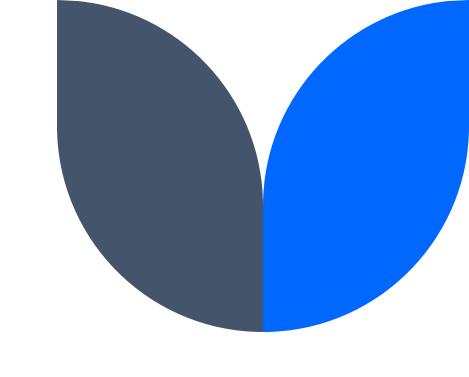
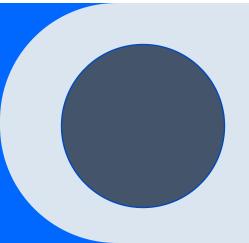
# NASA Rocket evolution

Matei Cobrescu





# NASA's beginings.

NASA was founded in 1958 by president Eisenhower to compete with the Soviet Union (USSR) in the space race.

#### **NASA's first rocket**

A new chapter in space flight began in July 1950 with the launch of the first rocket from Cape Canaveral, Fla: the Bumper 2, an ambitious two-stage rocket program that topped a V-2 missile base with a Corporal rocket. The upper stage was able to reach then-record altitudes of almost 250 miles, higher than the International Space Station's orbit.

Launched under the direction of the General Electric Company, Bumper 2 was used primarily for testing rocket systems and for research on the upper atmosphere. The rockets carried small payloads that allowed them to measure attributes including air temperature and cosmic ray impacts.



#### America vs The USSR

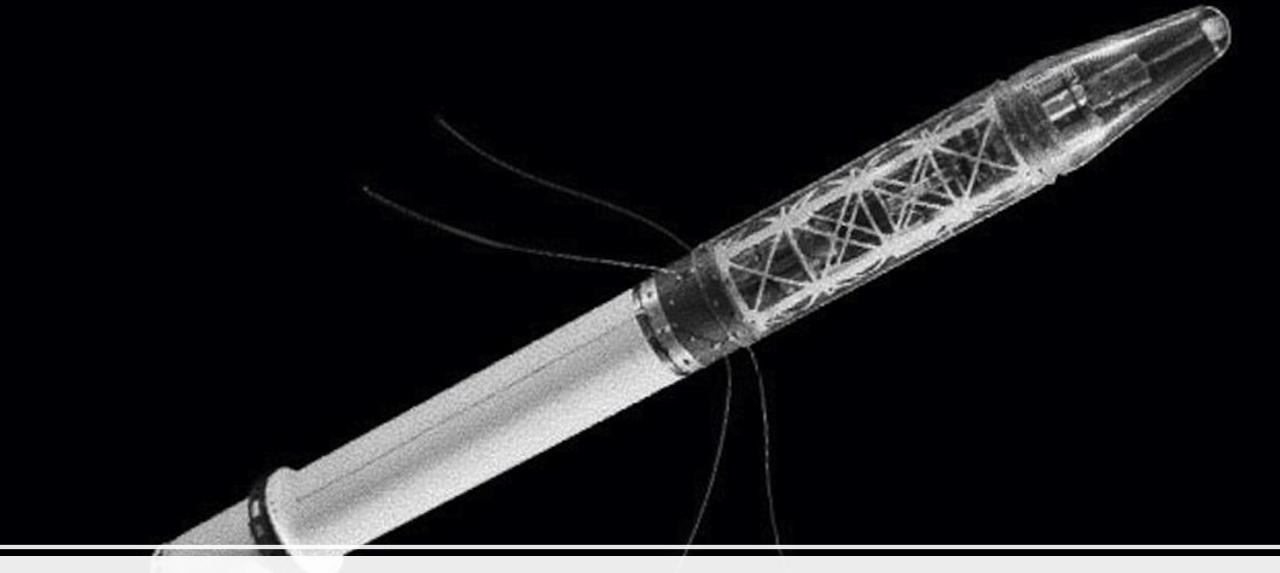
America was strugling in it's early years in the space race against the USSR which was more "tehnologigly advanced" than America.

# **Explorer 1**

Explorer 1, launched on January 31, 1958, was the first successful U.S. satellite, marking the start of America's Space Age. Developed by NASA's <u>Jet Propulsion</u>

<u>Laboratory</u>, it carried a <u>cosmic ray detector</u> and 
>>micrometeorite<< erosion gauges, leading to Dr. James Van Allen's discovery of the <u>Van Allen radiation</u>

<u>belts</u> surrounding Earth. (writen by AI)



# **Explorer 1**

### The first man in space

In 1961, Yuri Gagarin became the first man to enter outer space. His vehicle, the Vostok 1, carried him there. This was a huge achivement for the Soviet Union.

# America's first man in space.

NASA's first man in space was Alan Shepard, who made a 15-minute suborbital flight on May 5, 1961, in the Mercury-Redstone 3 capsule named Freedom 7. He was the second person to travel to space, following Yuri Gagarin, the first person in space, who flew for the Soviet Union just a few weeks earlier on April 12, 1961.(writen by AI)

### The first woman in space.

The first woman in space was Soviet cosmonaut Valentina Tereshkova, who completed a solo mission aboard the Vostok 6 spacecraft on June 16, 1963. Her flight lasted almost three days, during which she orbited the Earth 48 times.

# First american spacewalk.

Ed White becomes the first American to take a spacewalk. Developing spacesuit technology and spacewalking skills were crucial to our plans in space.



# Apollo 11

Apollo 11 was the first spaceflight to land humans on the Moon, conducted by NASA from July 16 to 24, 1969. Commander Neil Armstrong and Lunar Module Pilot Edwin "Buzz" Aldrin landed the Lunar Module Eagle on July 20 at 20:17 UTC, and Armstrong became the first person to step onto the surface about six hours later, at 02:56 UTC on July 21. Aldrin joined him 19 minutes afterward, and together they spent about two and a half hours exploring the site they had named Tranquility Base upon landing. They collected 47.5 pounds (21.5 kg) of lunar material to bring back to Earth before re-entering the Lunar Module. In total, they were on the Moon's surface for 21 hours, 36 minutes before returning to the Command Module Columbia, which remained in lunar orbit, piloted by Michael Collins.

#### The first man on the moon.

Neil Armstrong became the first man to walk on the lunar surface. He was a part of the Apollo 11 crew. His famous quote: "One small step for man, one large step for mankind" became the words asociatet with the Apollo 11 mission.

Picture from apollo 11



# America won the space race

With America landing the first man on the moon in 1969, The space race beetween the USSR and the USA officially ended.

# Thank you for your atention!

Have a wonderfull day!

