ROWMAN NOW

EXCERPTS AND INSIGHTS FROM THIS SEASON'S BOOKS



ROWMAN & Globe



Space Oddities: Forgotten Sturies of Mankind's Exploration of Space (Prometheus, August 2022) brings unknown, offbeat and obscure stories of space to life. Author for Cuhat also sheds light on the human aspects of space travel that have remained industry secrets – until now.

Before a human could safely fly into space, a myriad of questions had to be answered: What are the dangers of cosmic radiation? How will the body handle weightlessness? Can a human handle the forces exerted on it during launch? How can we find the answers to these questions without sacrificing human life?

The answer to the last question was simple for engineers—launch animals into space. To say that mankind's voyages into space would not be possible were it not for test flights conducted with a multitude of animals is an understatement. But these unwitting heroes of the space age—frightened and alone in a tightfitting scaled capsule—often path the ultimate price in the name of science and exploration.

The most famous animal astronaut was the Soviet Umon's dog Latka, but before Latka's fill-fated Journey, the United States had already been sending animals to the edge of space. It all becan with Project Blossom.

As the German rocket scientists that surrendered to the Americans at the end of World War II began settling into their new assignments in the deserts of Texas and New Mexico, the team was rounted with the parts from their captured V-2 rockets and began the process of reassembling them for test flights. Along with Cambridge Research Laboratories, the Air Force modified several of the rockets, increasing the body length by sixty-five inches and configuring the warhead section so that it could be used to hurl scientific instrumentation and biological specimens to the edge of space.

Early test flights of the modified V-z reckets, complete with fruit flees onboard as their mittal payload, exploded only infinites after launch. Still, Project Blossom forged ahead as engineers prepared to begin experiments using rhesus mankeys as their test subjects. Monkeys, they believed, were dottle and able to learn and perform complex tasks. And, of course, they were as close to a human antiject as they could get without actually flying a human.

The capsules that were designed for the flights

were a snog fit to say the least—a cylindrical enclosure measuring three feet long and twelve inches in diameter, just big enough to secure a nine pound monkey and cram scientific equipment around it in the nose cone. The anesthetized monkey was placed in a foam seat attached to a metal rack. A net sunt then was placed around the monkey before he was strapped in. The entire unit—monkey and

all—was shif turn the small capsole, scaled testile, and the cabin pressurfied.

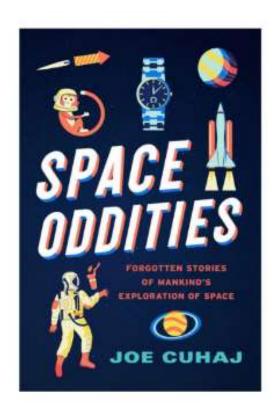
The pressurization of the capsule proved to be a thorn in engineer's side. When fully pressurized, the walls of the capsule bowed out much like a balloon. Metal reinforcements were added to prevent this. The following test revealed numerous holes in the capsule, which allowed oxygen to shoot out like geyaers. Technicians made the decision to re-weld all of the seams and, for good measure, added a healthy slathering of caulking around those welds. Consider it a high-tech doct tape fix.

While the capsules were being readied, several test subjects were training at MacDill Air Force Base in Tampa, Florida. During training, one of the monkeys escaped from his handler and was on the lain. Military police and have personnel scrambled to find the missing mookey, but be was cluster.

Three weeks after his great escape, the project manager, First Lieutenant David Simons, received a message from the Tampa Folice Department stating that they had caught a monkey and asking if it belonged to the officer. As Simons later described:

"B seemed this mankey was tired of the Aze Force losse and wandered off tota town a few miles away. It stuck its nose into a lady's kitchen one morning and began to snoop around. The lady happened to be a meticulous housekeeper, especially in the kitchen. Her concept of neatness naturally did not include having a monkey crawling around among her saurers and tracups. So, she made the mistake of trying to remove the mankey from her cupboard by farce. The monkey took exception to her attack. He started throwing teacups and saucers in her direction. She and the monkey then began running around and around her kitchen, until it became rather the worse for wear!"

The incident was settled in court with the woman winning several hundred dollars for emotional damages, broken dishes, and the Facing: Burn Aldrin on the Moon, photographed by Neil Armstrong Selma: The book's somer



"general besintreliment of her clean kitchen."

With the monkeys back in their proper place and all of the kinks in capsule design having been troned out, another V-2 was prepared for launch and, for the first time, would have a monkey as a passenger. The launch occurred on lime II, 1948. Engineers strapped a rhesus monkey named Albert into his seat, attached sensors to his body, then leaded him into the V-2. According to Sunous, Albert's capsule was so small that the munkey's head had to be "placed into a cramped, forward position with the neck acutely flexed."

After Albert was scaled in and the countdown clock started, the mission team settled in to track Albert's vital signs during the flight. Not long after, the team discovered that they were not picking up any availage from Albert's sensors. Engineers began troubleshooting the tosue and realized that there were only two possible answers either the sensors were defective or Albert had died. This late in the countdown, the engineers did not want to open the capsule and check on its passenger and

decided to press on with the launch.

On the launch pad, the V-2 emitted a shortlived puff of white smoke from its tail section. Within seconds the engine aguited, sending a pool of orange flame radiating across the ground around its base. The racket's engine burst fully to life and the black-and-white rocket shot off the launch pad, its flame entiting the desert sky like a kotfe.

At an altitude of thirty-eight and a half miles, the engine prematurely shut down. An engine valve had failed. The rocket began plunging down. Upon reaching 35,000 feet, the nose cone separated and continued its plummet toward Earth. The parachutes deployed but couldn't flare due to the than atmosphere at that altitude. By the time the name cone reached the thicker lower atmosphere and the parachutes grasped enough air to unfuri, the impact ripped the chutes apart, the nose cone carrying its tiny passenger lift the desert floor, tumbling end over end. If Albert wasn't dead at launch, he surely died on impact.

"THERE ARE SO MANY STORIES THAT DIDN'T FIT INTO THE PAGES OF SPACE ODDITIES."

Joe Cahaj grew up in New Jersey as a space fanatic. He would skip school to watch every launch and recovery from the late Merenry intestons to the final Skylab mission all while building and flying model rockets. Gahaj, a Navy veteran and former radio broadcaster, is now an author and freelance writer.

In his new project, Space Oddities: Forgotten Stories of Mankind's Exploration of Space (Prometheus, August 2022), the author demystifies ough on every element of the increasingly forgotten space race. In this exclusive interview, NOW spake to Culiaj about the human side of space travel, the possibility of Apollo 11's failure and wake-up call songs.

NOW:

Could you sum up Space Oddittes in one sentence?

Cuhat

Space Oddities tells the unknown, offbeat, and obscure stories of spacellight, bringing the human side of man's greatest adventure to life.

NOW:

At the start of Space Oddittes, you write

eloquently about your earliest memory of witnessing space travel on television. Is this a project you'd been planning – consciously or otherwise – for a long time?

Cuhat:

I guess you could say it has been in the planning stages for many years. I just didn't know it. I would read or hear many of these stories over the years and tuck them away in the back of my introl. It wasn't until I had flotshed writing another book on the history of the town and area I currently live in — Mobile, Alabama that I realized just how much I love history and writing about it.

When writing that book which became Bidden Bissery of Mobile, I found myself gravitating to obscure stories found in the city's early newspapers that have been long since forgetten. Tales about everyday life here in the Port City—the struggles and humorous anecdotes that made the city what it is. The book went from a stodgy old history book with "this happened on this date", to retelling those lost tales, the human side of city's bistory that has been lost for years.

That got me thinking about those odd and obscure space stories I had heard and my love of the space program. I told a couple of the stories to some friends in casual conversation just to see what their reaction would be, and it was what I had hoped for: "There should be a book above that!"

And now there is

NOW

You note at the start of the book that you're not 'your standard rocketry nerd', instead being drawn to the 'stories behind the story'. You seem, in your writing, more interested in the human side of the space race. Why do you think this as?

Cohat

When I was a kid, I used to love getting up at



ham and pull out my dad's portable radio that had shortwave bands on it. I would tune in to radio stations from around the world. Every station would start the broadcast with the news, but for most stations, that was sheer propagands, but after that, they would air shows focusing on the country's bistory and culture. That finchiated me – hearing first hand how people lived, their beliefs, their history from various parts of the world.

That side of life fascinates me. There are so many people who contribute to our life that go unseen, their stories untold. They all have a story to tell. We all know the headlines, but what — and who—went into making that moment?

NOW

The level of detail you profile oft-forgotten space race figures in is remarkable. How difficult did it prove to research the score of individuals you've written about? Presumably, you had to consult numerous archives and sources.

Cohat

It was remarkably easter than you might think. The NASA history department is incredible, documenting every little detail of every mission ever flown, preserving interviews with astronauts and engineers, A lot of material was pulled from video interviews preserved by NASA, C-SPAN, and the Library of Congress. I can't tell you how many times I will be watching television or flipping through our cable provider's guide on the TV and hear or see something that would grab my attention. It could be a stringle werd, a phrase, but it was always something that related to what I was writing about. I would jet it down then off I would go to research it, heading down the rabbit hole to find books (I built quite a library), videos, andos, a treasure trove of somees to build the story upon.

NOW

There are some littlarious anecdotes and stortes in the book. Do you have any favourities? Are there any that narrowly missed the cut or couldn't be included for other reasons?

Cuhat

Oh, yes. There are many more stories that just didn't fit into the pages of Space Origines. In fact, I am currently completing a 10-part podeast series to tell a few of these stories that, if I finally finish producing them, will debut. March 14th More details to come.

One that stands out deals with the handling of

the lunar samples brought back by the Apollo missions. There was a real fear that there could be organisms in the samples that could contaminate and endanger life on Earth. Special precautions and facilities were established to quarantine the astronomis and samples and protect the planet.

After Apollo 11, Buzz Aldrin and Michael Collins had assues with NASA's plan to keep the Earth safe. According to the astronauts, lunar dest would cling to everything so dusting off the moon walkers before entering the command module for the return trip home was virtually impossible so one would think that it would get into the capsule. After splashdown, when Navy SEALS opened the capsule, presumably those organisms would escape into the atmosphere.

The astronauts would then don special protective suits with respirators before hopping tuto a life raft. Before getting on board the helicopter that would transport them to the recovery slop, the SEALS would take rags and distofectant and scrub the astronauts down. The rags would then be tied to a weight and tossed into the ocean. Now the moon organisms would contaminate the ocean.



Later when scientists were examining the samples, one researcher ground up a piece of moon rock and was injecting the material into eggs. Don't ask me why. I'm a writer not a scientist. Anyway, the hypodermic needle with the material the researcher was using slipped off the egg puncturing her glove and injecting her with the material. She was the first person vaccinated with lunar dust. After quarantining, it was determined that the material had no effect on humans.

NOW:

I particularly enjoyed the sections raising serious ethical questions concerned with the space race. Where do you stand on the recruiting of German rocket scientists to lead American rocket efforts after WWII?

Cobsts

That is a complicated question, about as complicated as the man who led the scientists, Werliner von Braun. We are all grateful that his congress had substantially slashed the Apollo team launched the west's first satellite, put our first man in space, and landed us on the moon giving the U.S. unprecedented technological prestige and which resulted in many benefits through spinoffs for all of us. He also supported Cubat: the effort to desegregate NASA facilities.

eventually send a man into space but developing rockets for the NAZI's and building them with slave labor from POW camps with a blind eye. That's where it gets complicated, I can see where it was a means to the end for the rocket scientists. but at what cout? Again, a very complicated question.

NOW-

Latka, the first animal to orbit the earth, receives her due in the book. However, the chapter also covers myriad other animals who achieved aviation firsts. Why do you think Laika captured better life here on Earth, seemed to escape them. the world's imagination so much, to the degree that she's still widely remembered today?

While it was an incredible feat to send a live animal into space and orbit the Earth, I think Latka is mainly remembered today because of her Your writing is effective at humanising those who

tragic death. There was no plan by the Soviets to bring her back alive. A horrible death that could have been prevented.

John F. Kennedy's longstanding offer of a toint space venture with the USSR is very surprising to a modern reader. Do you think there was ever any realistic chance that could happen?

Cultati

I don't believe so. The Cold War was getting chillier. The Seviets believed that they were ahead in the space race and that their technology was far more advanced than the U.S. While there were some narrow agreements reached, I do not believe that an actual joint manned mission was possible in the roots.

NOW

Your book touches on an interesting point: that missions' funding even before the first moon. landing. What factors contributed to this, do you

You must remember the time we were living in, But then there is that war record. Their dream - what was happening across the country at the was to always use nockets to explore space and time civil rights battles were being waged; the war in Vietnam was raging on; poverty was ravaging the country. Those in Congress had enormous pressure on them to address these issues. As it was becoming clear that the U.S. would reach President Kennedy's goal of landing a man on the moon, even before the first landing occurred, these Earthbound nones had to be conquered and re-directing funding was the answer.

> At the same time, though, it seemed like the politicians could not see beyond the immediate. Space exploration, with its promise and hope for a To me, it almost looked like they had the attitude of, "ek, we land on the moon. That's the end of it."

> It's good to see they eventually came back around.

participated in space missions. Do you have a favourite of the individuals profiled in the book?

Cuhat

Thank you for that. There tun't any one favorite from the book overall. There are too many.

For astronauts, Wally Schirra stands out. After writing the book I had a newfound respect for him. I knew everyone called him a "jokester", but I didn't know how deep his sense of humour went until I started digging deeper. He was quite a fumy guy but when it came to a mission, he was dead sertous. In the first flight of the Apollo capuale after the Apollo I fire, he made sure that the entire flight of Apollo 7 was by the book. There would be no deviations from the flight plan even when Mission Control tried to add new items to their checklist.

Another name that comes to mind after writing Space. Oxfiltes is former NASA administrator Thomas Patne. His meeting with civil rights leader Ralph Abereathy just before the launch of Apollo 11 and his words with the reverend were heartfelt and sincere and really touched me.

NOW:

The "In the Event of Moon Desaster" document in the Nixon archives is incredibly detailed, making the thought of Apollo it's failure very palpoble. What do you think the intestoria legacy would be today had Armstrong and Aldrin died on the moon's surface?

Cuhat

The U.S. came back from the tragic Apollo 1 fire to eventually land the first men on the moon, but I don't know how you come back from something like that. I imagine that eventually, years later, we would probably regroup yet again and make a successful landing and return. We are like that tesactions, but it would take quite a while before NASA and the public could move forward.

Imagine looking up at the moon every night, knowing that two men from Earth will be there for ever more. It's a chilling vision.

NOW:

If you were an astronaut flying a mission, what would your preferred wake-up call song be, and who would perform It?

Cuhat

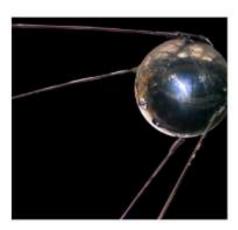
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Top to bottom:

A ruptica of Sputnik I

John F. Konnedy inspects the Mercury capacie, 1963 Romanian steep from 1959 with Laiks (the caption reads "Laiks, first travellar into comme")

Facing: Astronaut John Glunn waaring his space suit deferm the filips of Project Mercury, 1963







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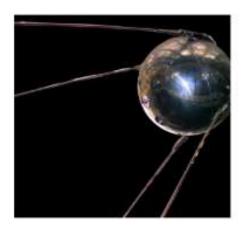
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You to better:

A replica of Spotnik 2

John F. Normedy inspects the Mercury capacie, 1962 Ramanian stamp from 1959 with Lasks (the caption rends "Lasks, first travaller into comms")

Facing Astronaut John Glunn warring his space suit Seture the flight of Project Marrary, ISEL







started in high school and still get together every few years and record a song or two just for fun. I could see my bandmates writing a special song for the occasion. They've done that in the just and surprised me. I would love that.

But thinking about a true wake-up song, it would have to be the classic Beatles' song, Penny Lane. That song always reminds me of a small town in northern New Jersey where I grew up. The main street through town had the same vibe to it as the song conveys. I had great times there growing up. Now, if you could get Paul McCartney to perform it for me...

NOW:

Where do you stand on the recent trend of billionaires launching their own space race? I'm sure there'd be more than few outlandish stories to mine for a future book...

Cultaj:

I have mixed feelings about billionaires in space. On the one hand, I see it as a publicity stunt. Jeff Bezos is sending celebrities into space to get media attention. While I think it's great that one of the Mercury 13, Wally Fink, finally had a chance to fly, "Captain Kirk" (William Shatner) finally made it to space, and the daughter of the first American astronaut Laura Shepard Churchley, followed in her father's footsteps, it's a dangerous business that has very little, if any, regulations and isn't something to play around with.

On the other hand, isn't that how the airline industry began? Once the airplane first took wing, inventors built upon the technology one step at a time. To make that happen, they needed public support. The more outlandsh a test flight was, the better chance that the media would cover it and if it was successful, the chances of gaining financial backing increased.

To get more exposure, celebrities would take a seat on these flights and the aircraft company would gain even more exposure and more backers. Milhonaires would buy seats on flights helping to ensure money was coming in to fund further research.

I guess we'll have to see how it plays out and

hope that all necessary precautions are taken to prevent a tragge accident which could set getting creftians regularly into space back years.

NOW:

if you could be involved in any space mission, which would you pick and why? What role would you want to fulfil?

Cubat

Personally, I'm not as interested in going to the moon and Mars as I am in orbiting the Earth. I have heard so many astronauta return from their first flight into space talk about the awe inspiring view of the planet far below and the realization of how fragile it really in that I would love to experience that feeling. Just look at the reaction actor William Shatner had to his short is-minute flight on the New Shepand spacecraft in 2021.

I'd be hoppy with spending some time on the international Space Station as a Journalist or writer to document life aboard the ISS from the perspective of an average person. When I was in radio, I applied for NASA's Journalist in Space program during the space shuttle years but never heard back. Maybe one day.

Space Oddities: Forgotten Stories of Mankind's Exploration of Space (Paperback, 9783933887848, 616.21) by Joe Culiaj publishes August 2023.



About: Space Shuttle Columbia in 1996