonymous assistant.

Somewhere down on Earth two people are sitting at a sidewalk cafe table on one of the main streets of a capital city. They're discussing another country in their part of the world.

The first is saying, "They're not running that place as a democracy. It's run as a dictatorship that competes with the West."

The second asks, "But hasn't the government nonetheless succeeded in doing what needs to be done?"

The first answers, "No. The cabal that's run the country for the last decade has not seen to the needs of its many poorest citizens. The laws of the land there are not really what's written in their constitution. The laws are what the cabal says they are at any given time. The cabal and its cronies live well. The cabal has political ambitions that exceed its capabilities within the world's economy and among the military powers of the world."

The second says, "Come now, they must have done something well."

The first says, "Yes, in a way. They've turned to espionage and propaganda to compete among the ascendant countries of the world."

The second says, "I think you're overly pessimistic. I visited the place last year and things seemed OK to me, at least for the two weeks I was there."

But this country does have one leg up on the rest of the world. One of its citizens is a very smart space scientist. The scientist has worked out a way to identify a form of radiation, unknown to the world, that moves unseen around the Universe. It's not what some call dark energy or dark matter.

A bit later the two pay the waiter the tab and leave the cafe.

There's something the two intellectuals have no way of knowing about the country they've discussed. It's the same country that Skye Steel left when heading to Lunar Village on the Moon. Steel's objective is to destabilize the world with fears of an existential threat. Steel was told about the mystery radiation that's still not known in the rest of the world. That may allow the cabal to succeed at acquiring a big share of the world's power and wealth by misleading the world about what they've found. If so, this dishonest, aggressive approach to success is not new. It's been used from time to time during the entire history of the human race.

The knife that the reporter Madison Cairns found near the airlock, like many knives has a serial number on it. The eight numbers on this knife were put on it to allow collectors, owners, and police investigators to read basic things about the knife. The knife's number 34453983 can tell anyone who knows the code about

the handle type, materials used, date of manufacture, and place of manufacture. The knife is now stored in an evidence locker in Noah's office suite. Noah doesn't know the numerical code and so radios down to ask for help from the police department that serves Rocket City AZ. He sends them the knife's number and a photo but keeps the knife in the locker.

A day later Noah learns that the knife was manufactured ten years ago in a small country Noah has never been to. Noah doesn't tell anyone about what has just been learned about the knife's origin nor about its probable wielder. Now two clues are present that if put together will help identify the killer. One clue is the knife's origins and the other is the address of the confederate that bounced Steel's spaceMail.com message back to the professor on the Moon. But the clues remain separated.

When the billionaire came up to Lunar Village several members of what are called the paparazzi also arrived. These are independent photographers who get and sell personal photographs of high-profile people or celebrities. Some critics call the paparazzi stalkers because they disregard the rights of people to have privacy when not at work. The word paparazzi was coined in the 1960 film *La Dolce Vita*. They buzzed around the rich and famous taking sometimes embarrassing photos.

Three of these paparazzi are now at Lunar Village looking for telling images of the Billionaire First-Half. They lost their best chance of juicy photos when the billionaire went on the space taxi to see the Moon. They were refused seats on the ship. One of them did get a photo of First-Half gambling at the craps table in the casino area at the High Noon hotel. The photo caught First-Half rolling the dice. To get the picture the photographer had pushed someone aside who then spilled a drink. One of the casino staff escorted the photographer from of the casino.

Skye Steel has decided to create a scare message about people's safety at Lunar Village. But Steel wont personally create the warning. He'll get the ex-professor Snider to pen a warning about what the now destroyed solarship SSA *Gold Digger* brought back to the Moon before it was sent away to crash into Jupiter. Snider already believes the danger is possible but hadn't intended to go public with the warning. Steel has sent Snider another bounced-around spaceMail message that contained secret information that Steel is 'afraid' to mention. Steel pleads with Snider to tell people at Lunar Village about what may have been on the ship. Snider now has the confidence to offer the warning because of how sure Steel is about the threat. The *Lunar View* rejects Snider's first draft of the warning. But does publish a scaled down second version, which it steps back from by saying everyone's entitled to say what they believe. The second veresion is published as:

### ***The Threat May Be Real***

*Their is now good reason to believe that a mining solarship recently returned from the asteroid belt carried back with it a substance unknown to the scientific world. The substance cannot be detected with present day sensor equipment. It shares one feature with so-called dark matter and so-called dark energy in that it too is dark. I call it dark radiation. I have a PhD in space science and have taught in a university.*

*There are many types of radiation that are known to be dangrous when humans get too close, such as X-rays and microwaves. Like these two radiation types dark radiation might be able damage a person's genes to cause things like cancer. No I can't point to the new form of radiation because it's still undetectable. And I can't prove that dark radiation can cause cancer. But I can point out that the people who owned the solarship sent it to Jupiter to be destroyed. These ships are super-expensive to build. Who would throw away millions if not billions of dollars so easily.*

*Yours truly, a science friend in deed*

At the bottom of the essay the editors of the *Lunar View* say in bold letters, "There is no proof that these things are happening here on the Moon. But then again we editors are not space science experts."

The family members who owned the SSA *Gold Digger* are furious when they read the essay just published. Their first thought is a lawsuit brought against the scandal sheet and against the professor.

Charles Martin who manages the gold mining ship for Lucas and Amelia Miller is saying, "Remember we're on the Moon where there are no written laws and where lunar jurisdictions on Earth are unclear."

The son Elijah says, "If there are no enforceable laws here maybe we should hire an assassin to get back at that professor and the editors."

Martin says, "Forget that. And remember what goes around can come around."

Lucas says to Elijah, "And the essay didn't mention the ship's name or our company's name."

Amelia says, "But everyone here knows who that rat was talking about."

Elijah yells, “Right!”

Martin tries to clarify things by saying, “The issue here is whether this local story gets any news legs on Earth. We may get support from the science community back there because the essay challenges their beliefs. But since the scientific community has bought into dark matter and dark energy without being able to point to them, they may extend their beliefs to just one more type of dark something.”

The mining company then releases a *Lunar View* response to the accusations:

*The SSA Gold Digger had electronic problems. It left lunar orbit without a crew aboard. We do not know where it has gone. Without a crew on-board the ship will follow random courses. It may be destroyed by powerful extraterrestrial forces or may head to the far reaches of the Universe. We have launched a replacement, the SSA Gold Digger II. It will head with a crew to the asteroid belt to resume mining operations.*

*RT Martin Jr., scheduling manager*

The replacement for the now crushed *SSA Gold Digger* is orbiting the Moon and ready for its next trip to mind for gold in the asteroid belt. But several of the crew who have been waiting for their jobs to return have decided to resign and look for work back on Earth. So the Snider essay is beginning to have the impact that Skye Steel wants.

Steel is talking on that end-to-end encrypted radio phone device with the the mission’s boss.

Steel says, “We’ve got our first bit of success. Several deckhands on a gold mining solarship have backed off taking any more mining trips. They’re afraid of the dark energy.”

The boss says, “Good. The committee wasn’t sure you were the right person for the job. But now I think my recommendation for you was the best one.”

Steel adds, “We were lucky that this professor came up to Lunar Village. If I had penned the essay it might not have had the impact it’s had.”

The boss says, “Let me give you a heads up. The rest of the committee decided to send someone else up to the Moon to keep an eye on you. I wouldn’t worry about that. That’s just the way they think. We’re going to do some things here to help your mission. One is that no one from our country will be allowed to travel to the Moon without getting a visa. I’m in charge of giving visas. There’s no need for the visas except that they create a sense of importance and maybe danger.”

The call ends. One of the hotel managers uses an expensive receiver to scan radio waves here on the Moon for the fun of it. There are people who do this since a signal named GPMJ1839-10 was received that may have come from 15,000 light years away from Earth. And so the manager could hear the phone call but could not understand what was being said. The end-to-end encryption made the conversation sound like random static. The secrecy is not perfect because the companies that manufacture the end-to-end encryption phones can decipher the data if they wanted. So the only sure way to have perfect protection is to build your own end-to-end phone.

Savannah Rolland, a manager of the shuttle service to Lunar Village is talking with the boss down at Rocket City on radio phone.

The boss is saying, "Did you just say, "Move over?"

Savannah says, "Oh no. I was talking with Tangerine who's sprawled out on the bed."

"Who's Tangerine?" asks the boss.

Savannah says, "Tangerine's a cat. Actually Tangerine is a robotic cat who sometimes strolls near my rooms. I invite Tangerien in when I'm here. Tangerine meows and sometimes stares at Earth through the real-time video window in my suite."

The boss says, "Oh. What I wanted to say is that the powers-that-be down here are giving some thought to extending our shuttle service to Mars."

"That would be great," says Savannah, "I think that a more convenient shuttle service to Mars will increase the tourism there."

"You may be right. That's been the rule down here on Earth. When public transportation reaches some outlying area people tend to build and then move there. Cars, trains, and buses often do the trick down here. But where you are public transportation has to be solarships and air taxis."

Savannah adds, "Speaking of air taxis I've just made a friend, Grace Yeager who pilots one of the air taxis here on the Moon."

The boss says, "That name sounds familiar."

Savannah says, "Grace's family goes back to Chuck Yeager who was the first pilot to exceed the speed of sound in level flight in 1947.

The boss asks, "So what's this Grace Yeager like?"

"A good air taxi flyer and a great sense of humor. If we run solarships to Mars you may want to recruit and develop Grace for your fliers pool between lunar orbit and Mars orbit."



## The call ends

## Chapter 7

- An asteroid A201r in the Asteroid Belt between Mars and Jupiter had its orbit around the Sun altered
- Professor Snider seeks out agent because of the essay the agent had published on existential threat
- They exchange a series of spaceMail.coms
- Something about the hostile nation on Earth
- Knife ID number provides some information about its history
- Paparazzi are on the Moon; photo of First-Half at casino
- The scare envelopes with a dark energy essay and angry owners of the ship
- Steel makes encrypted call home for a conference; hotel manager hears call but can't understand it
- Savannah discussion about Mars and tourism, cat introduced, Grace Yeager introduced
- 

## \*Operations at spaceport

## \*Events at Lunar Village

## \*Secret agent story

Convinces powers that be that existential threat is underway  
How? Where? When? With whom? Why?

## \*Meteor-story

Will it cause problems or not?  
Where and when will it hit and with what effect

## \*Existential Threat story

How will it be used to sell everyone on existential threat?

## \*New Form of electromagnetic radiation

Dark radiation  
Dark matter  
Dark energy

## \*Murder case

Will it be solved and when?  
Who will solve it and when?  
How will it be solved?  
What repercussions will come about when solved?

## \*Fired professor case

Rehired?  
Goes off on a saga to convince people existential threat is real

## \*Savannah's story contributions to saving the day

Manages shuttle service; Manages public relations, Wants company to

## \*Noah Sebastian's story

Contributions to saving the day, job handling problems

## \*Hermit's story contribution to saving the day

## \*Reporter Madison Cairns

Contributions to saving the day, getting story

- Protagonist begins searching for the officers on the ship that's been sent to Jupiter
- Villains say deckhand died drunken brawl where both were at fault
- Protagonist goes to Earth to seek out fired professor who explains dark matter

•College classroom lecture (new professor). Absolute gravimeters provide such measurements by determining the gravitational acceleration of a test mass in vacuum. A test mass is allowed to fall freely inside a vacuum chamber and its position is measured with a laser interferometer and timed with an atomic clock. The likely shape of dark matter is a flattened sphere or a flat washer used to hold a screw flatly in place. Could there be halo of dark matter around the ship? There may already be dark matter here cemented into things, But would additional dark matter cause problems?

# Characters

Ship owner <b>Lucas Miller</b> Agencies: mining ship Acts: Purposes: Scenes:	Owner <b>Amelia Miller</b> Agencies: mining ship Acts: Purposes: Scenes:	Ship owners' son <b>Elijah</b> Agencies: Acts: general antagonist Purposes: Scenes:	Mgr <b>Charles Martin</b> Agencies: mng solarship Acts: orders to pilots Purposes: success Scenes:
Mgr <b>David Moreau</b> HiN Agencies: hotel Acts: resource control Purposes: Scenes:	Mgr <b>Emma Baker</b> Aq Tu Agencies: hotel Acts: resource control Purposes: Scenes:	Mgr <b>Merle Kumar</b> Sk Lif Agencies: hotel Acts: resource control Purposes: Scenes:	Mgr <b>Akira Tanaka</b> LuCv Agencies: hotel Acts: resource control Purposes: Scenes:
<b>Noah Sebastian</b> officer Agencies office, duties Acts: Keeping the peace Purposes: justice, safety Scenes: office, Lunar Vill	Skie Steel's <b>boss</b> Agencies: Skie Steel Acts: orders Purposes: greed Scenes: island nation	Editor <b>Lunar View</b> Agencies: entertain news Acts: topics Purposes: success Scenes: Lunar Village	Billionaire <b>First-Half</b> Agencies: billions Acts: thrill seeking Purposes: fun Scenes: Lunar Village
<b>Pirates</b> Agencies: ships, weapons Acts: plunder Purposes: greed Scenes: Solar System	<b>Bartenders</b> Agencies: drinks Acts: prepare, talk Purposes: busines success Scenes: lunar pubs	Taxi pilot <b>Grace Yeager</b> Agencies: ship controls Acts: trips Purposes: success Scenes: lunar "airspace"	<b>The Last Word</b> news Agencies: news facts Acts: issues out Purposes: truths Scenes: Earth, Moon
<b>Professors Snider, Silver</b> Agencies: knowledge Acts: teaching Purposes: truth learning Scenes: classrooms	<b>Leah Smyth</b> Agencies: deed, respect Acts: Purposes: Scenes:	The <b>hostile nation</b> on Earth Agencies: weapons,agents Acts: sabotagepropaganda Purposes: ascendance Scenes: Asia	Savannah's <b>boss</b> Agencies: phone Acts: jobs for Savannah Purposes: success Scenes: Rocket City
Tangerine the cat Agencies: robot stuff Acts: staring Earth, meow Scene: Savanna's suite			

**Agent** (material, biological, psychological, social, economic, political, cultural, moral, spiritual)

**Act** (material, biological, psychological, social, economic, political, cultural, moral, spiritual)

**Scene** (material, biological, psychological, social, economic, political, cultural, moral, spiritual)

**Agency** (material, biological, psychological, social, economic, political, cultural, moral, spiritual)

**Purpose** (material, biological, psychological, social, economic, political, cultural, moral, spiritual)

Possible clues: about the knife, about the stabber, about the stabbers mentality, about the stabbers co-conspirators, about the things of value involved, about the motive

## Synopsis

A solarship has just returned to the Moon from mining gold in the asteroid belt between Mars and Jupiter. There are some suspicious things about the return. The ship's not listed on the Lunar Village spaceport arrivals and departures electronic screen. When the crew reaches the lunar surface, the ship is sent away seemingly without a crew probably to crash into gas planet Jupiter. One of the deckhands is murdered after a dispute at a Lunar Village cafe. A scare develops that the ship brought back some existential-threat substance that will destroy the Moon and maybe Earth. Three sides develop around the story, the investigators, the investigated ship owners, and the exploitive paparazzi.

What actually happened is that the ship did pass through a form of radiation space scientists don't yet know about. It's not dark matter or dark energy and it's not particularly dangerous. A hostile nation was the first to learn about this new so far invisible radiation. It then sent an undercover agent to the Moon to help create a dark matter existential-threat story to worry their more peaceful adversaries on Earth. In the panic that would result the hostile nation would gobble up many benefits at the expense of the other nations. The ship's owners worry that they will be blamed for the horrible threat and do things that make them look unnecessarily guilty.

The dead deckhand nearly discovered the agent's purpose and was murdered by the agent. A hermit on Raunt Island, NY is related to the deckhand and somehow later guesses what happened. In the end the hermit helps the investigators solve the mystery. The agent is killed trying to escape arrest, the mining company gets a new ship, the hermit gets a job, the hostile nation ends up with egg on its face, and the world gets back to normal.

Skye Steel dreams up the first of many things that will happen over the next bit of time to worry people about a bogus existential threat. Steel has written an essay using the pen-name "William T C." The essay is about a Domesday Book where people were to be judged without any possibility of appeal. William says in the essay that the first description of an existential threat to the world was the Domesday Book (today spelled doomsday). The essay has been submitted for publication to the scandal sheet *The Lunar View*.

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