

# The First Conquerors of the Cosmos

## Animal-pioneers paved the way for manned space exploration

In the beginning little was known about living conditions in space. Was it even possible to survive in zero gravity? Animals tested the equipment and proved that the dangers of the cosmos could be overcome. Those courageous little cosmonauts cleared the way for man's greatest adventure.



### 1. INDIA

Forerunners : rocket flights with live stock

### 2. USSR

Space dogs

To the Moon and back

Monkeys

### 3. USA

Small animals : mice, rats, frogs, chickens and others

Space monkeys and apes

### 4. EUROPE

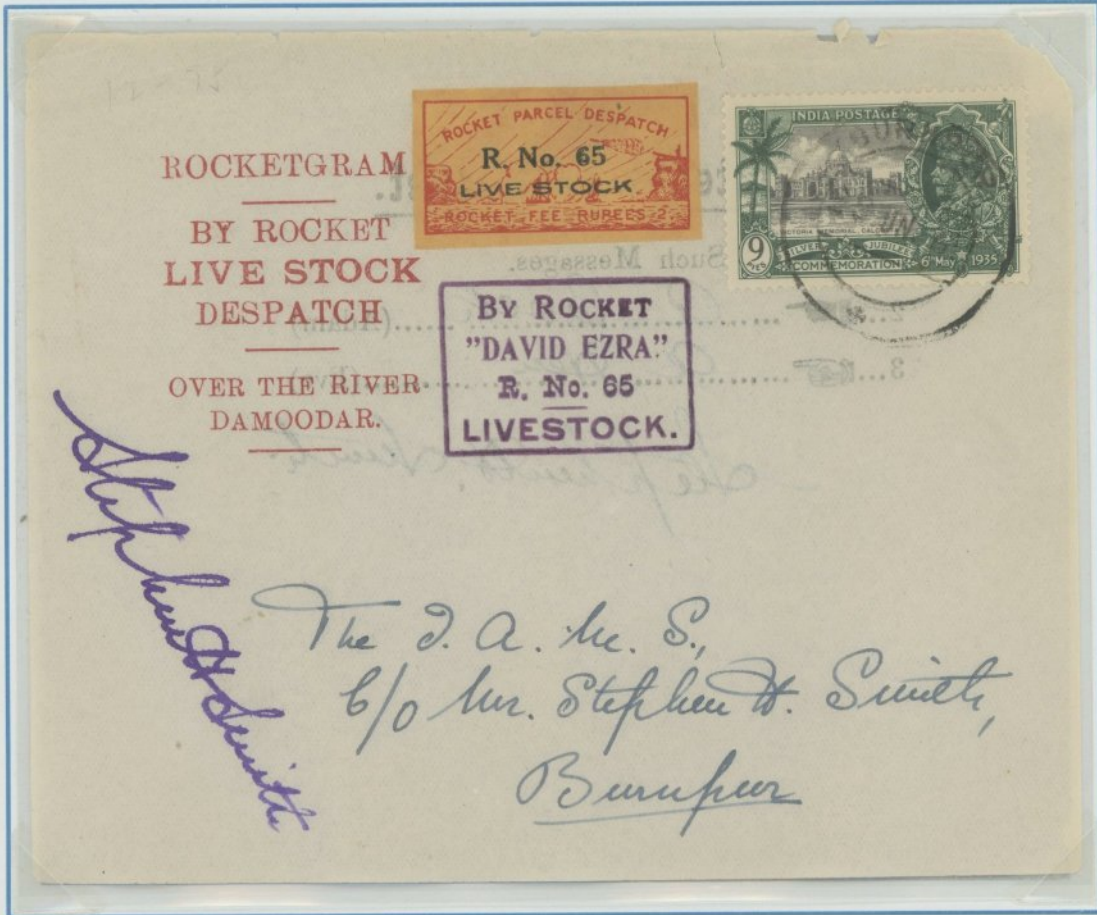
Space cat

### 5. CHINA

Space dogs, monkey, rabbit

### BIBLIOGRAPHY :

- Animals in Space (Burgess and Dubbs)
- Soviet and Russian Philatelic Items Related to Dogs in Space (James Reichman)
- The Race to the Moon (Umberto Cavallaro)
- Pionieraketenpost und kosmische Post (Walter Michael Hopferwieser)

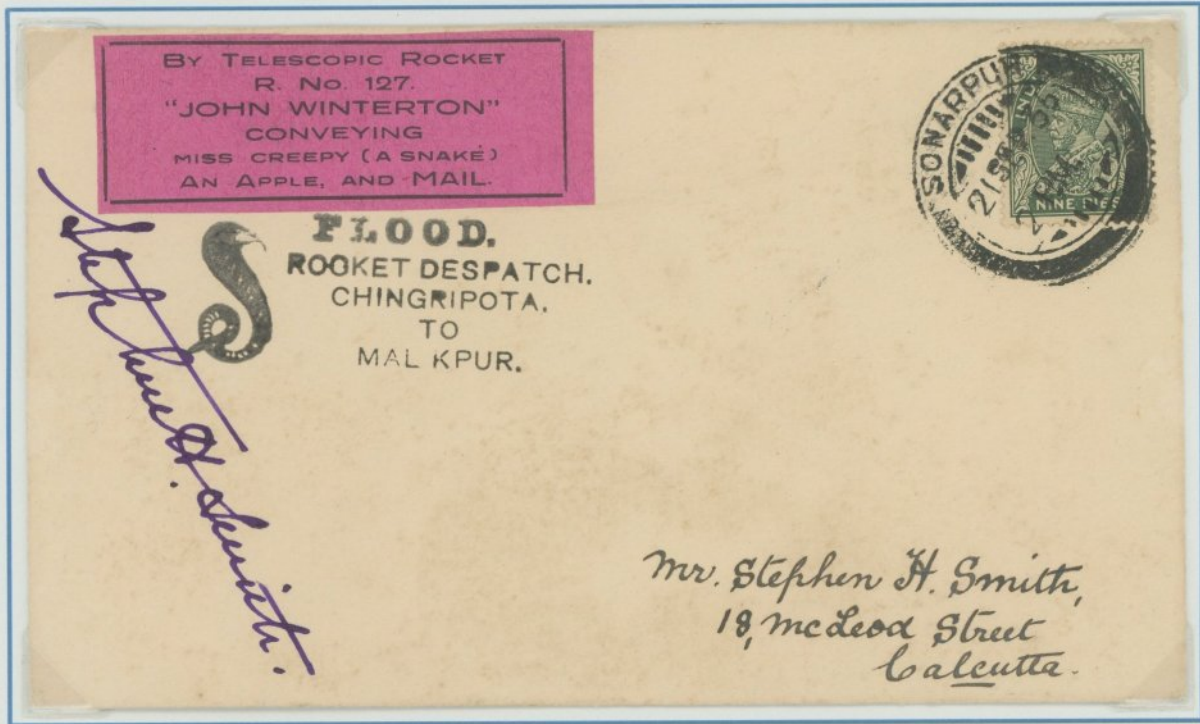


"29/6/1935 Burnpur - first rocket flight (750 m) with vertebrates: rooster Adam & hen Eve"

Stephen Smith (1891-1951) was a man of vision who conducted experiments to understand and promote the potential of rocket power as a means of transport. He proved that living beings could be transported by rockets.

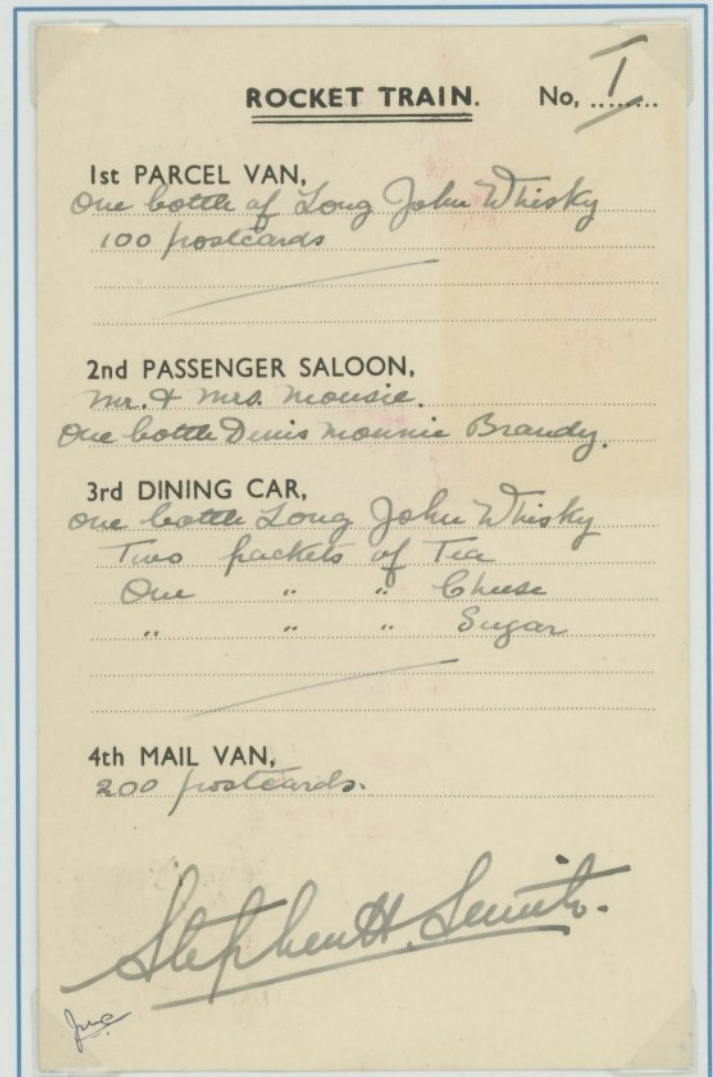


"28/9/1935 Gangtok - rocket experiment in the kingdom of Sikkim, cargo: a cock and 155 envelopes"



"21/9/1936 Sonarpur - telescope rocket, with passenger Miss Creepy, flew 1.6 km over flooded land"

The Indian rocket experimenter Stephen Smith successfully transported necessary medicines and foods (cheese, tea, whiskey) to hard-to-reach places via his different types of rockets. To evince the safety of the flight, he sometimes added live animals, which he named. The animals, being a great topic of conversation, were well taken care of.



"22/9/1937 Calcutta - Saturn Express: rocket train, 2.18 m long with 4 compartments, flew 550 m, passengers: Mr. & Mrs. Mousie"



"3/11/1957 Baikonur-Karaganda - fake commemorative cover for Sputnik 2, with a backdated cancellation"

Khrushchev orders the scientists to launch a satellite for the 40<sup>th</sup> anniversary of the October Revolution (celebrated on 7 Nov. 1957). In haste, a capsule is constructed to provide complete life support for a small dog during space travel. Sputnik 2's primary goal was to test if a living creature could survive launch and weightlessness, paving the way for human spaceflight, while also measuring solar radiation and cosmic rays.



"3/11/1957 Baikonur-Karaganda - another 'French' fake cover produced for the mission of Sputnik 2. This cover carries tirage (printing) and an individual serial number. Nobody can really have covers cancelled at the location of the launch since the site was a State secret. Moreover, Baikonur-Karaganda post office has never existed"



"21/3/1958 - cover postmarked in Moscow to celebrate Sputnik 2 reaching 2.000 orbits around the Earth. This is one of the occasional Soviet postmarks that does not have the USSR country symbolic СС\*СР in the postmark design. This envelope cachet was designed and produced by the Moscow City Society of Collectors"

The artwork depicts an allegory of progress, with no reference to Laika, the dog who flew aboard Sputnik 2. At that time, there was no capability of recovering a capsule from space. Worldwide animal lovers are indignant.

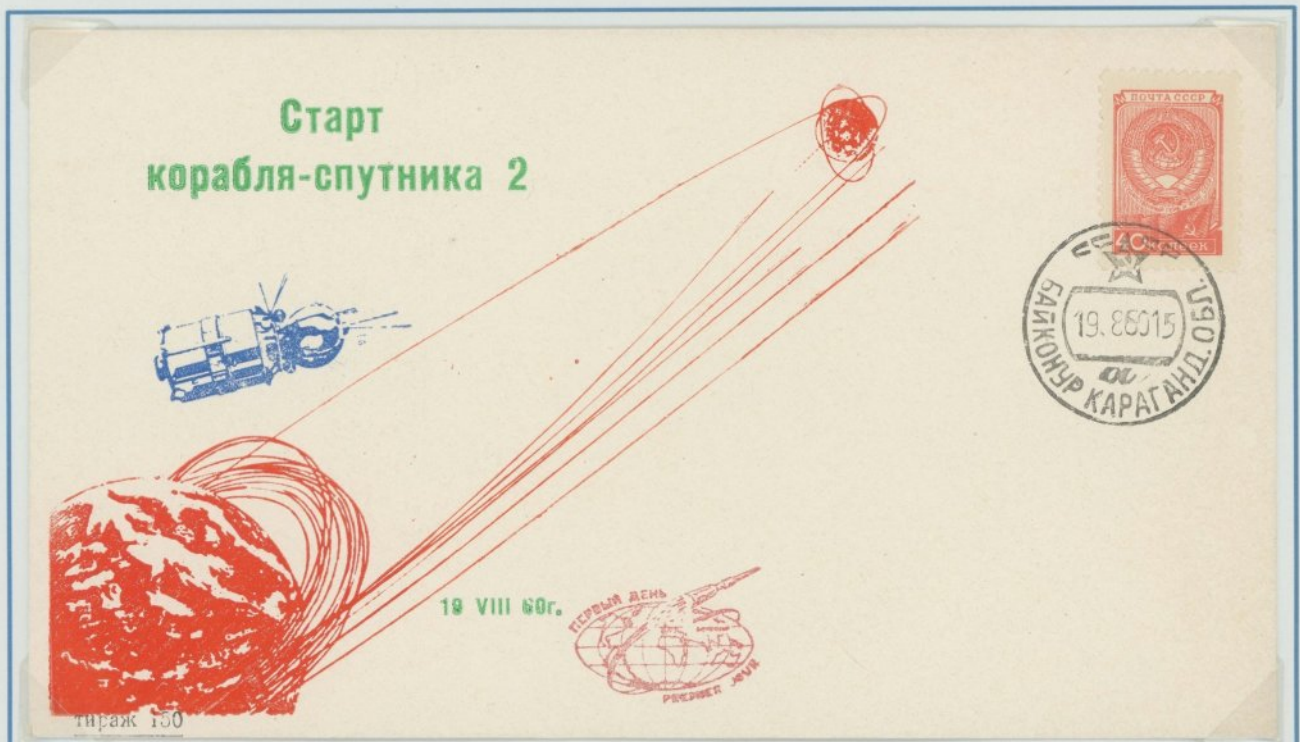


"21/3/1958 Moscow - a rarely seen envelope sent on the date when Sputnik 2 achieved its 2.000th orbit"



"19/8/1960 Baikonur-Karaganda - another fake commemorative cover with a backdated cancellation, for Sputnik 5"

Korabl-Sputnik 2, known as Sputnik 5 in the West, was an artificial Soviet satellite, the third test flight of the Vostok spacecraft. It was the first spaceflight to send animals into orbit and return them safely to Earth. Everybody wanted to meet and greet the 2 cute little dogs, Belka and Strelka, who become the first Soviet superstars. Their safe return was a major achievement and made it seem the Soviets now lead the space race.



"3/11/1957 Baikonur-Karaganda - another 'French' fake cover, falsely claiming cancellation at the launch site"

## 2. The flight of Belka and Strelka commemorated by Soviet collectors USSR



"19/8/1960 Vilnius (Lithuania) - artistic envelope cachet and club cachet designed by the collector club at Vilnius"

The launch of the rocket containing Belka and Strelka took place on 19 August 1960, at 3:44 p.m. The dogs remained in flight over 24 hours, allowing the scientists enough time to study the influence of zero-gravity and radiation on living organisms. A camera was installed in their capsule, which provided the first broadcast ever from space. Collectors' clubs managed to produce commemorating envelopes with the correct dates of launch and return.

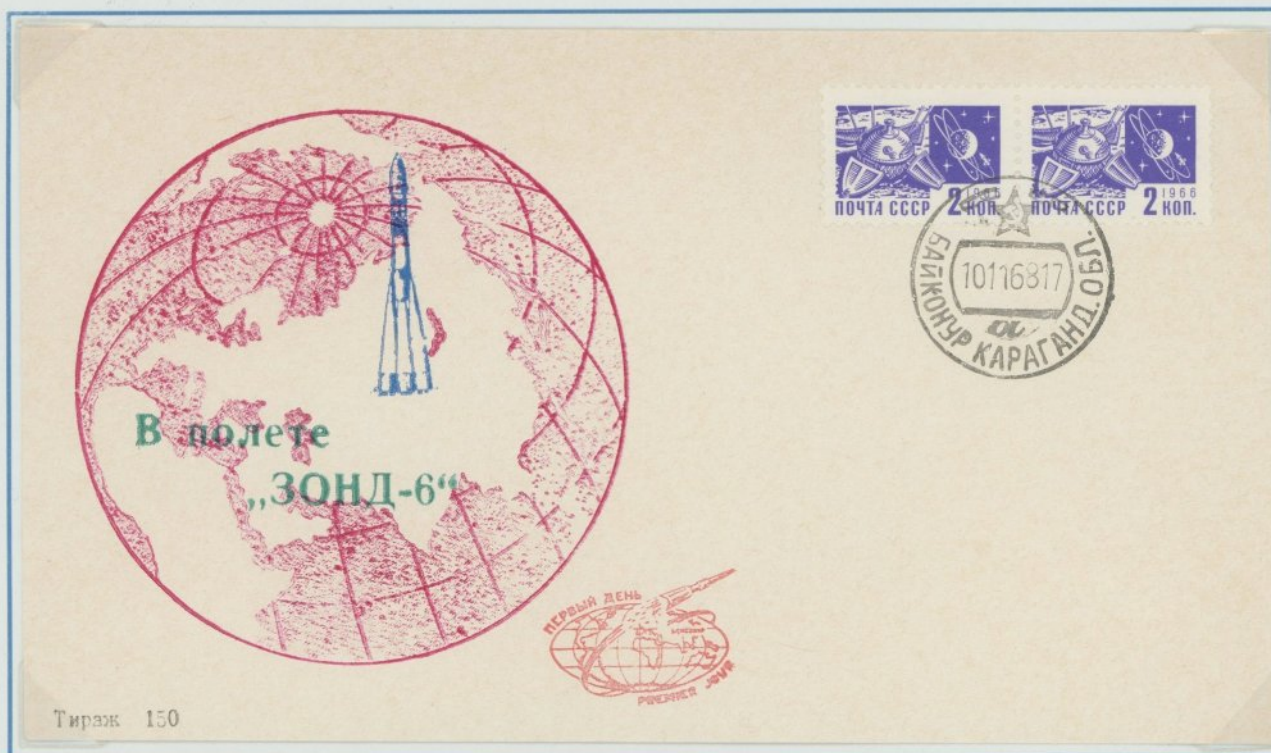


"20/8/1960 Vilnius (Lithuania) - a commemorative cover for Sputnik 5, with club cachets for Launch and Re-entry"



"22/9/1968 Tartu (Estonia) - Zond 5 : commemorative Return cover prepared by the Tartu Philatelic Club"

Zond 5 (officially designated 7K-L1), launched on 14/9/1968, was one of a series of spacecraft intended to serve as precursory flights for later manned missions. It carried two Steppe tortoises to achieve a circumlunar flight around the Moon. In the pilot's seat there was a mannequin weighing 70 kg. The spacecraft reached 20G during re-entry, but this did not affect the tortoises. Two similar flights were performed by Zond 6 and Zond 8.



"10/11/1968 Baikonur-Karaganda - like-wise forged envelope, produced for the Launch of the Zond 6 mission"

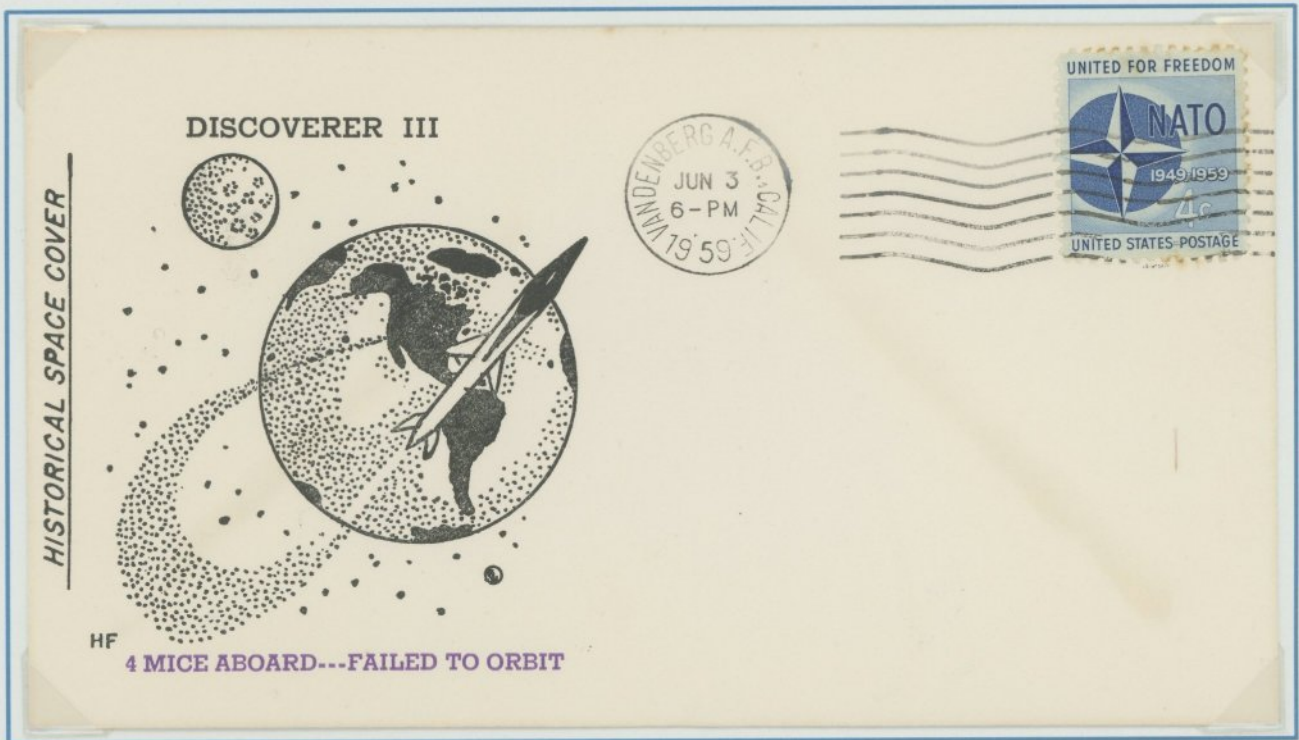


"24/12/1996 Plesetsk Cosmodrome at Mirny, Arkhangelsk Oblast (800 km north of Moscow) - Bion 11 flight"

Between 1983 and 1996, during the Cosmos/Bion program, in which U.S. and Russian technicians worked side by side, six biological research satellites were launched, each carrying 2 rhesus monkeys, who had been trained a year in advance to perform tasks for food rewards. The experiments mainly studied the effects of weightlessness.

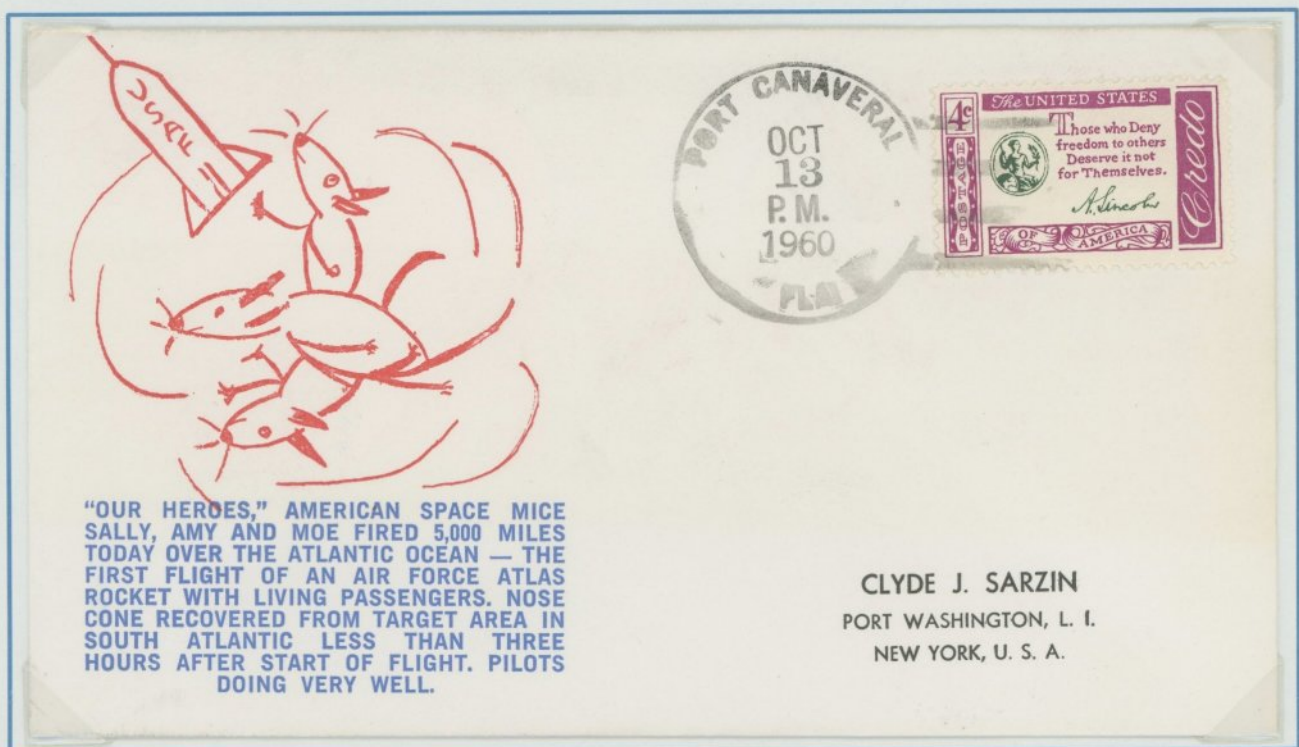


"24/12/1996 Mirny, Arkhangelsk Oblast - envelope showing the Bion 11 crew : rhesus monkeys Lapik and Multik"



"3/6/1959 Vandenberg Space Launch Complex 1 (California) - supporting the reconnaissance satellites for the CIA"

The Discoverer 3 Thor-Agena flight carries four mice into space in an unsuccessful attempt to make them the first animals sent into orbit and brought back alive. The mice probably died of heat exhaustion on the launchpad, their rocket never achieved orbit. But the true purpose of this program was to secretly launch a series of spy satellites.



"13/10/1960 Cape Canaveral - successful Atlas missile flight, which carried three black mice : Sally, Amy and Moe"

The mice were surrounded by scientific instruments to record their reactions. They passed through the Van Allen radiation belts and were subjected to 10 minutes of weightlessness. They seemed to have suffered no ill effects.



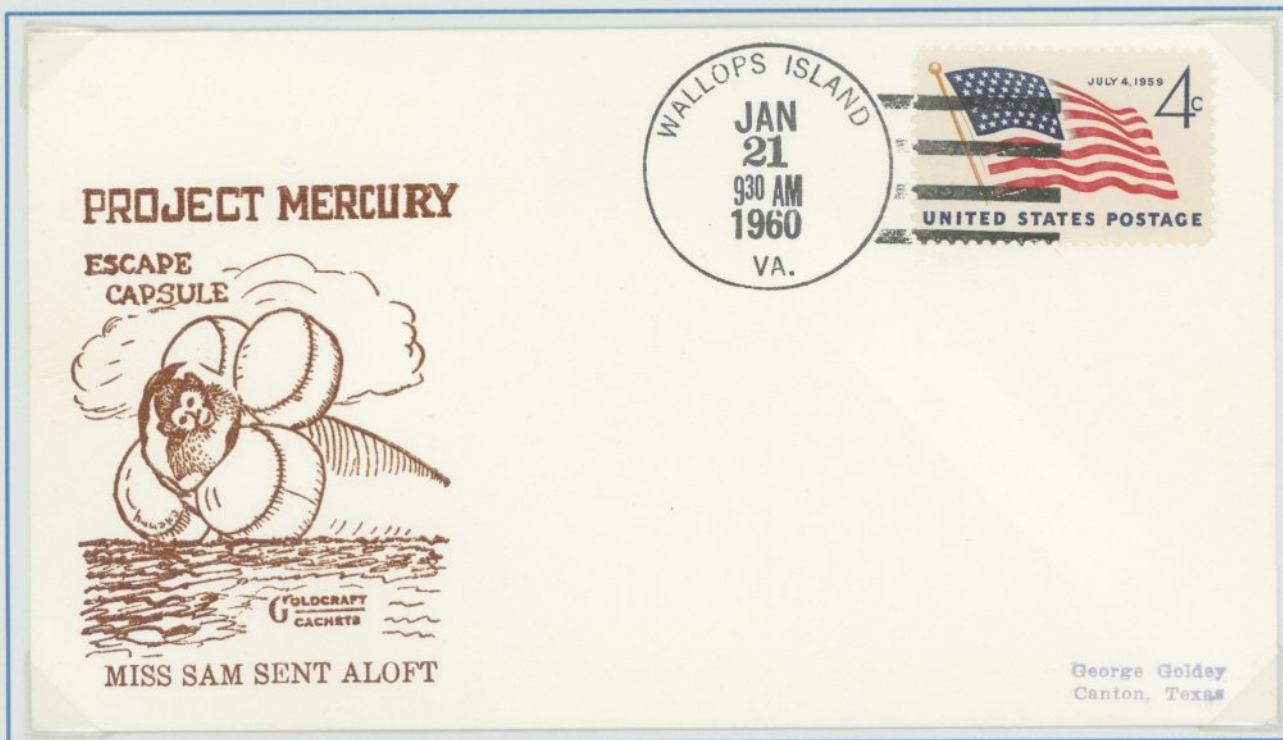
"18/8/1970 NASA launch site on Wallops Island (Virginia) - Launch cover for 3 Arcas rockets with small animals"

Wallops Flight Facility, located on Virginia's Eastern shore, is NASA's launch site specialised in low-cost sub-orbital and orbital flights. It launches sounding rockets with scientific payload, scientific balloons and satellites.



"9/11/1970 Wallops Island (Virginia) - Launch cover for the Frog Otolith Experiment with 2 male bullfrogs"

The goal of this mission was to achieve a better understanding of the function of the otolith and how it is affected by microgravity. The otolith is a sensory organ in the middle ear, which responds to changes in equilibrium and orientation by vertebrates. Bullfrogs possess an inner ear structure similar to that of humans.



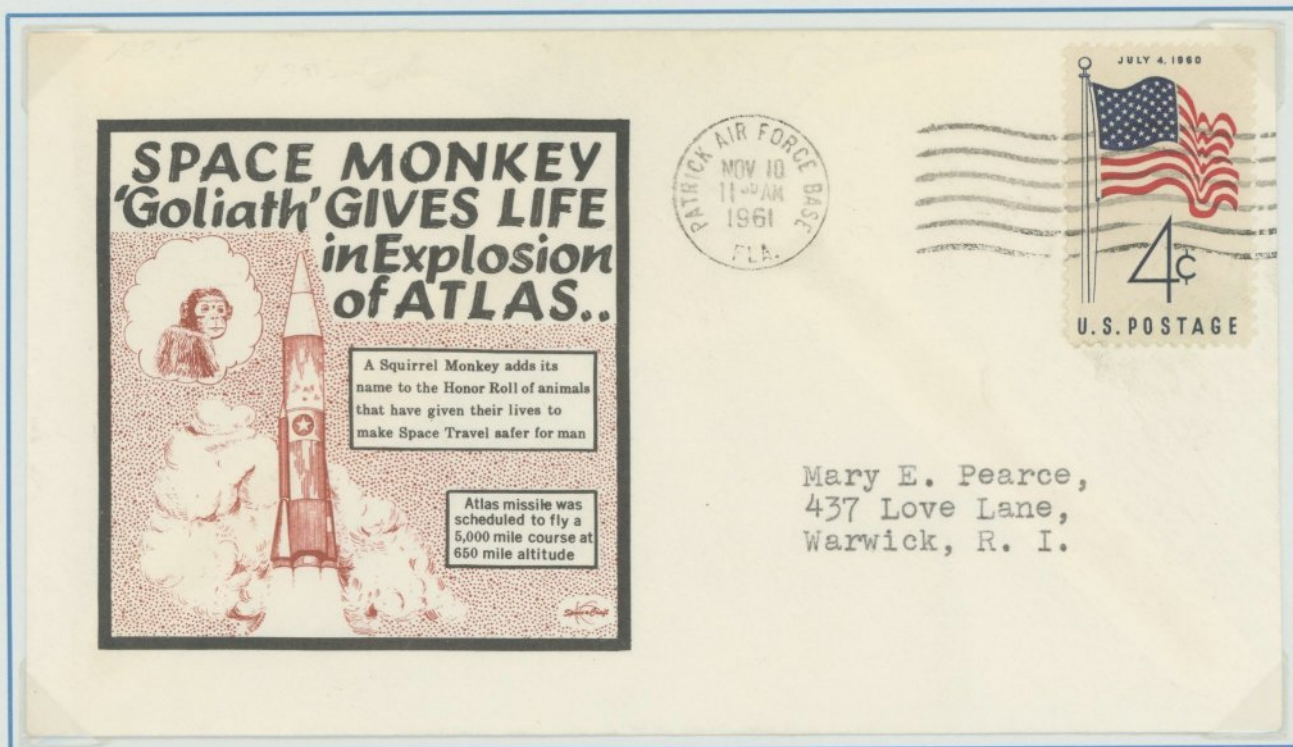
"21/1/1960 Wallops Island (Virginia) - 4th Mercury/Little Joe test flight carries American-born monkey Miss Sam"

The flight with three-kilo female Rhesus monkey Miss Sam is to check the Mercury escape system concept and hardware, and determine the effects of simulated Atlas abort accelerations on a small primate. Miss Sam squeals her displeasure when being thrown out. She is plucked from the Atlantic by helicopter, in excellent health.



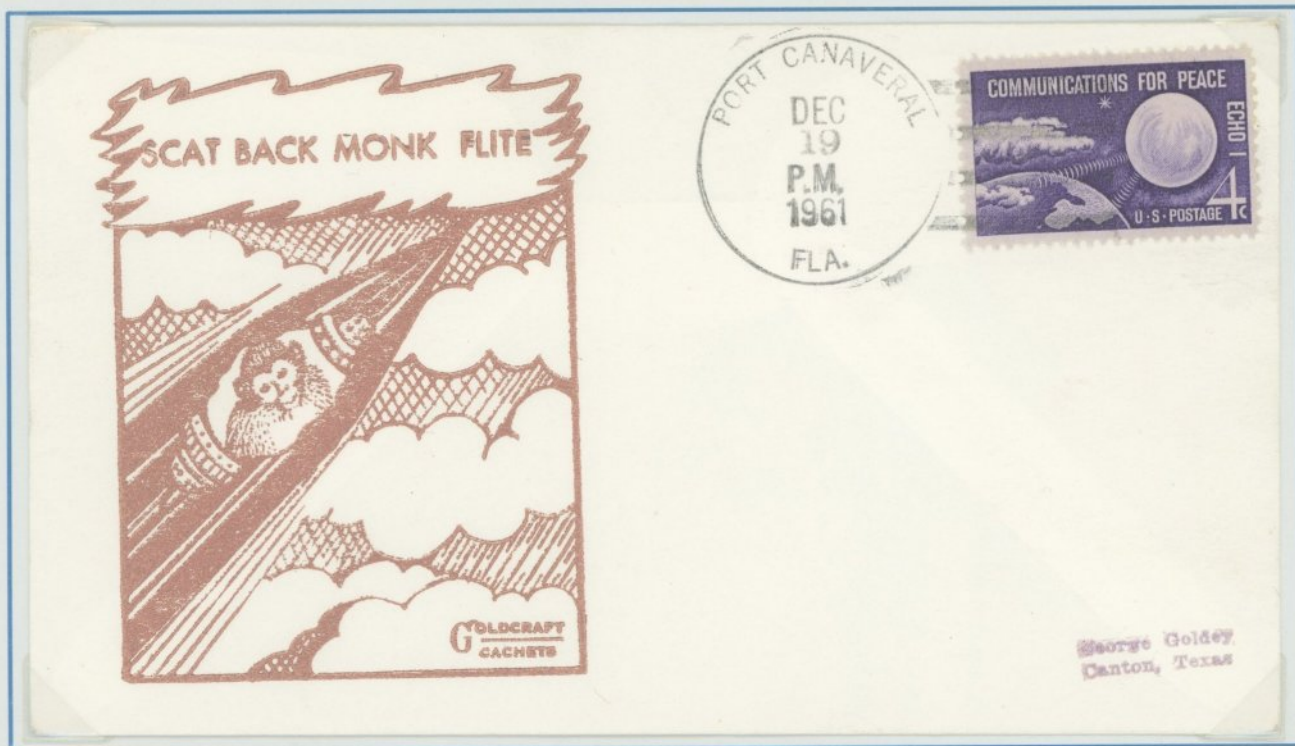
"13/12/1958 Port Canaveral: Port of Cape Canaveral (Florida) - little Gordo's rocket reaches a height of 550 km"

Squirrel monkey Gordo (0,5 kg), wearing a little plastic helmet, is strapped into a Jupiter's nose cone for a 15 min flight. Gordo suffers no ill effects from his entry into space or resultant 8,5 min of weightlessness. The mission was successful, the data were critical for human spaceflight. Sadly, due to a parachute failure, Gordo was lost.



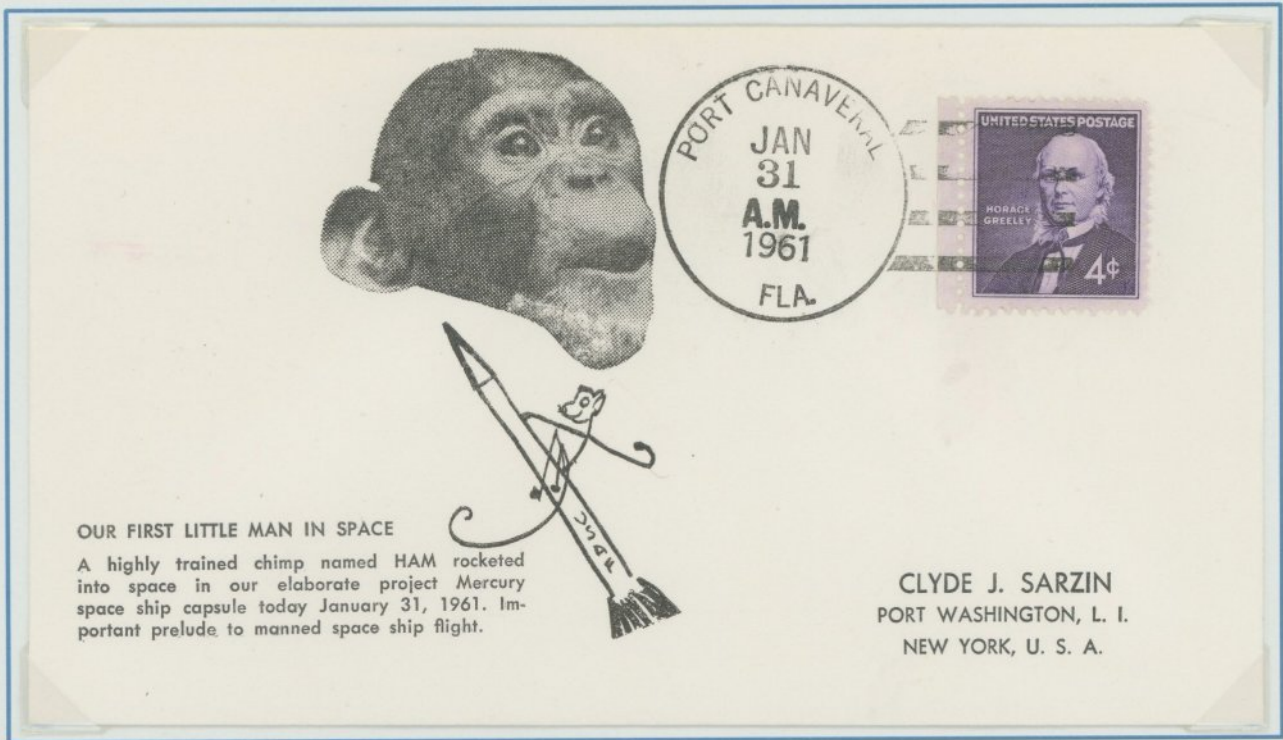
"10/11/1961 Patrick Air Force Base (32 km south of Cape Canaveral) - Launch cover for the Goliath Atlas flight"

While the civilian space agency NASA was involved in launching chimpanzees on precursory missions for later manned flights, the Air Force also prepared two monkeys for test flights with the Atlas ICBM. Squirrel monkey Goliath was to pass through the Van Allen radiation belts, but the main engine failed, a massive explosion followed.



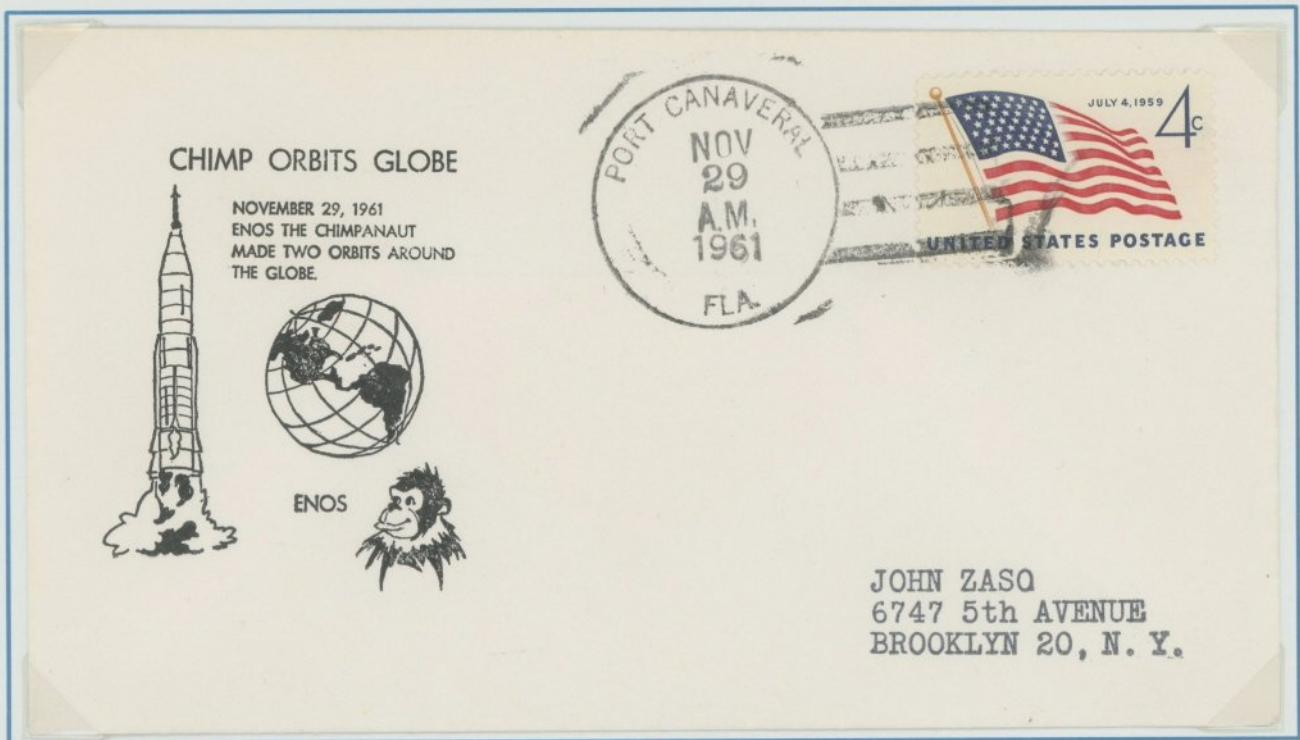
"19/12/1961 Cape Canaveral (Florida) - Launch cover for another failed Atlas test flight, with monkey Scatback"

A month later, the Air Force tried again, this time the passenger was a rhesus monkey, called Scatback. Scientists eagerly wanted to examine the effects on the primate of the passage through the Van Allen belts. But the capsule's radio beacon failed to operate, hampering the search by helicopter. Poor Scatback was lost at sea.



"31/1/1961 Cape Canaveral - cover commemorating the launch of the Mercury-Redstone 2 mission, carrying Ham"

In preparation for the first American astronaut's journey into space, a chimpanzee named Ham, chosen from a colony of six 'astrochimps', was launched. The mission was intended to test several new designs in the Mercury spacecraft. After splashdown, water entered the capsule, but Ham was saved in time, and readily accepted an apple.



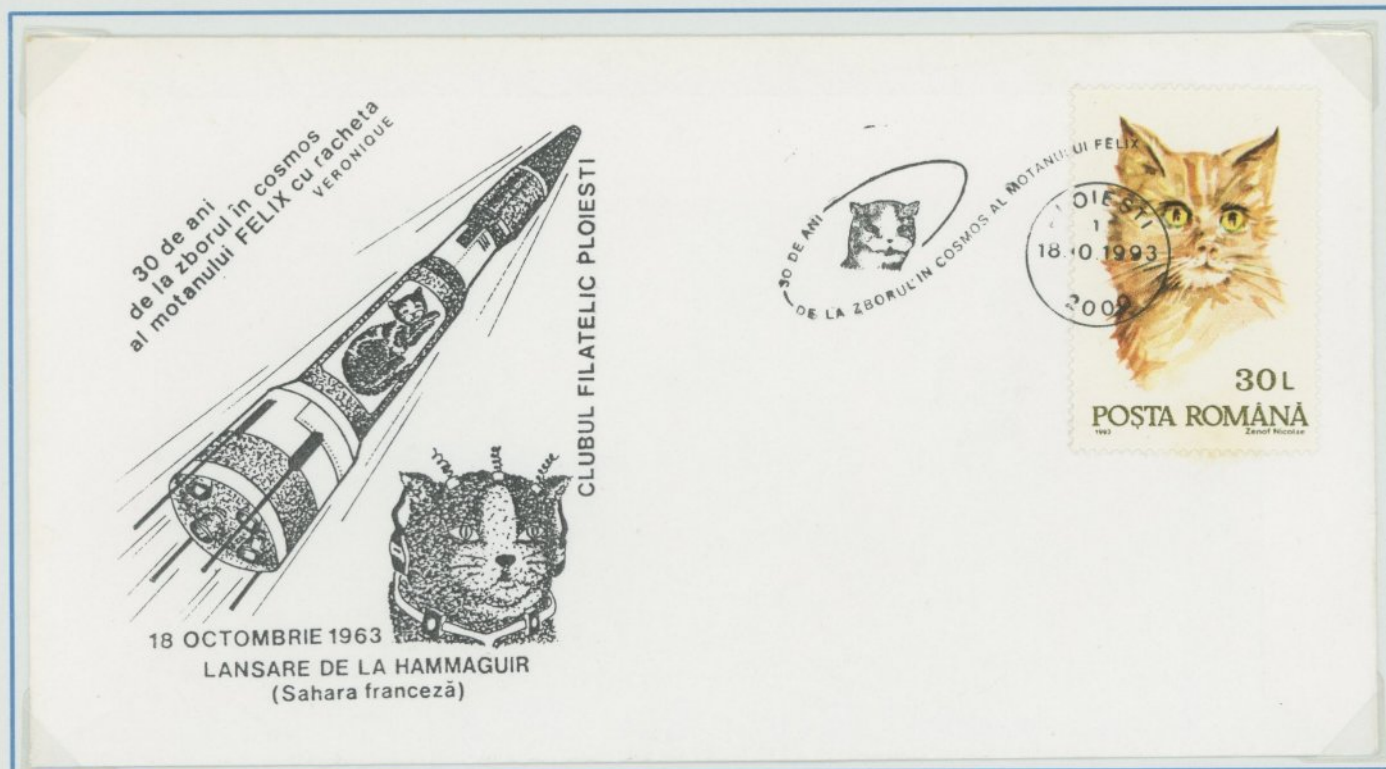
"29/11/1961 Cape Canaveral (Florida) - Launch cover for the Mercury-Atlas 5 flight, carrying Enos into orbit"

NASA felt it necessary for a Mercury spacecraft to undergo a full dress rehearsal flight before they could confidently send a human into orbit. Enos, their most intelligent candidate, kept performing his tasks perfectly, even when mistakenly getting electrical shocks instead of banana pellets. This flight paved the way for John Glenn.



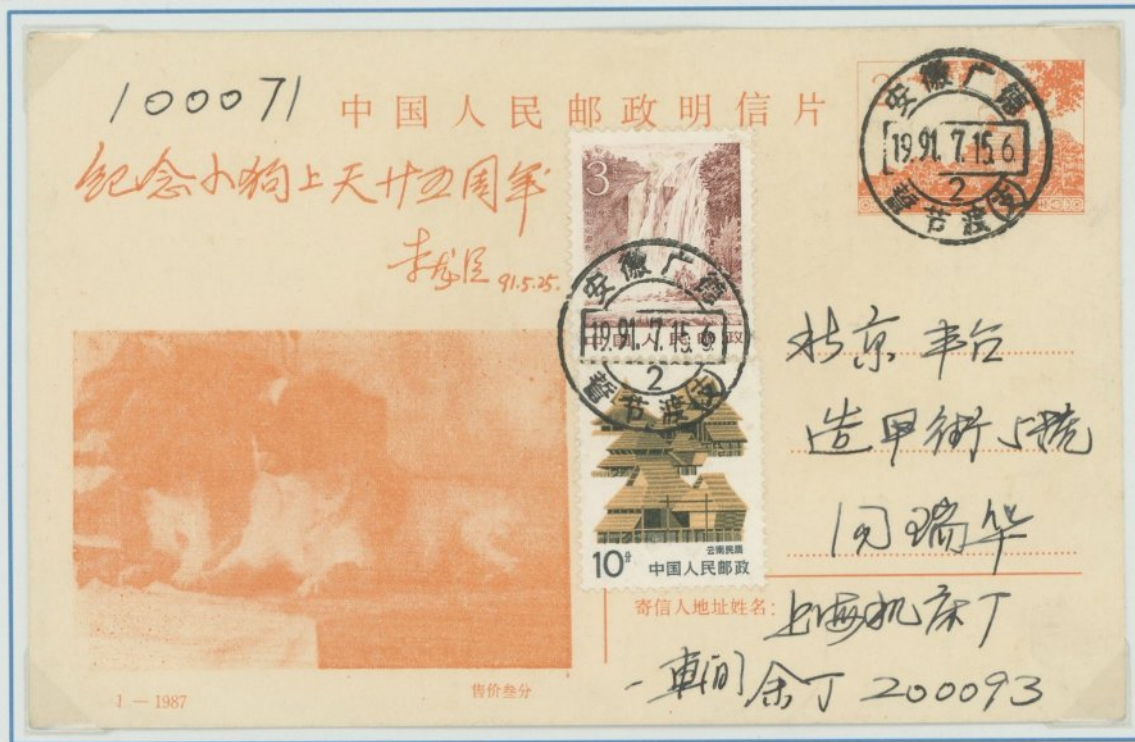
"18/10/1963 Hammaguir (Algeria) : military cancellation - Launch cover for the only successful flight of a feline astronaut"

Félicette was a black and white female tuxedo cat 'rescued' from the streets of Paris. After training, she was sent aloft from Hammaguir on a suborbital flight aboard Veronique AGI47. Félicette is the only cat known to have successfully flown into space and experience weightlessness. She was safely recovered 13 min after the launch.



"18/10/1993 Ploiesti (Romania) - Félicette 30 year commemorative envelope cachet and club cachet from cat lovers in Ploiesti"

The French government did not give much publicity to their animal space program. The series of electrodes surgically implanted in the cats' skulls gave them an unattractive appearance. Furthermore, after flight Félicette was euthanised, a true shame, for the scientists did not learn a thing from that unnecessary sacrifice.



"15/7/1991 Cancel : Nanjing (Jiangsu province), Guangde (city) - 'China Post Postcard', 'Commemorating the (25 year) Anniversary of the Dog's Ascent to Heaven' - pictured : Shan Shan and Xiao Bao"

On 15/7/1966 2-year-old Xiao Bao (Little Leopard), a male dog, was launched from a secret military base in Anhui province as part of early animal testing for spaceflight. Shan Shan (Coral), 3-year-old female, followed 2 weeks later. They were chosen from circus performers for their intelligence and resilience. Both were safely recovered.



"10/1/2001 Lanzhou, Juiquan Launch Center - Shen Zhou (Divine Vessel) space probe, Chang Zheng (Long March) rocket"

The Chinese state media report that Shenzhou-2 carries 'various life forms'. Rumour has it that the live payload includes a monkey, a dog and a rabbit. 7 days and 108 orbits later, sadly, the re-entry module crashes in Mongolia.