

A Bump In The Night

"I liken SETI and CERN to cosmic Ouija Boards. We might be very surprised when some unfriendly entity answers." ~Unknown

Monday, 24 March 2025, 2:50 AM VATT Observatory, Mt Graham, Arizona.

Thirty-five-year-old Marcus Jansen rose from his chair and stretched his arms, then he took time to rotate his neck, getting as many of the kinks out as he could. He was six hours into his shift monitoring the constellation Canis Minor at the Vatican Advanced Technology Telescope on Mt Graham, Arizona.

Marcus was neither Catholic nor a believer. A true skeptic of all things spiritual, Marcus maintained an amused yet professional attitude about his employment with Ascension Astrophysics based in Tucson, Arizona, and his current assignment to VATT.

The assignment differed from the career assignment he expected when he entered college at The University of Arizona at Tucson in 2008. His vision was studying mysteries of the universe, such as quasars, pulsars, and the birth and death of stars. His current assignment was basically that of a watchdog. He was to monitor a particular patch of sky and report anything peculiar.

What constitutes peculiar? He often asked himself as he watched the sky night after night. He was thankful that the recent technological advances to the facility meant he was not jostling for a position to peer for hours through the eyepiece of a telescope. Instead, he could sit comfortably in front of a monitor showing the live feed from the telescope.

Marcus sometimes felt out of place surrounded by Vatican astronomers and astrophysicists. They were polite and easy to get

along with, yet Marcus couldn't help but wonder what they thought of the heathen in their midst. He had to admit they laughed at his expense after his initial arrival. When he first arrived, Marcus referred to the facility as the LUCIFER telescope.

L.U.C.I.F.E.R. had been an unofficial acronym for the facility in its early years. It stood for Large Binocular Telescope Near-infrared Spectroscopic Utility with Camera and Integral Field Unit for Extragalactic Research (LUCIFER). The Priest/Astronomer who was giving Marcus his initial tour of the facility quietly leaned over to Marcus and whispered, "It's V.A.T.T. now. We no longer use that other name,"

Marcus, red-faced, made a quick apology. The Priest smiled and remarked, "It's quite all right, my son."

Marcus assumed his faux pas was over and was thankful none of the other Vatican-assigned astronomers had heard him. Later that evening, when he entered the facility to start his first shift, all the Vatican staff were dressed in black cassocks, complete with collars. They all had one accessory added to their uniform. Each member wore a set of red devil's horns on their heads. Each man looked at him sternly. Marcus stopped dead in his tracks, not knowing what to say or do. As if on cue, each of the priests stuck their tongues out and started shaking their heads, saying, "Lalalalala," in a demonic fashion.

Then, the room burst into laughter. Marcus, who always appreciated a good joke, also joined in on the laughter. He had come to know and respect the men he worked with and discovered they were as dedicated to science as he was. They chided him often about the company he worked for and how Marcus' boss sometimes seemed more like a Pope than their own Pontiff.

Marcus' employer was enigmatic. Silas Fischer was born in Corning, New York, in 1950. He was the son of Ernst and Ava Fischer; his father had been a scientist in Nazi Germany during World War II. He had been brought to the United States after the war along with hundreds of other German scientists during Operation Paperclip, the program to get the best and brightest

German scientists to America before the Soviets could snatch them up.

Ernst Fischer was a novelty compared to other German aerospace engineers and scientists. His specialty was not the building of rockets or jet aircraft. His specialty was exotic glass, used in optics, such as gunsights on tanks and aircraft and periscopes on German U-Boats. His real contribution to the American Space Program, known as NASA, was realized when the original seven astronauts of Project Mercury demanded a window in their space capsule.

It was there that Ernst Fischer's genius shined. The pressure and temporal stresses on the glass would be enormous, and if the glass failed to maintain its integrity, the mission would end in disaster.

Ernst Fischer's design called for a double pane design that used aluminosilicate glass 0.23 inches thick tempered to 25,000 psi. The design filled the void between the inner and outer glass pane with liquid nitrogen. Corning Glass manufactured Fischer's design and used it throughout the history of NASA, from Project Mercury through the Space Shuttle program.

Ernst Fischer left NASA in 1965 to start his own glass technology lab. The American Military still uses his designs and discoveries to manufacture optical devices on current weapons systems, including night vision and infrared. His genuine love lay in the development of lenses for telescopes to explore the heavens. This is where his son Silas would also develop an intense love. The design of lenses for the most powerful telescopes in the world consumed Silas as a young man.

Silas' breakout moment came during the Hubble Space Telescope fiasco when defects in the system appeared within weeks of its launch in April of 1990. A flawed mirror made the images produced next to useless. The expense of retrieving the telescope via space shuttle was too time-consuming and expensive. It was also impossible to replace the mirror in orbit. It was Silas and his team of engineers that came up with an external solution, adding two more mirrors in the light path with an inverse error canceling the original aberration.

The success of the Hubble rescue made Silas and his team the go-to company for global observatories that were updating their optics. The demand for his lenses and mirrors was worldwide. Quietly, Silas became a billionaire. Not wanting to be known for his wealth, Silas stayed in the background and under the radar; very few people on Earth knew of his genius or success outside astronomy.

In 1995, Silas lost his wife and teenage son in a traffic accident. The tragedy nearly broke his spirit. His first instinct was to dive into his work. Still, this didn't relieve him of the anguish and loneliness he faced nightly in his sprawling Mediterranean-style mansion located in the foothills of the Santa Catalina Mountains overlooking Tucson. The sprawling three million dollar home had been the castle he shared with his wife and son. His queen and the young prince were gone, and the house became a luxury prison.

One evening, as Silas sat on his wife's side of the bed, he noticed her bible on the nightstand. He had instructed the staff that cared for his house to clean and dust as needed but to keep the possessions of his wife and son precisely as they had left them. The items being where they had left them when they had last touched them afforded him comfort and peace.

He smiled as he held the bible, thinking of all the times his wife would be sitting up in bed, reading glasses on her nose, the bible in one hand and a highlighter or pen in the other. The fact that she was writing in what was supposed to be a holy book always amused Silas, who had never touched a bible.

"Should you be marking in that?" Silas once asked her.

"The Lord loves a well-used bible," was her response.

Silas smiled at the memory and thumbed through his late wife's bible. He went through the pages quickly, not intending to stop. In the book's second half, he spots a passage his wife had underlined and highlighted, not noticing until he had already flipped several pages ahead. He stopped thumbing and backtracked, looking for the passage.

What could be so important to her that she would underline and highlight the passage? He wondered. Finally, he found it. ***For God so***

loved the world: He gave his one and only Son so that whoever believes in him will not perish but have eternal life. This simple passage would change Silas like it had changed so many other people in the world.

Monday, 24 March 2025, 3:00 AM VATT Observatory, Mt Graham, Arizona.

Marcus' thoughts of his employer suddenly vanished as his attention returned to his display. *What was that?* He asked himself. There had been a pulse of some kind. His digital screen had a flashing icon that alerted the user to any event that might have escaped their notice. Marcus had his display set to infrared and could have sworn his eyes had detected a flash.

He heard murmurs coming from some of the Vatican astronomers, indicating they, too, had witnessed some form of event.

"What was that, Father Dean?" he asked the Vatican astronomer closest to him.

"It was a flash of some kind," The man responded.

"Lightning?" Marcus asked as he ran the recording on his display in reverse.

"No, it wasn't lightning," Father Dean replied.

"Maybe it was something the Air Force is doing tonight?" Marcus asked, knowing they regularly saw the lights from A-10s stationed at Davis Monthan AFB, 75 miles to their southwest. There were F-16s and F-35s from Luke AFB, near Phoenix, 140 miles to their northwest.

"I set my display to infrared; what was your display on Father?" Marcus asked.

"Optical," Father Dean replied, staring at his display curiously.

Marcus continued to scroll, and then he saw the source of the flash in a single frame. It was a pulse or ray that stretched from the infinity of space to a spot west of the observatory.

"What the hell? Oh, sorry, Father," Marcus said, apologizing for his lack of decorum among the priests.

It's entirely all right, my son. What the hell is that thing?" Father Dean said as he reached for the phone at his desk.

All the men were in the astrophysics lab, not in the main observatory section of the facility where V.A.T.T. housed the telescope. Father Dean called the observatory room and requested the senior astrophysicist, Father Archer, to look at what they had caught. Another priest was evaluating the pulse to see from where it originated and where it terminated.

"The beam impacted the earth," The Priest said.

"From where did it originate?" Father Archer said as he entered the room.

The Priest charting the beam said, "It originated from the constellation Canis Minor; the star is GJ273."

"Have we had pulsars from this star before?" Father Archer asked.

"He's right, it was an impact," Marcus added to the conversation.

Father Dean, who had also pulled up information on GJ273, replied. "No, Father, we have never had a pulsar from that star and likely never will."

"Why not?" Father Archer asked.

"Because it's a red dwarf star, not a neutron star that emits pulsars," Father Dean replied.

Father Archer looked at Father Dean in confusion and asked, "Are you sure?"

The Priest charting the beam said, "Hold onto your collars, gents; the beam didn't originate from the star itself. It originated from GJ273B, a planet orbiting the star."

"Find where the pulse terminated, please, Father," Archer told the charting Priest. Then he turned to Father Dean and Marcus.

"Father Dean, Marcus, I would appreciate it if you two could get me all the information possible on GJ273 and the planet from where the pulse originated," Father Archer said.

The Priest doing the charting said, "I have it; the pulse terminated at Longitude 40.8171 North 121.4690 West, which will be in Northern California somewhere."

"Hat Creek Observatory, it's SETI. Somebody sent the signal to SETI," Marcus said.

"You have the longitude and latitude memorized for SETI?" Father Archer asked.

"I've been assigned there in the past, so I have it memorized. I have the longitude and latitude of this facility memorized, too. I find it helps to know my precise location on Earth when charting stars," Marcus replied.

"Do you know anybody at SETI?" Father Archer asked.

"I can do better than that; my best friend is there right now working on the same project I am," Marcus said.

"Can you contact him?" Father Archer asked.

"I'm on it, Father," Marcus said, grabbing his cell phone.