

Table Of Contents

Chapter Zero Chapter One

Chapter Two

Chapter Three

Chapter Four

Chapter Five

Chapter Six

Chapter Seven

Chapter Eight

Chapter Nine

<u>Credits</u>

Endnotes

Chapter Zero

"It's the remarkable and very unusual rock that tells the best story." — Apollo 17 astronaut Harrison "Jack" Schmitt on collecting moon rocks

"The strangest and most unique things are very often connected not with the larger but with the smaller crimes, and occasionally, indeed, where there is room for doubt whether any positive crime has been committed."—Sherlock Holmes

December 13, 1972. For the coffee-breathed boys back on Earth, huddled in Mission Control with their loosened ties and day-worn collars, night had fallen hours ago. But up on the near side of the moon, the sun still burned hot against the black sky of space. With only a few hours left on the surface, two Apollo 17 astronauts, Jack Schmitt and Gene Cernan, returned to their lunar module to prepare for departure. It was just as well. After three days, their tools were shot: Their rake and scoop had fallen apart, and the back gate on their rover was dust-eaten from its hard travel through the Taurus-Littrow valley's many craters. Schmitt had named a good 50 of those giant divots. There was Sherlock, dedicated "to all who aspire to understand the worlds around us." And there was Camelot, the largest of them, so named because "the kingdom of the legendary Arthur, whether real or not, represents the seed of freedom, compassion, and achievement that exists in mankind."

Had there been a full moon that night, terrestrial observers could have located the astronauts' position just southeast of the Man in the Moon's right eye. Had those observers been ancient Romans, they might have told each other stories of how the Man in the Moon was a sheep thief, exiled from the world for his crimes. Were they Alaskan Indians, they'd talk of how this man kept safe the souls of all living things and how only great shamans had the power to float up and meet him. Had they been the pocket-protected American nuclear scientists of the 1950s, they might have considered the eye a target for their classified project to fire an atomic weapon at the moon—and thereby show the Soviet Union once and for all who ruled space⁴. To the two earthlings now kangaroo-hopping their way across the craggy lunar desert, the right eye of the Man in the Moon was a dusty, 400-mile-wide iron-rich plain known as the Sea of Serenity, carved out by an asteroid or comet that collided with the moon's surface 3.8 billion years ago, sending now rock-hard lava bubbling to the surface.

Before the astronauts left for Earth, they decided to collect a few lunar samples from around the landing site. Schmitt, the only geologist to ever reach the moon, didn't exactly know what he was looking for—humanity's experience hunting moon rocks was, after all, quite modest—but he knew what he hoped to find. By studying the degree to which radioactive elements inside moon rocks had decayed, he could determine their age. And since the rocks were formed by cataclysmic conditions like those that created the Sea of Serenity, this would give him a glimpse of what the solar system looked like billions of years ago⁵.

"OK. Here we go, Jack. Here's one here," Cernan called out, referring to a 10-centimeter-long chunk of porous gray basalt resting in the moondust.

"Let me get it," Schmitt replied, "so you won't get it too dirty." He bent down. But it wasn't an easy task to pick up a moon rock. His suit was pressurized at 3.7 pounds per square inch. Anytime he clutched an object, he had to squeeze against that pressure. He grabbed the rock. It was about three kilograms—roughly one moon pound. It's like squeezing a tennis ball, he thought.

Cernan bounced over to a camera mounted on the lunar module and pointed it at Schmitt, who was holding the rock while standing next to the American flag they'd hammered into the moon's surface a few days before. Together they began a message to Earth. "Jack has picked up a very significant rock," Cernan said, rejoining his partner in the frame. "It's a rock composed of many fragments of many sizes and many shapes, probably from all parts of the moon, perhaps billions of years old. ... We'd like to share a piece of this rock with so many of the countries throughout the world."

"Put that in the big bag, Geno," Schmitt said.

"In the big bag." Cernan dropped the rock into his Teflon pouch, thereby bestowing upon it the honorary taxonomical distinction Sample 70017. The pair loaded their gear into the lunar module for the last time. "Close the hatch," Schmitt said. And with that, the salad days of space exploration ended. The astronauts of *Apollo 17*, the last crew to ride a 300-foot-tall rocket 240,000 miles to the moon using computers less powerful than a talking greeting card, brought their moon rock back to Earth.

Chapter One

On a May afternoon in 1995, an American named Alan Rosen made the five-hour drive from central Honduras to the mountain district of Olancho. Rosen, a sun-worn, middle-aged Floridian, had for years worked as a procurer of fruits for a juice company, traveling the country in search of its pitted treasures: purple mangosteens, spiky green durians, and hairy red rambutans. And despite Olancho's unofficial motto, *Entre si quiere, salga si puede*—"Enter if you want, leave if you can"—he'd been to this violent but fruit-rich region many times. On this particular trip, however, Olancho's exotic maracujas were not his concern. Rosen had come instead to meet with a former colonel from the twice-crumbled regime of military dictator Oswaldo Enrique López Arellano. The colonel was prepared to sell Rosen something considerably more exotic: a piece of the moon.

The colonel had claimed, somewhat fantastically, to have been given the rock by President López Arellano himself, in the months following the coup d'état that deposed the dictator from power. Now the colonel was looking to unload it for the right price, and he was waiting for Rosen at the house of an associate, Jose Bayardo. Bayardo lived in Catacamas, a dirtroad city of 44,000 that had grown out of the center of Olancho without so much as a radio station until 1970.

A year earlier, Rosen and Bayardo had met over drinks to discuss the purchase of the moon rock. All Bayardo would say of the supposed exmilitary officer was that the man wanted to do business with "some Americans" and claimed to own a \$1 million piece of the moon. It sounds more like the Brooklyn Bridge, Rosen thought. He declined the offer.

It wasn't until later that year, upon returning to the U.S., that Rosen discovered two pieces of information that caused him to consider the possibility that the colonel's offer wasn't a con: The first was that, following the U.S.'s final mission to the moon in 1972, the Nixon administration had in fact sent moon rocks to 135 countries. In 1994, NASA's then lunar curator, a moon rock expert, had told the press, "NASA and the United States gave up title when the gifts were bestowed. Therefore, we don't pursue them." The second piece of information was that in December of 1993, Sotheby's had sold 227 relics from the Soviet space program. Among the items, which also included a lunar rover and the first eating utensils used in space, were three tiny specks of the moon that fetched \$442,500.

When Rosen returned to Honduras a few months later, Bayardo contacted him again and told him that the colonel would lower his price. This time Rosen was ready to listen. The colonel, Bayardo explained, was very ill and wanted to do something with the moon rock before he died.

Now, in May of 1995, Rosen arrived at Bayardo's house to find the colonel waiting inside with a black vinyl suitcase. Rosen had only seen photographs of the piece in question until, moments later, the colonel opened the case. Inside was a grayish pebble-sized stone encased in a Lucite ball and mounted to the top of a 10-by-14-inch wooden plaque. Above a miniature, glass-covered Honduran flag was a metal plate bearing the inscription:

This fragment is a portion of a rock from the Taurus Littrow Valley of the Moon. It is given as a symbol of the unity of human endeavor and carries with it the hope of the American people for a world at peace.

Together, the three men agreed upon a price of \$50,000 and drafted a contract: Rosen, with the help of Bayardo, would have 90 days to verify the authenticity of the moon rock and find a buyer in the U.S. If he failed to do so, he was to return it to the dying colonel in Olancho. On his juice-man's salary, Rosen couldn't pay the entire \$50,000 up front. He agreed to give the colonel \$10,000 in cash—a gift from his aunt—and sign over a refrigerated truck from the juice business worth another \$10,000. The men parted ways with the understanding that Rosen was to raise the remaining \$30,000 back in America. Until that time, the colonel would hold onto the moon rock, the money, and the refrigerated vehicle.

Rosen settled his juice-related affairs in Honduras and returned to the U.S. in February 1996. Over the next few months, he was able to cobble together only \$5,000 from family. Still, the sum was enough that, when Bayardo called from Honduras in April, he agreed to hand over the moon

rock once Rosen had delivered the money to an associate in Florida. Rosen picked the location for the meet, a Denny's restaurant situated in an exceptionally Denny's-rich region surrounding Miami International Airport, which boasted eight such restaurants within a two-mile radius.

In May 1996, a year after his meeting with the colonel in Catacamas, Rosen was drinking a cup of bottomless coffee, waiting for Bayardo's partner to arrive with the moon rock. Around 2 p.m., the man showed up carrying a flannel pouch. He recognized Rosen, but Rosen couldn't place him. Perhaps, Rosen thought, he was a relative of Bayardo's named Luis. Rosen was terrible with names. Their conversation lasted only 15 minutes. Once the man who might well have been called Luis Bayardo had the \$5,000 in cash, he handed Rosen the moon rock and left.

A few months later, Rosen made one last payment to the colonel, wiring \$5,000 to Bayardo from a bank in Massachusetts. He agreed to pay the balance after he'd sold the rock. But this would prove more difficult than Rosen imagined. The only serious offer he'd received was from a Swiss watchmaker who produced high-end timepieces for Omega; he wanted to buy the rock for \$500,000 and a portion of his watch sales. Rosen had heard that the moon rock the U.S. gave to Nicaragua sold for 20 times that amount to a buyer in the Middle East. He declined the Swiss offer, confident he would find a better one.

Chapter Two

On the morning of June 2, 1998, NASA special agent Joseph Gutheinz was sitting in a courthouse in Houston, waiting to testify against his most recent catch, an astronaut impersonator named Jerry Whittredge. Gutheinz, a stocky, black-bearded senior detective with a Napoleon-sized personality to match his five-foot-seven frame, normally didn't bother with the small-time gang of astronaut impostors who peddled fake autographs and made-up tales of space travel. His targets were the big fish of the space-crime world: the defrauders and embezzlers who picked NASA's loosely guarded pockets through major aerospace companies like Lockheed Martin and Rockwell International. But the 47-year-old Whittredge was in a class all his own. Using only his driver's license and a doctored résumé—on which he claimed to be a Congressional Medal of Honor and Top Gun Trophy winner, as well as a CIA regent known to the Russians as "Black Death" for his five "confirmed kills" in Central America—Whittredge had talked his way inside the mission control room at Alabama's Marshall Space Center⁶.

Gutheinz had gotten wise to Whittredge's con after a public affairs officer at Pensacola Naval Air Station reported to NASA that a man claiming to be an "Astronaut S-1"—a nonexistent classification—was trying to gain entry to the base. Gutheinz and another agent tracked Whittredge to his mobile home in Galveston, Texas, where they found him with a loaded .357 Magnum. In the trailer's cramped kitchenette, Whittredge explained to Gutheinz that he had been sent by President Bill Clinton to infiltrate NASA's astronaut program and that George Abbey, then the director of Johnson Space Center, had told him that if he built a model of the International Space Station, he would get to fly on a shuttle. "I've done it!" Whittredge then exclaimed, grabbing a glue-gobbed model from a nearby shelf and slamming it down on the table.

As far as Gutheinz was concerned, the only point of contention in this case was how a man of questionable mental health, armed with a résumé of fictional credentials—there is no such thing as a Top Gun Trophy or a CIA "regent"—got through NASA security and sat down at the command console in the agency's most secure room. Once he had a chance to testify, this would become clear to the court. But after two hours, Whittredge's attorney still hadn't shown.

Trapped in his seat behind the prosecutor, Gutheinz opened up his legal pad and began doodling. But soon his mind—and his pen—began to wander from the hapless astronaut impostor sitting in the jail box in front of him to the oldest, most widespread con in NASA's 40-year history: the trade in fake moon rocks. Ever since the U.S. first landed on the moon in 1969 and began bringing back lunar samples to study, small-time grifters had hawked ash-colored rocks to gullible middle-class Americans all too eager to believe that pieces of the moon had somehow made the journey from Neil Armstrong's space-suit pocket to their front porch⁸. The first reported sale was to a Miami housewife in 1969. She paid five dollars to a door-to-door salesman-and when her husband got home, "he almost hit the moon himself," she told a reporter. Over the next three years and five subsequent moon landings, as astronauts continued to explore, golf, and otherwise do their space-race victory dance on Earth's satellite sister, the demand for fake moon rocks boomed. The bull market lasted until the 1980s, when the Cold War turned from moon missions to mutually assured destruction and interest in the moon vanished.

But in recent years, Gutheinz had noticed lunar confidence men cropping up at auction houses and online, exploiting the low-accountability marketplace that dominated the Wild West days of the early Internet. In the mid-'90s, Gutheinz's team at the agency's Office of the Inspector General had caught a man selling bogus rocks around the world from his website—he was still awaiting trial on 24 counts of fraud. Just as moon missions were fading into history, the market for fake moon rocks was growing.

Beneath a doodle of Whittredge waiting for his attorney to arrive, Gutheinz began to sketch out a plan to shut down the bogus moon rock market. The name came to him first: OPERATION LUNAR ECLIPSE, he scribbled. From there the details worked themselves out. He would create a fake estate-sales company and pretend to be the broker for an

exceptionally wealthy client in search of a moon rock. Then he would take out an ad seeking moon rocks in a national newspaper. He'd get a dedicated phone line in his office, and when a seller called he'd set up a meet and arrive with an arrest warrant. It would take only a few guys and a minimal amount of money. For NASA's senior special agent, it was an easy sell to the higher-ups.

As the detective was finishing his outline of Operation Lunar Eclipse, the judge's impatience with Whittredge's lawyer boiled over. He demanded to know who the missing attorney was.

Whittredge stood and did an about-face toward the judge. With three words, he rendered superfluous the entirety of Gutheinz's testimony and underlined his own mental instability: "William J. Clinton."

The judge adjourned the court and ordered that Whittredge undergo a psychiatric evaluation. Gutheinz stuffed his doodle into his briefcase and headed back to the office.

Chapter Three

Gutheinz worked out of a grass-covered Cold War-era bunker known as Building 265, located on the north side of NASA's Johnson Space Center, in Houston. This sprawling, 100-building, 1,600-acre complex was home base for NASA's Apollo missions between 1961 and 1972, and it remained the central command for the space program. It sat on the bank of Clear Lake, 30 miles south of downtown Houston, a city pursuing its own alternative future of transportation with a network of tangled 16-lane freeways locals half-affectionately referred to as spaghetti bowls.

Building 265 was divided in half by a steel wall with a safe door. On one side was Gutheinz and his small team at the Office of Inspector General, or OIG. On the other side was a group of Russian researchers. Since the end of the Cold War, Russia had maintained a staff of cosmonauts and scientists at Johnson, though Gutheinz would never figure out what exactly they were doing. To him they were simply and mysteriously "the Russians." He had interacted with them on only two occasions. Once when he briefed Boris Yeltsin's economic advisers on a fraud case he had unraveled, in which one of NASA's major contractors was convicted of embezzlement and money laundering. The other time, while Gutheinz was giving a tour of the bunker to a group of U.S. attorneys, a Russian researcher pushed open the supposedly locked safe door to purchase a soda from the Coca-Cola⁹ machine on the OIG side. It was one more example of the impressive lack of security at NASA, against which the detective had long waged a quiet battle of frustration.

Behind his office's own cipher-locked steel door, Gutheinz began to flesh out Operation Lunar Eclipse. He named his fake company John's Estate Sales 10. For himself he took the name Tony Coriasso, a combination of his uncle's last name and his brother-in-law's first. To play the role of John Marta, the wealthy buyer, he enlisted the help of a U.S. Postal Service inspector named Bob Cregger.

In September 1998, the two detectives set the operation in motion, taking out a quarter-page ad in *USA Today*. Above a 1969 photograph of Buzz Aldrin walking on the moon during the Apollo 11 mission, they printed MOON ROCKS WANTED. The number accompanying the ad was connected to a bugged telephone sitting on a folding table in what the pair referred to as the Hello Room, an otherwise empty closet attached to Gutheinz's office.

On the morning of September 30, Gutheinz walked into the Hello Room and checked the phone's answering machine. There was a message left the night before by a man identifying himself as Alan Rosen. Rosen claimed to have a moon rock for sale. Gutheinz picked up the receiver. Tony Coriasso, Tony Coriasso, Tony Coriasso. John's Estate Sales, John's Estate Sales, he said to himself as he dialed the number. Rosen picked up. He told Gutheinz that all those other calls he was getting were from con men selling bogus moon rocks. But he had the real thing.

Gutheinz had heard this whole good-con-bad-con routine before. He figured he'd just play along. Soon, however, Rosen was exhibiting a command of moonrock history the detective hadn't often seen from low-level lunar hucksters. Rosen told Gutheinz that during the Apollo program, NASA had brought back 842 pounds of lunar material. In 1973, months after the conclusion of NASA's final moon mission, the Nixon administration cut up one particular moon rock, known as Sample 70017, into 1.5-ish-gram moon fragments, called goodwill moon rocks, that it gifted to countries around the world, as well as all 50 U.S. states. Accompanying each rock was a letter that read, "If people of many nations can act together to accomplish humanity's dream of peace here on Earth." Now, Rosen told the detective, he had gotten ahold of a goodwill rock, and he was looking to sell.

Rosen expressed surprise to see an ad in the paper looking for moon rocks—these deals were usually done in dark alleys, he explained. Indeed, besides those that fell to the earth as meteorites, moon rocks were one of three NASA artifacts, along with debris from the Apollo 1 and *Challenger*

explosions, that it was outright illegal to sell. Rosen wanted \$5 million for his rock. He cited the rumored sale of Nicaragua's moon rock 11, along with a collection of pre-Columbian artifacts, to a buyer in the Middle East for as much as \$10 million. And he claimed to have a certificate of authenticity: He'd brought his rock to Harvard University, where a reluctant geologist confirmed that it was in fact lunar material.

Gutheinz visited a website on which Rosen had posted photos and information about his alleged moon rock. There it was: a Lucite-ball-encased, ash-colored stone mounted to a plaque with the flag of an indeterminate Central or South American country. Rosen had covered up the seal in the center of the flag, and without that distinction the detective couldn't distinguish between the flags of Argentina, Nicaragua, El Salvador, and Honduras. Gutheinz leaned back in his chair. If this was a fake, it was a savvy con for a man who answers *USA Today* ads looking for black-market goods. He began to wonder, Is it possible that, for the first time, we're investigating a real stolen moon rock?

Two weeks later, Cregger, posing as John Marta, contacted Rosen to purchase the rock. Cregger asked Rosen how he got ahold of a moon rock that had been given to a foreign country. Rosen told Cregger he had purchased the rock from a retired colonel in Central America.

"You brought it back?" Cregger asked.

"Yeah, yeah, I've got it here. And how I got it here and all the rest is unimportant."

Rosen assured Cregger that he had left no paper trail in bringing the rock into the States. Pretending to be reassured, Cregger agreed to a location for a meet: Tuna's, a small restaurant and margarita bar off West Dixie highway in North Miami Beach. Cregger and Gutheinz packed a suitcase of windbreakers, vacation shirts, and anything else that might befit two wealthy men in their forties flying to Miami to buy a black-market moon rock for \$5 million.

Chapter Four

On October 20, 1998, the two undercover detectives arrived at Tuna's. Rosen wasn't scheduled to show for 45 minutes, but Gutheinz needed to make sure they found a table outside. He was wearing a wire beneath his windbreaker and didn't want anything to interfere with its transmission to the pair of customs agents listening in from a car parked a block away. The detectives had roped customs into the sting after realizing that if Rosen *did* in fact have an authentic goodwill moon rock, it might actually not be legal for the U.S. to seize it as stolen property. After all, the U.S. had gifted the rock to another country three decades earlier. It wasn't clear that an American court would have any direct authority to take it back. Their best hope was to get Rosen to admit that the foreign-bought rock hadn't been declared when it was brought into the country. If this were the case, it would be considered smuggled property, subject to seizure by U.S. Customs.

The two detectives sat down at a table on the palm-tree-flanked patio at Tuna's and waited in their civilian disguises for the mark to arrive. Gutheinz had his Glock 9mm stuffed inside his pants. Cregger kept his gun in a fanny pack. Gutheinz was used to the sticky tropical heat, having worked on Cape Canaveral at NASA's Kennedy Space Center before moving to Houston. But this was South Florida in October. He ordered a Diet Coke. And another. And another. Then Rosen and his partner showed up.

Once Rosen settled in, he joked to Gutheinz and Cregger that he half expected a bunch of Central American soldiers in green military fatigues to rush around the corner with AK-47 assault rifles and demand the moon rock. Everyone laughed. A moment later there was a loud crash, and the four men jumped from their seats. Rosen panicked, and Gutheinz moved toward his gun—nearly blowing their cover—before they realized the source of the commotion: a waiter had taken a sharp turn coming around the corner of the restaurant and dropped his tray. Everyone was relieved. The men took their seats to discuss the rock.

The two agents grilled Rosen on whether there was any record of the rock entering the U.S. He insisted there was "no continuity" between when the rock was given to the Latin American country and now. They pressed the issue: What about when it came through customs? Again Rosen assured the buyers that no record existed. He was getting uneasy. What were all these questions about customs? Why would this fanny-packwearing space collector care about whether or not the moon rock was mentioned on that little declaration card flight attendants pass out at the end of international flights? Something wasn't right. Rosen declined to let Gutheinz see the rock. He told the two men he was suspicious that they might be undercover detectives. He showed them photographs of the rock but said he wouldn't furnish the real thing until he confirmed their identities and saw proof that they had the \$5 million.

This latter request was particularly unfortunate. Gutheinz knew that woefully cash-strapped NASA would decline to loan him the money. But he also knew that Rosen was one whiff of double-talk away from backing out of the sale. So the detective assured Rosen he would get the cash. The four men shook hands. Gutheinz paid his check for the Cokes and the parties parted ways. He and Cregger headed back to their hotel.

Short of NASA, the obvious place to turn for the money was Cregger's agency, the U.S. Postal Inspection Service. It was considerably more liquid than NASA and had already agreed to foot the bill for the USA Today ad. But the agency declined, no doubt seeing a \$5 million sting operation to recover an allegedly real moon rock as incongruous with its stated mission to "ensure public trust in the mail."

Then Gutheinz remembered watching a news story with his father decades earlier about how two employees of the Texas-based Electronic Data Systems corporation were detained during the Iranian revolution. EDS specialized in large-scale data processing and management for clients like Rolls-Royce, Kraft, and the U.S. military. In the late 1970s, the company was contracted by Iran to set up the country's social security system. When the Shah was overthrown in 1979, the EDS employees were taken captive. The CEO of the company had hired a retired U.S. Special Forces officer and

called the CEO "the Patriot" for this act and continued to do so for the rest of his life. Gutheinz, now desperate for money for his own rescue operation, decided to approach the Patriot for help. It was the sort of long shot that could only seem reasonable to a man who spent his career hunting fake astronauts and door-to-door moon rock salesmen.

Gutheinz looked up Electronic Data Systems in a telephone directory

personally funded a rescue operation. Gutheinz's father, a lifetime Marine,

for Plano, Texas, and asked to speak with the CEO. He navigated the \$13 billion company's phone tree until he reached the Patriot's personal secretary, who informed him that the Patriot was busy. Gutheinz left a message and hung up.

Half an hour later his telephone rang. It was H. Ross Perot 12.

Gutheinz described Operation Lunar Eclipse to the EDS CEO, Texas billionaire, and 1992 presidential candidate. If there was any wealthy private citizen who could appreciate not spending government dollars on a moon rock recovery operation, it was Ross Perot, whose campaign ads once argued that "the enemy is not the red flag of communism but the red ink of our national debt." Gutheinz knew how to sell the importance of his mission to the great chart-wielding champion of explanation.

These rocks, he explained, were not just detritus from outer space. They were relics of a singular time in world history, a temporary calm in the madness of an arms race that in the U.S. alone had produced 70,000 nuclear weapons and consumed \$5.8 trillion—enough one-dollar bills to reach the moon and back. The way Gutheinz saw it, to lose moon rocks on the black market was to lose a generation of astronauts and engineers to lesser curiosities. There were, after all, only two kinds of scientists for kids to encounter in their world of comic books and television shows: those who made bombs, and those who made spaceships. The goodwill moon rocks were perhaps the last, best argument for the latter.

Perot agreed to fund the operation, transferring \$5 million into a bank

account accessible by Gutheinz. But Rosen was still nervous. He phoned Gutheinz in a frenzy in the middle of the night and demanded the phone numbers of five of Tony Coriasso's clients. Gutheinz gave him the home numbers of agents back at NASA's OIG in Houston. The agents knew enough about the operation that when Rosen called them, they were able to convince him that they were happy customers of Coriasso. Satisfied that his under-the-table buyers were aboveboard, Rosen agreed to sell the rock, which he said was being stored in the vault of a bank in Miami. His only condition was that Gutheinz not be involved in the transaction. He wanted to deal only with a third party—which Gutheinz was welcome to choose. It was difficult to see what protection this afforded Rosen, but Gutheinz went along with it anyway and enlisted a customs agent to handle the exchange.

On the morning of November 18, Gutheinz's team obtained a seizure warrant from a Miami judge and headed to the bank. Gutheinz and Cregger,

now back in their familiar detective-grade suits and ties, waited in a nearby open-air garage while the undercover customs agent greeted Rosen and led him inside. After a few minutes, the detectives made their way over to the bank's parking lot and perched on the trunk of Rosen's car. Meanwhile, inside the bank, Rosen removed the Lucite-encased moon rock from his safe-deposit box and presented it to the customs agent. The wooden plaque, he explained, was waiting in his trunk. With the rock in hand, the agent put an end to the three-month operation. He served Rosen with the warrant and escorted him outside, where Gutheinz and Cregger waited. Gutheinz eyed Rosen and thought, *The guy almost looks relieved*—like a schoolkid finally receiving the bad report card he'd long been dreading.

Chapter Five

Ultimately, the rock would appear in Miami, where a judge would decide whether or not Rosen had any legal claim to it. But first Gutheinz needed to determine if he had in fact recovered an actual piece of the moon, or if his fake estate-sales company had nabbed just another fake rock. With the protection afforded by his Glock, Gutheinz flew the rock back to Houston to be examined by NASA.

At the agency, there was one man in charge of confirming the authenticity of moon rocks—Gary Lofgren, the lunar curator. Lofgren was a tall, bespectacled geologist who worked in the Lunar Lab, a few hundred feet from Gutheinz's bunker. His office was long and narrow, filled with the sort of professorial clutter that made it appear to belong to an academic, not a government worker. He'd studied lunar samples long enough that he could usually tell whether a rock was real just by looking at a reasonably high-quality photograph of it.

To make an official ruling, though, he used several techniques. If the rock in question was thought to be a lunar meteorite—a piece of the moon chipped off by a stray asteroid and sent 240,000 miles to Earth—it would contain oxidized iron. Because there is no gaseous oxygen on the moon, the iron in lunar material does not oxidize. If Lofgren were to find oxidized iron in the center of a rock, then he could conclude with near certainty that it didn't come from the moon.

In the case of the rock recovered in Operation Lunar Eclipse, however, Lofgren could check its authenticity using a much simpler method. Rocks found on a planet's surface form from hardened lava flows and are composed of relatively few minerals. Variation in the size and prevalence of each of these minerals determine the characteristics of a given rock. On Earth, the spread of potential rock types is large; but on the moon there is little variability. In other words, to a trained geological eye like Lofgren's, all moon rocks—particularly those from the same region of the moon—look alike. Since NASA kept some of the rock from which the goodwill gifts were cut, Sample 70017, Lofgren had only to compare its mineral composition with Gutheinz's specimen. He placed it underneath a high-powered microscope, and on December 2, he made his ruling:

It is my considered opinion that the above mentioned "presumed lunar sample" is in fact one of the Apollo samples distributed by President Nixon to Heads of State of several countries between 1973 and 1976. The current commercial value of the item, including the plaque, can be based only on its collector value, and therefore, in my opinion, the asking price of 5 million dollars would be reasonable.

The news that the black-market moon rock was genuine weighed heavily on Gutheinz. He had grown up during the space race, and later, at NASA, he had gotten to know many of the scientists and engineers who worked on the Apollo project, which had helped a dozen men set foot on the moon. These are people who cared, he thought, people who had an imagination bigger than most.

Throughout the 1960s, the Gutheinz family had watched the moon missions unfold on the *CBS Evening News* with Walter Cronkite. Since the day John F. Kennedy had declared his candidacy for president, he'd been a hero in the Gutheinz house. In 1960, Gutheinz's mother, a five-foot-eleven-inch Irish-Catholic Marine turned bar bouncer, enlisted her son to help her campaign door-to-door in the neighborhood. The 5-year-old happily accepted, captivated by the presidential hopeful's charm as he preached the importance of bolstering the U.S. space program—once even telling an audience it was embarrassing that the first dogs to make the trip to space and back "were named Strelka and Belka, not Rover or Fido, or even Checkers."

In 1962, from the living room of their Long Island home, the Gutheinzes watched President Kennedy announce that his administration would triple NASA's funding, build the Johnson Space Center, and put a man on the moon before the end of the decade, "not because it is easy but because it is hard." The moon was many things in Kennedy's 15-minute speech. What Gutheinz's mother and father no doubt heard coming through their television that September day were the practical realities of a strategic

military mission that would cause space expenditures to increase "from 40 cents per person per week to more than 50 cents" in order to make sure that outer space was "a sea of peace" and not "a new terrifying theater of war." But even at age 7, Gutheinz was a dreamer. He lit up when he heard Kennedy speak of the moon as an "unknown celestial body," the journey to which would be "the most hazardous and dangerous and greatest adventure on which man has ever embarked."

In truth, Kennedy on more than one occasion privately stated that he was "not that interested in space." The idea of going to the moon first became a serious consideration in the days following the botched Bay of Pigs invasion 13. Reeling from his loss to the Cubans, Kennedy told Vice President Lyndon B. Johnson to find a goal in the space race that the U.S. could most likely achieve before the Russians. Johnson—who years earlier, as the senate majority leader, had told Congress that "the position of total control over Earth lies in outer space"—reported back to Kennedy that putting a man on the moon held the most promise.

putting a man on the moon held the most promise.

Once the U.S. beat the Soviets to the moon, in 1969, the White House's interest in the Apollo program waned. President Nixon slashed NASA's budget to free up money to win the increasingly unwinnable Vietnam War. By 1972, when *Apollo 17* completed its journey to the moon and back, the U.S. had demonstrated its dominance over the Soviet Union in space. Both militarily and scientifically, the space race was over. Nixon canceled the remaining three Apollo missions. Without the Cold War and the international battle against communism, the U.S. would undoubtedly not have made it to the moon by 1969—if ever. As Nixon wrote in a letter he sent out with the goodwill moon rocks, "In the deepest sense, our exploration of the moon was truly an international effort."

Chapter Six

In February 2001, a fleet of customs agents waited on the tarmac at Miami International Airport for the arrival of the Honduran goodwill moon rock. When it arrived from Houston, armed men clad in raid jackets escorted the rock off the plane. It was due to stand trial in the case that was to be officially catalogued by the Southern District of Florida as *United States of America v. One Lucite Ball Containing Lunar Material (One Moon Rock) and One Ten Inch by Fourteen Inch Wooden* Plaque. Technically speaking, President George W. Bush was suing Honduras's moon rock.

The crux of the U.S. attorney's case rested on whether or not Rosen had legally purchased the rock from the colonel back in 1995. Rosen claimed to have received a receipt of sale. Unfortunately, he said, he kept it at a friend's house on Lake Yojoa, in the Comayagua Valley of eastern Honduras. And in the fall of 1998, the region was hit by the 180-mile-perhour winds of a Category 5 hurricane, which left thousands dead and thousands more missing. What had survived of the documents—or Bayardo and the colonel—Rosen didn't know.

On August 15, when Rosen gave his deposition, the U.S. attorney focused instead on whether the colonel had any legal standing to sell the moon rock in the first place.

"What, if anything, did you do to satisfy yourself that he had legal possession of it?" the prosecutor asked Rosen.

"Well, he owned it. ... He was given it by the dictator for—I don't know, for whatever reason."

The military dictator Oswaldo Enrique López Arellano had ruled Honduras since he forcibly took power in 1963—save for a brief spell in 1971, when he allowed for a popular election to occur, lost, and took back his rule in a violent coup d'état a few months later. In 1973, the U.S. ambassador, regardless of whether López Arellano deserved America's goodwill, presented him with the goodwill moon rock, which López Arellano stored in the presidential palace in Tegucigalpa. A little over a year later, in 1975, López Arellano was ousted in a bribery scandal connected to the suicide of the president of an American banana-importing company. The incident became known as Bananagate 14. The colonel had told Rosen that shortly after Bananagate, López Arellano gave him the rock. "He had it in his possession for 20 years," Rosen told the court. "So that sort of said to me that he owned it."

The court enlisted a professor of law at the University of Miami to determine whether López Arellano did in fact legally give the moon rock to the colonel. The professor searched for any official documentation of the moon rock in Honduras and reviewed Honduran news reports that he found on "the Net." Eight months later, he gave his testimony. "I frankly don't know when the rock disappeared," he said 15.

Eventually, the professor determined that, regardless of when the colonel got ahold of the rock, he never possessed it legally. It was public property of the people of Honduras. In order for López Arellano to give it to the colonel without breaking the law, the gift would have had to have been approved by the Honduran government. No record of that approval existed.

That summer, while Rosen waited for his case to go before a judge, he made an appearance on CNN to argue his side. The question at hand was how much the rock was worth. To the court, it didn't matter what exactly that value was, but it was a happenstance of U.S. law that for the government to seize property, that property must have some value. And so the prosecutor priced the treasure at \$5 million. This number was based on Lofgren's valuation of the rock, which in turn was based on Rosen's asking price, which he arbitrarily conceived and now disagreed with.

To debate him, CNN brought in a space-memorabilia collector named Robert Pearlman. Pearlman was a stocky, articulate man who spoke with the authority that seems to adhere to the self-appointed caretakers of history's minor treasures. He worked as the public relations director at a space-tourism company in Virginia, where he lived among his fascinations: an ever growing collection of capsule models, reentry thrusters, space-suit accessories, and other artifacts from NASA's Mercury, Gemini, Apollo, and Columbia missions. Since 1999, Pearlman had

catalogued and displayed his artifacts on his website, CollectSpace.com. It's one of the world's largest private collections of space memorabilia, and it had made him a de facto authority.

The anchor asked Pearlman how much Rosen's 1.14-gram chunk of the moon might be worth. "It's really hard to say," Pearlman explained, "because an actual moon rock brought back from the Apollo astronauts is not something that sold before on the U.S. market. I would say it's not a far stretch to say that at a really public auction like Christie's or Sotheby's that it could reach upward of \$1 million or \$2 million."

"Well," Rosen responded. "I was offering this rock at \$5 million. And in the year after, I was convinced that, because of the publicity and somewhat notoriety of it, that the value could be well up into the tens or \$15 million." His intention, Rosen said, had been "not just to make a profit." He'd planned to finance "low-interest loans for agriculture and artisans and mini businesses" back in Honduras.

On March 3, 2003, the United States' suit against Honduras' moon rock finally went before a judge. It took him three weeks to make his ruling. Ultimately, Rosen was unable to convince him that the colonel had obtained the rock from López Arellano in accordance with Honduran law. And since the colonel had illegally sold property of the Honduran people to Rosen, the U.S. had the right to seize it. No criminal charges were filed against him, but Rosen was stripped of his rock.

At a ceremony the following September, NASA's administrator and a Mir space-station astronaut gave the rock back to the Hondurans. "Thank you for returning this material that is so valuable to the world," the president of Honduras commented.

Chapter Seven

Shortly after Operation Lunar Eclipse concluded, the grass-covered Building 265 where Joseph Gutheinz worked began to show signs of age. Mold infested the walls of the structure, and the Russian side began flooding on rainy nights. With the Cold War over for a decade, NASA decided to renovate the building. The OIG team and the Russians were relocated, and the earth was torn off the roof of the bunker. The entire building was gutted. Gutheinz didn't stick around much longer. He had grown exhausted from the long, strange hours he kept as an OIG detective. He wanted to spend more time with his wife and six kids, two of whom had received their law degrees and returned to Houston after tours of duty in the Army. Within a year of Operation Lunar Eclipse, the detective put in for retirement.

Leaving NASA was hard for the lifelong puzzle solver. "I think he could be a modern-day Sherlock Holmes," Gutheinz's sister said. Before joining NASA, he had planned on practicing law and still had a JD to fall back on. So he hung out his shingle, and then, in 2010, opened a law firm with his two attorney sons. They set up shop eight miles west of the space center in Friendswood, a town of flaking East Texas barns and palm-tree-lined boulevards.

Gutheinz covered the walls of his law office with awards from his days at NASA and news clippings from his favorite cases, or at least those he most enjoyed recounting to visitors: the astronaut-impersonator bust, the investigation of the Mir space station—during which he discovered that the Russians were billing NASA for million-dollar homes in Star City, Russia 16—and, of course, Operation Lunar Eclipse. In the corner, Gutheinz hung a photograph of himself presenting Ross Perot with a plaque for his work as the Patriot. With it was a then rare photo showing Gutheinz without a beard. Having heard that the Patriot didn't like facial hair, he'd shaved it as a sign of respect. He'd kept his mustache, though—he was not a man without scruples.

Even though he'd left the official world of space investigation, ostensibly ending his pursuit of moon rocks for good, Gutheinz couldn't seem to let the chase go. The Honduras case had brought to light how many pieces of the moon might have slipped onto the black market. In fact, NASA hadn't kept any record of the rocks after 1973. For him, what he'd told Perot years before remained true: Those little chunks of moon tucked into bouncy-ball-sized shells weren't idle treasures from a forgotten time on a distant world, and the hunt for them didn't end just because he'd left the agency.

So after he finished his legal work for the day, Gutheinz began staying up into the night working on his latest passion: an online class for police-detective hopefuls at the University of Phoenix. The initial goal had been to teach the ins and outs of investigating. But before long the newly minted professor was recruiting his students to hunt moon rocks. Eventually, 5,000-word end-of-semester papers on criminal justice became 2,500-word papers "where we had to track down moon rocks," as one student explained. "Mr. Gutheinz was crazy about his moon rocks."

Meanwhile, in April of 2003, Gutheinz reached out to Robert Pearlman, the space collector who ran CollectSpace and debated Rosen on CNN. Two months earlier, the shuttle *Columbia* had disintegrated while returning to Earth from its 28th mission. In the aftermath of the disaster, reports began to surface that local law-enforcement officers were looting pieces of the wreckage—now the fourth space artifact it was illegal to own. A Texas constable was accused of stealing *Columbia* debris, and Gutheinz wanted to cover the trial for CollectSpace. Pearlman happily agreed. He knew of Gutheinz from the Honduras case. And since his publicity during that trial, traffic to the site had exploded 18. For the next couple of weeks, Gutheinz went to the Texas courthouse to watch the trial unfold. In the end, the jury found the constable not guilty. It was "David defeating Goliath," he wrote. "The government had everything in this case, [including] superb special agents from NASA Office of Inspector General."

After the trial, Gutheinz and Pearlman stayed in touch. Aside from posting space news on his website, Pearlman maintained a list of all the

countries that had received goodwill rocks from the Nixon administration. In addition, he had discovered that after Apollo 11, the first moon landing back in 1969, Nixon had sent out around 200 lunar samples 19. He began tracking those as well. Soon, museum curators worldwide were reviewing the list and contacting him with the whereabouts of their rocks. Pearlman even received an email from the Vatican with a photo attached of a church official holding its goodwill moon rock. By October of 2004, when Pearlman relocated to Houston to be closer to Johnson Space Center 10, he and Gutheinz had teamed up to track down the missing lunar samples. Pearlman could feed Gutheinz information from the collector world. In turn, he and his students would do the legwork.

To be sure, the two thought very differently about the goodwill rocks. Pearlman was skeptical that there was much of a black market—if anything it was a gray market—and thought that most of the rocks were just misplaced, not traded by small-time thieves in South America and the Middle East. And he didn't like that Gutheinz told the press that the rocks were worth \$5 million²¹. He thought it only made their job more difficult²². The price tag that seemed to validate the detective's obsession only served to frustrate the collector.

The investigations were simple enough: Gutheinz gave his class Pearlman's list of unaccounted-for rocks, both in the U.S. and abroad. Each student picked one to track down. The detective always gave the same piece of advice: "Start at the state archives." The students waded through automated phone lines and filled-to-capacity voicemail boxes of government institutions that never quite had the budget to digitize their records. At the end of the semester, each student had to either publish a newspaper editorial about his rock or write a report on the investigation. Students in classes with names like Organizational Administration and Crime in America soon found themselves calling museums and state offices in search of long-lost pieces of the moon. "It was a surprise. I wasn't looking to do this assignment at all," said a former student. "It didn't have anything to do with the class²³." Another said, "I didn't even know what a moon rock was when I started."

In 2003, one of Gutheinz's classes went looking for Canada's goodwill moon rock. Back in 1973, when the Nixon administration was mailing out pieces of Sample 70017, it had mistakenly sent one to a 13year-old kid who had lied about his age to become the United Nations' Apollo 17 Youth Ambassador for Canada. And like any kid worth his elbow scrapes, he kept his quarry. Some months later, Canada got it back. But what happened from there is less clear. When the students inquired about the rock in 2003, the country said it had been stolen in 1978. Thinking he might have another Honduras moon rock on his hands, Gutheinz assigned the investigation to his next class, only to find that, fortunately—or perhaps unfortunately—Canada was mistaken in thinking its rock was stolen. It had merely been forgotten for decades, sitting in a storage facility maintained by Canada's natural-science museum. It seemed that Gutheinz, along with that 13-year-old kid back in 1973, were the only people who cared much for Canada's piece of the moon. It took the detective another six years to finally get Canada to take its rock out of storage for the 40th anniversary of Neil Armstrong's giant leap.

Meanwhile, his students slowly pieced together the fate of Sample 70017. In Romania, after the communist president and his wife were executed by firing squad in 1989, the country's goodwill rock ended up on the auction block at their estate sale. In Spain, the grandson of the dictator Francisco Franco told a newspaper that his mother had once possessed the country's "moon stone" but had lost it. Malta's moon rock was stolen from a museum and never recovered. In Ireland, the land of magic stones, the goodwill moon rock was lost in a museum fire.

These were the rocks Gutheinz dreamed of chasing. But from faraway Friendswood, without the resources of NASA, they might as well have been back in space, crusting the eye of the Man in the Moon²⁵. For years he focused mainly on the U.S., tracking moon rocks back to the dusty storage units and retired file cabinets of states that usually just forgot to care. During that time, he wrote articles about space in *Earth* magazine, with titles like "Settling the Moon: A Home Away From Home" and "Fix the Hubble

Telescope: Mankind's Spyglass on the Universe." In Canada's *National Post*, he wrote an editorial scolding U.S. Customs agents for allowing a man to enter the country despite the fact that he showed up at the border in Maine with a bloody chainsaw and sword, claiming to be a Marine assassin with 700 fresh kills. Gutheinz compared the negligence to that of NASA in the Jerry Whittredge case: "The U.S. government blew it and acknowledges their mistakes. U.S. Customs should make a similar admission." When he wasn't writing himself, Gutheinz would talk to any reporter who would listen, especially about moon rocks, hoping to catch a break on his next big case. And in late 2009, his telephone rang.

Chapter Eight

On the other end of Gutheinz's line was an Associated Press reporter named Toby Sterling. Earlier in the year, Sterling had reported that a Dutch museum's Apollo 11 moon rock, which they'd insured for a half-million dollars, was just petrified wood—"It's a nondescript, pretty much worthless stone," one geologist commented. The find had prompted Sterling to launch his own investigation of the goodwill rocks, with nine other AP reporters. They phoned embassies and visited archives and museums, checking to see which nations still had their rocks. Sterling had found Gutheinz in one of the many²⁶ articles in which the detective was quoted about moon rocks and thought he might be interested in what one of his reporters found.

An AP journalist who happened to be on the island nation of Cyprus had recently visited the battle-weary Mediterranean country's National Museum to inquire about its rock²⁷. But the bewildered staff told the reporter that they had never even heard of a Cyprus goodwill moon rock. Presumably, the Nixon administration had sent the country one—even the Soviet Union got a moon rock—so Sterling tracked down the 1973 and 1974 communiqués from the U.S. embassy in Cyprus to see if there was any mention of where the rock had ended up. What he found instead was a peculiar string of telegrams:

18 JUL 1973

PRESENTATION OF MOON ROCK IN CYPRUS PRESENTS SOME UNUSUAL PROBLEMS CONCERNING REPRESENTATION OF TURKISH COMMUNITY AT ANY CEREMONY. ... WE HAVE TWICE RAISED TOPIC WITH FOREIGN MINISTER, WHO PROMISES US AN EARLY REPLY.

23 APR 1974

WE DO NOT THINK WE SHOULD CONTINUE TO TRY TO THRUST UPON CYPRIOTS SOMETHING WHICH THEY ARE NOT INTERESTED IN RECEIVING. ... IN TORTURED POLITICS OF THIS LITTLE ISLAND, GOVT COULD WELL PREFER NOT TO BE ASSOCIATED WITH FACT THAT IT WAS CYPRIOT FLAG WHICH APOLLO 17 DELIVERED TO THE MOON. FLYING OF CYPRIOT FLAG HERE IS LIMITED ALMOST EXCLUSIVELY TO POLICE STATIONS, AND DISPLAY BY OTHERS IS REGARDED AS SYMBOL OF LACK OF ENTHUSIASM FOR ENOSIS (UNION WITH GREECE).

30 APR 1974

WE WILL HOLD FOR PRESENTATION BY [U.S. AMBASSADOR] DAVIES NEXT SUMMER.

In fact, Gutheinz knew the Cyprus rock well. It had been one of the first he assigned to his students back in 2002. But the investigation had gone nowhere. It had proven to be a case too fraught with history for students to solve by phone from thousands of miles away: In Cyprus, civil unrest was as old as religion. And the county had for centuries been divided between the Christian Greeks in the northern section of the island and the Turkish Muslims in the south. A year after Nixon sent the Apollo rock to the island in 1973, the U.S.-backed Greek junta made a coup attempt that prompted the Turkish army to invade the north. The president of Cyprus, who was supposed to receive the moon rock, was ousted. To make matters worse, violence erupted at the American embassy in Nicosia. In August 1974, the U.S. ambassador was assassinated and the embassy was evacuated. Rioters burned the presidential palace—where Gutheinz and his students suspected the rock would have been displayed—to the ground. There the trail of the Cyprus moon rock had gone cold.

Now Sterling's embassy telegrams suggested that the ambassador was assassinated before he had a chance to turn the rock over to Cyprus. In late 2009, the detective sent Pearlman an email informing him of Sterling's discovery. If Cyprus never got its moon rock, Gutheinz asked, then who did? His partner's reply stunned the detective: Pearlman was surprised the Cyprus rock was still "missing," he wrote Gutheinz. He had known exactly where it was for years.

In 2003, Pearlman had received an email from a memorabilia dealer claiming that the Cyprus moon rock had surfaced. The dealer told Pearlman

that a man, claiming to be the son of a U.S. diplomat who had been stationed in Cyprus in the 1970s, had contacted him looking for a broker to move the rock. The man explained that when the ambassador was assassinated and the embassy was evacuated in 1974, his father took possession of the rock but never returned it to the embassy or presented it to Cyprus. After his father died in 1996, the ambassador's son found it in a storage locker in Virginia. At first he had assumed it was some sort of award his father had received for being a Foreign Service Officer. But when he'd seen the case of Rosen's Honduran rock in the news, he'd realized what he had. He also knew—based on Rosen's widely public reasoning on CNN and elsewhere during the trial phase on the order of millions was not considered unreasonable. On the now wide spectrum of unimaginable moon rock prices, his was a modest \$1 million to \$2 million.

Pearlman informed NASA's OIG about the seller in August 2003, furnishing the name, location, and contact information. From there he assumed they'd pursued it. Preoccupied with the loss of the *Columbia* shuttle, he let it go. Now, six years later, Gutheinz was telling him that the whereabouts of the rock were still a mystery.

The detective, meanwhile, couldn't believe what he was hearing: *This* was a two-week job! They had a witness! They had the email! Had he gotten that kind of tip when he was at NASA, he would have organized another Operation Lunar Eclipse to recover the rock³⁰.

Instead, he did what he could from the outside: In early September 2009, the detective requested a congressional investigation into the missing rock. He contacted a newspaper in Cyprus, *The Cyprus Mail*, and relayed that NASA had known where the rock was for seven years and hadn't pursued it. On September 18, a *Cyprus Mail* reporter named Lucy Millett contacted Gutheinz. Millett was in a particularly good position to investigate the story, since her father was the former British ambassador to Cyprus at the time the rock was supposed to have been presented 31. In the weeks that followed, Millett worked with the detective—a "media blitz," he called it—to publish five stories demanding that NASA investigate the theft and return the rock to Cyprus, with headlines like "Cyprus a Victim of Lunar Larceny" and "Cyprus Should Claim Rightfully Owned Moon Rock."

Washington, D.C., attorney representing the Cyprus seller, who apparently had been unable or unwilling to find a buyer for the rock. After five months of negotiation with the U.S. attorney, on April 16, 2010, the seller handed over the rock to NASA in exchange for immunity from prosecution. The rock was turned over to Lofgren, the lunar curator, who confirmed that it was indeed another piece of Sample 70017. The agency issued no press release and held no press conference. Unlike the case of the Honduran moon rock, there was no mention of the Cyprus rock in the American media—only an obligatory note in the 2010 semiannual report from NASA's OIG:

The bad press paid off. A month later, NASA was contacted by a

During this reporting period, OIG investigators recovered a moon rock plaque that had been missing since the 1970s. The plaque had been intended for delivery by a U.S. diplomat to the people of Cyprus as a gift when hostilities broke out in that country. The plaque had remained in the custody of the diplomat until his death and was recovered from his son.

A year after the 2010 report, the rock was still in a vault at NASA, and Gutheinz was fuming that the U.S. government hadn't returned it to Cyprus. It had given Honduras its moon rock, why not Cyprus? For Gutheinz, the real crime was that the rock never made it back to its rightful home $\frac{32}{2}$.

Chapter Nine

Houston was once a company town. Johnson Space Center employed 3,000 people in the city, the fourth largest in the U.S., and Houstonians were proud of the space program, particularly the moon landings. In the lobby of Terminal B at Bush Intercontinental, travelers are greeted by a larger-than-life sculpture of a cow in a space suit planting the Lone Star State's flag on the moon, with a plaque that reads: "This masterpiece represents the merging of the arts with aeronautics, and depicts Houston's spirit of mingling creativity with opportunity."

"Houston was the first word in space!" pointed out the woman at the car-rental desk when I arrived in the fall of 2011. She added that she'd collected the badges from all the different space missions. Astronauts used to come through the airport all the time, she continued, but not so much since the shuttle program ended $\frac{33}{2}$.

Out in his Friendswood law office, the man I'd come to see still considered himself a "company man." He was sitting at his polishedhardwood desk, on which he kept four small moon rocks cut from lunar meteorites. "I miss it," he said of his days at NASA, leaning back in his chair and taking a sip of a Diet Coke34. But the time when Russians were "the Russians" had passed, and now, Gutheinz told me, he often found himself at odds with the agency he once knew. Even when it managed to pull off a decent moon rock sting, he tended to find it lacking. The previous spring, NASA had received a tip that a 74-year-old woman in Riverside County, California, was claiming to have a moon rock for sale. It was the same old story: a lunar peddler trying to sell a piece of the moon to someone she was already vaguely suspicious was an undercover cop35. And NASA's investigation began much like it might have in Gutheinz's day. An agent telephoned the seller to purchase the rock, the two set up a meet, and the second known moon rock exchange to take place at a Denny's restaurant was under way.

But on the day of the meet, when the four-foot-eleven-inch senior citizen furnished the stone to the undercover agent, a half-dozen bulletproof-vested NASA special agents and Riverside County sheriffs stormed the diner and forcibly removed the elderly woman—bruising her left arm and terrifying her sufficiently to cause her to lose control of her bladder. Gutheinz found himself outraged by law enforcement's conduct. "I believe you treat people with respect," he told me. To Gutheinz, this little old lady was hardly a criminal. For one thing, Lofgren confirmed her moon rock was real; but it wasn't a stolen goodwill rock. According to Gutheinz, NASA workers who were cleaning suits and tools after an Apollo mission likely pocketed it.

Sherlock Holmes had his bees in Sussex to keep him busy when he left Baker Street; Gutheinz had his moon rocks. He had expanded his operation from the University of Phoenix to a local community college, where, since 2004, he had taught criminal justice in classrooms with infrared cameras and armed guards. He didn't have the money or manpower he'd had at NASA, but finally he had adequate security. In his law office, a table pushed up against the far wall held a stack of homemade books he created to chronicle his lunar investigations 36. At home he had a hope chest full of these books, containing newspaper clippings and emails from his old NASA cases. "I don't have a pristine memory," he said. "It helps me remember things."

Lately, he'd been wrapped up in what could prove to be one of his strangest cases yet. In 2010, one of Gutheinz's online students, an autoworker in Michigan, had tried to track down a moon rock given to Alaska after Apollo 11. When she called up the state museum and told the curator what she was looking for, he was interested enough to help. He discovered that, in 1969, the state transportation museum had indeed been charged with taking care of the rock. It placed the stone in a small glass case and put it on display. But four years later there was a fire at the museum, making the state of Alaska the fourth known party to have the building intended to house a moon rock destroyed. No one knew what had happened to the plaque after that.

To make matters worse, the student could find no paper trail beyond a government-run exhibit in early 1971 at the Chugach Gem and Mineral

Society, a local potluck-throwing club for "individuals and families interested in mineral collecting and lapidary." After a semester of fruitless searching, she published her assigned editorial in an Anchorage newspaper, asking for information. "With help from the good citizens of Alaska," she wrote, "I am confident we will be successful."

After the article came out, Alaska's museum curator received a request from a lawyer in Seattle for all of Alaska's records about the 1973 transportation-museum fire. The curator was suspicious, given the timing of the request and the scant conceivable reasons that a lawyer from Seattle might be interested in a three-decades-old fire at a transportation museum way up in noncontiguous Alaska. "He didn't say anything about moon rocks ... it was kind of strange," the curator told a local reporter at the time. "We had no idea what they were getting at."

In December 2010, he got his answer. The lawyer served the state of Alaska with a complaint from his client, a fishing-boat captain who demanded to be recognized as the legal owner of the rock, which he claimed to have rescued from the museum fire in 1973. The moon rock was being kept in an undisclosed location in Asia. The client, a man named Coleman Anderson, also happened to be the captain of the king crab boat *Western Viking*, featured on the first season of the popular reality-TV show *Deadliest Catch*.

Anderson stated that a few days after the fire in 1973, as a 17-year-old kid in Anchorage, he was exploring the rubble when he came across the Apollo 11 moon rock plaque, covered in a melted material. At this point, garbage crews were just shoveling away the debris. He thought the moon rock looked "cool"—"a neat souvenir"—so he decided he'd save it from extinction. He took it home, "in full view of the garbage-removal workers," his lawyer would state, and scrubbed the moon rock clean with toothpaste. Without him and his toothbrush, he claimed, this piece of the moon would have wound up in some snow-covered Alaskan landfill. And anyway, this was 1973: "The plaque was considered not to have any real monetary value because it was assumed moon trips would become a near everyday occurrence."

If Alaska wouldn't let him keep the rock, he expected to be compensated for it. He didn't specify an exact amount. That would be "proven at trial"—a trial where it is almost certain that Anderson will bring up Rosen's \$5 million price tag for the Honduras moon rock, as well as Lofgren's confirmation of that price and Gutheinz's ongoing reaffirmation of it in the media $\frac{37}{2}$.

At the time I met Gutheinz, neither he nor his student were buying Anderson's story. "It's fishy," said the student. After Anderson's lawyer filed his information request with the museum, the curator had unearthed a file revealing that after the 1973 fire, two employees had seen the rock still in its glass display case. It wasn't until a few days later that another worker noticed that the case was empty, with a square marking the dust around the spot the plaque had sat.

At the time, the employee assumed the museum's then curator, a man named Phil Redden, had taken the rock home for safekeeping. But Redden denied it, so the investigation was filed in the museum's inactive drawer. It might have been understandable that there was no mention of Redden in Anderson's statement to the court. Redden died in 1998 and a year after the fire had moved to South Dakota to take up a humble life of antiques restoration, square dancing, and card playing. By all accounts, his life had little to do with the moon rock in question—save for the last paragraph of his obituary: "Mr. Redden is survived by his ... foster son, Coleman Anderson."

Gutheinz's student believed there could be some sort of scheme behind the claim. It was, to her and the detective, an unlikely coincidence that Anderson just happened to be the son of the same museum curator that an employee had once suspected of taking the rock. But, as in the case of Rosen and Honduras, it was now up to the court to decide. Gutheinz told me he was sure the state would get its rock back.

In the meantime, there was other work to do. Things moved more slowly around Friendswood than they had at NASA, but they moved forward nonetheless. A few months earlier, he had published an editorial in the

Cyprus Mail titled "Houston, We Have a Problem," continuing his crusade to force NASA to return that nation's rock. At the moment, he was helping New Jersey's attorney general launch an investigation to find the state's piece of Sample 7001738. He hoped to do the same in New York. All told, the Nixon and Ford administrations passed out 377 moon rocks between the Apollo 11 and 17 missions. In the past 14 years, Gutheinz had personally helped track down 77 of them; 160 were still missing39. The 56-year-old detective took another sip of his Diet Coke. He was looking exhausted, and it was time for me to go. As I got up, he stopped me with a wave of his hand. "Grab one of those little moon rocks on my desk," he said. "It's yours. You can have it40."

Credits

The Case of the Missing Moon Rocks, by Joe Kloc, is Issue No. 12 of The Atavist, published in February 2012.

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We welcome feedback at letters@atavist.net.

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Endnotes

1. Celestial Time

NASA used Greenwich Mean Time to record the Apollo missions, meaning that while it was 11:40 p.m. in Houston on December 13, 1972, it was already December 14 on the moon.

Back »

2. Good Night Moon

It would be three more weeks before night fell completely on the near side of the moon.

Back »

3. The Moon's Craters

Schmitt often turned to literature for his crater names. He dubbed one crater Shorty, "recognizing Richard Brautigran's collection of short stories, *Trout Fishing in America*, and other books which bring the literature of youth and life from the foundations of Salinger into the present." During Schmitt and Cernan's second day on the moon, they visited Shorty and discovered a deposit of orange soil. Cernan later said this about the discovery: "Quite frankly, when Jack said he saw orange soil, I began to wonder if he hadn't been on the moon too long. Until I saw it myself."

Back »

4. Nuking the Moon

This remarkably bizarre government project—to detonate a nuclear weapon on the moon—bore the mundane title "A Study of Lunar Research Flights." The once classified report was unearthed by a Carl Sagan biographer who discovered that Sagan, as a young scientist, was involved in the project. The idea was eventually discarded in favor of the Apollo missions.

Back »

5. The Moon's Secrets

"The moon can tell us things we would never have learned here on Earth," Schmitt told me. "On Earth, rocks have been changed and altered, and they have gone through many cycles of metamorphism by being taken down to the deep earth and brought back up. The oceans and the movement of continents are a major part of that. Almost anything older than about 3.8 billion years on Earth has been changed. Their [radioactive] clocks have been reset. On the moon those clocks are still ticking away."

Back »

6. Infiltration

In a local newscast, as Gutheinz recalls it, the agency even served Whittredge drinks as he spoke to astronauts on a shuttle flight.

Back »

7. Idle Drawings

Among those who study doodles, it is thought that small, boxy patterns betray a person who is extroverted, practical, and meticulous. If this is true, the detective's doodle might well have started out this way.

Back »

8. Holding the Moon

"An astronaut gave it to me" is a common line used by moon rock peddlers. When questioned about this by a special agent at NASA, Neil Armstrong said, "I have never even had any such material in my possession subsequent to leaving the lunar surface, with the exception of the

Ambassador of Exploration Award, which resides in the Cincinnati Museum Center and which, I must confess, was legally 'in my possession' for about one half hour in front of a sizable audience."

Back »

9. Communist Coke

In 1950, there was considerable foreign resistance to the spread of Coke products around the world. In France, many considered it not only a matter of public health to resist Coke but one of national pride, as the soft drink was seen as a powerful tool of Americanization. One American journal editor argued for Coke as a repellant of socialism: "You can't spread the doctrines of Marx among people who drink Coca-Cola," he wrote. "The dark principles of revolution and a rising proletariat may be expounded over a bottle of vodka on a scarred table, or even a bottle of brandy; but it is utterly fantastic to imagine two men stepping up to a soda fountain and ordering a couple of Cokes in which to toast the downfall of their capitalist oppressors."

Back »

10. The Cover

The company was named after an uncle of Ronald Marta, a recently deceased auditor with whom Gutheinz had unraveled a massive fraud case a few years back. Gutheinz hadn't wanted any direct, searchable connection between the fake name and himself.

Back »

11. Nicaragua's Sale

There is no direct evidence that this sale ever took place. It does, however, seem to be the first widely circulated rumor of a goodwill moon rock on the black market.

Back »

12. The Patriot

In 1992, as Perot was ramping up his campaign for president, *New York* magazine noted that he had "cornered the market on patriotism."

Back »

13. The Bay of Pigs

After 1,400 CIA-trained Cuban exiles landed on a Cuban beach in the middle of the night and failed to incite a revolution, the Soviet-backed leader Fidel Castro declared victory against the United States. For Kennedy, the attempt was the great public debacle of his presidency.

Back »

14. Bananagate

López Arellano's regime was accused of taking \$2.5 million in bribes from United Fruit Company in exchange for lowering the export tax on bananas. The chairman of United Brands, Eli Black, jumped to his death from the 44th floor of the Pan Am Building in New York City.

Back »

15. Honduran Mystery

The professor suspected, however, that the gift was never made. In fact, a research assistant in his office who had grown up in Honduras remembered seeing a moon rock at the presidential palace in 1988. On top of that, the professor found a Honduran newspaper clipping in which former security officers at the palace claimed that the rock disappeared in the early 1990s, not long before the colonel got in touch with Rosen. The trouble was, the U.S. had also given Honduras a moon rock after the Apollo 11 mission.

Since no one could remember any details about the rock they saw in the

palace, it was impossible to know with certainty which Apollo mission it came from.

Back »

16. The Russian Housing Scam

In the 1990s the U.S. invested more than \$2 billion in a partnership between NASA and the Russian space program. Much of the money ended up in the pockets of high-ranking Russian officials. In the mid-'90s, journalist James Oberg reported that he'd asked a Russian officer how the man could afford his expensive home: "'Trust me,' he replied, speaking very carefully," Oberg wrote. "'It is dangerous for you to write about this subject. You know about the Russian mafia? It is dangerous for you to write about these houses.' He then walked off." Oberg summed up the U.S.-Russian partnership this way: "The Russians have a pungent proverb that describes this arrangement. It's like pissing in your boot to warm your toes on a cold day. After the first brief flush of warmth and comfort, you realize you're

Back »

17. Teaching Moon Rock Hunting

worse off than before. And it stinks."

According to this student, when her class was first assigned moon rocks to hunt, "nobody was all that enthused about the project. You could tell they didn't really care." Her mind changed when she tracked down Arizona's rock, which had been missing for 35 years. "I really stirred them up!" she said. A few weeks later, on her own time, she found Alabama's rock. Now she's hunting the rock given to Kansas.

Back »

18. CollectSpace

Today, CollectSpace gets 275,000 visitors a month; include the site's syndicated content to MSNBC, CBS, Yahoo News, Space.com, and Fox News and that number jumps to 4.5 million.

Back »

19. Apollo 11 Samples

Unlike with the Apollo 17 goodwill rocks, there is no comprehensive list of the countries that the Nixon administration gave Apollo 11 samples. Pearlman estimates that there were about 250 samples, but the exact number is unknown.

Back »

20. Pearlman's Rock

NASA eventually gave Pearlman a chance to hold a moon rock (with a pair of tongs) in its Lunar Receiving Lab. "It's amazing. I've been in the space field for 20 years and enamored with space since I was 6, and yet it was all I could do to contain my enthusiasm," he said. "There is a magic that comes over it." Pearlman now owns a small fragment of a lunar meteorite.

Back »

21. Valuations

Since the Honduras trial and Gutheinz's subsequent interviews with the press, this somewhat arbitrarily conceived \$5 million price tag has been cited in nearly every news article about moon rocks. As Pearlman put it to me, "The \$5 million today is from Joe declaring \$5 million." But perhaps the best measure of the degree to which the price has been universally accepted is a commendation given by the governor of West Virginia to one of Gutheinz's students for recovering its rock. "As Governor, I am happy to recognize your major role in recovering the West Virginia goodwill moon rock," it read. "This is a truly wonderful and exciting find for the Mountain State. Through the discovery of this treasure you have secured \$5,000,000 for the State of West Virginia."

22. Black Market Dispute

"We disagree on the moon rocks that are still missing," Pearlman told me. "I think most of them are sitting exactly where they are supposed to be. We just haven't found them. [Gutheinz] feels that a large majority are on the black market. I dispute this idea that there is a mass black market for moon rocks. I know in the art world there are people content with owning very highend pieces of art and never letting anyone see them because they're stolen. That doesn't really happen unless there is some evil genius out there sitting in a room full of moon rocks. With space artifacts, people tend to collect this material to show. They want to show off." Pearlman cites, by way of example, Hawaii's moon rock. The state thought it was missing only to discover that it was in a locked drawer in the governor's office.

Back »

23. Student Investigation

This student later added, "I really changed my tune as the investigation progressed," calling the hunt "intoxicating."

Back »

24. Catching the Bug

This student ended up tracking Colorado's Apollo 17 moon rock to the office of former governor John Vanderhoof. He now has what he calls the "moon rock bug" and is looking for Panama's rock.

Back »

25. The Distance of the Moon

From Italo Calvino's "The Distance of the Moon": "At one time the moon was very close to the Earth. ... Then the tides gradually pushed her far away: the tides that the moon herself causes."

Back »

26. In the News

Gutheinz has been mentioned in more than 180 news stories since 1998 (based on the number of articles archived by LexisNexis that contain his name).

Back »

27. Cherishing the Moon

Many Cypriots, it seems, were interested in the moon rocks. As one reporter who was in Cyprus during the first moon landing wrote: "A man stopped me, grabbed me by the shoulder, and vigorously shook my hand. Others picked up on the gesture and did the same. ... Since I was an American and Armstrong and Aldrin weren't handy, they were giving me full credit."

Back »

28. President Clinton's Apology

In 1999, in an effort to foster better Greek-Turkish relations on Cyprus, President Bill Clinton apologized for America's backing of the Greek junta during the Cold War: "When the junta took over in 1967 here, the United States allowed its interests in prosecuting the Cold War to prevail over its interests—I should say its obligation—to support democracy, which was, after all, the cause for which we fought the Cold War. It is important that we acknowledge that." In 2011, an archivist found the Arkansas goodwill moon rock among Clinton's belongings from his days as governor of the state.

Back »

29. Pricing the Rocks

Gutheinz's repeated mention of the \$5 million figure in the press almost certainly influenced the Cyprus seller as well. When Rosen was pricing his rock in the 1990s, he had only a Sotheby's auction and a rumored moon rock sale in the Middle East to go on. By the time the Cyprus seller was pricing his rock, there were more than 100 news stories in which

Gutheinz talked about the Honduran rock.

Back »

30. The Informant

I asked Guthienz how certain he was that NASA saw Pearlman's email in 2003. "I am basing my stance on Pearlman's statement to me," he said. "I know that NASA OIG frequently drops cases it is not interested in or, conversely, will cut off the informant if they believe he or she has nothing further to add."

Back »

31. Cyprus Origins

reason the U.S. embassy never handed it over had to do with the sovereign flag. The Greek Cypriots felt that the Americans weren't supporting their bid to become part of mainland Greece by putting the official Cypriot flag on the plaque. And so they decided not to give Cyprus the plaque until they settled the dispute. In the meantime there was a coup. The president who should have received the moon rock was ousted and later died. Which was followed by the Turks from the Turkish mainland invading the island to protect the Turkish Cypriots from the Greek Cypriots. The ambassador was killed, the embassy was evacuated, and everything was going a bit crazy."

Millett told me an anonymous diplomatic source informed her that "the

32. NASA's Reluctance

Pearlman speculates that NASA's hesitation to return the rock derives from its fear that the artifact would slip onto the black market. "We have created this story line and put a price tag on it and made it such that these moon rocks have an allure to them," he told me.

Back »

Back »

33. NASA Tales

This woman had countless stories about NASA. Three years ago, she told me, a box marked for NASA arrived at the Budget counter with a padlock on it. When a man came to pick it up, she asked him what was in it, and he told her it was a toilet from the International Space Station. "It costs \$1 million, I think. It has to suck all the time, or else it just floats up!"

Back »

34. Diet Coke

"I wouldn't be caught dead drinking a regular Coke," he said. Back »

35. Virgin Stone

he told one agent.

watching, she couldn't put the moon rock on the open market. When the agent asked where the rock came from, the woman said that Neil Armstrong gave it to her late husband, who, until his death a week after the *Challenger* explosion in 1986, "was very instrumental in all the space programs." The agent offered her \$80,000. She was "actually insulted" and wouldn't go for less than \$1.5 million, depending on her tax liability. She said the rocks had sold for millions and claimed to be in touch with space entrepreneur and Virgin media mogul Richard Branson. For all the agents

knew, the woman really believed Armstrong gave the rock to her husband, though the astronaut later denied the claim—"It looks like a paperweight,"

She told the undercover agent that, because "Big Brother" was

36. Holmes's Life

From the Sherlock Holmes story "His Last Bow":

"But you have retired, Holmes," said Watson. "We heard of you as living the life of a hermit among your bees and your books on a small farm." "Exactly, Watson. Here is the fruit of my leisured ease, the magnum opus of my latter years, *The Practical Handbook of Bee Culture*."

Back »

37. Anderson's Gambit

If Anderson is awarded the rock or the \$5 million by the court, it will be the first verifiable sale of a moon rock for that price. "Once a \$5 million moon rock sells," Pearlman says, "I'm sure all the missing moon rocks are gonna come out of the woodwork."

Back »

38. The Original

A large portion of Sample 70017 is now displayed at the Virginia Air and Space Center museum.

Back »

39. Missing Moon

The total number of missing moon rocks around the globe is much higher if you consider the 26,000 samples NASA has out on loan. In late 2011, a NASA report revealed that 517 of the loaned samples, or about 2 percent, are missing.

Back »

40. From the Heavens

My moon rock was found in the Sahara desert in 2005. According to the card accompanying it, from the American Meteorite Collectors Society, it weighs 606.3 grams. Its authenticity is guaranteed.

Back »