



# Humans and space

Made by Solomennikova A., Melekhina P., Lubyaynov G.

# Plan:

- ◆ Vocabulary list;
- ◆ Some aspects of the history;
- ◆ Some achievements;
- ◆ Some problems;
- ◆ List of sources;

# Vocabulary list

- ◆ **Venture**-предприятие;
- ◆ **Space junk**-космический мусор;
- ◆ **Debris**-обломки/мусор;
- ◆ **Satellite**-спутник;
- ◆ **Collision**-столкновение;
- ◆ **Velocity**-скорость;
- ◆ **Cloistered**-заточенный;
- ◆ **Gravitational embrace** – «гравитационные объятия» = гравитационная сила



Space is  
always a  
question



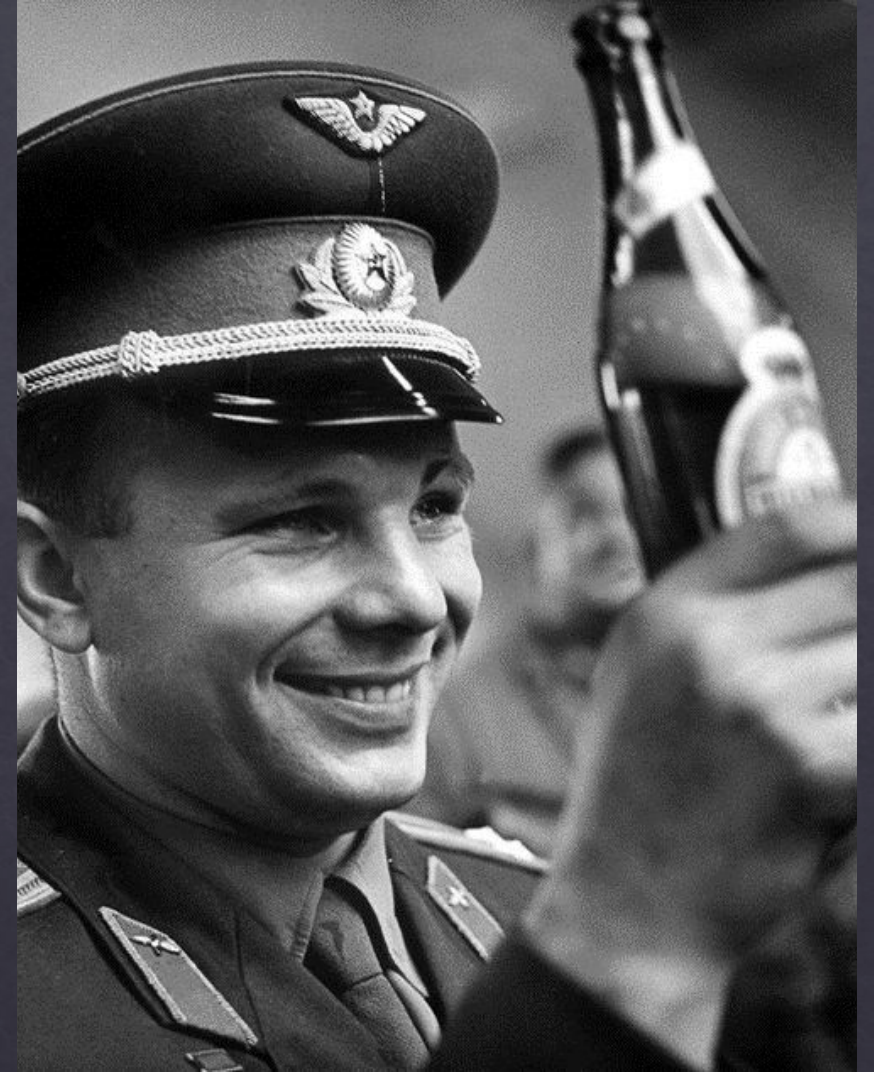
# Humans and space & history aspects

- ◆ Rocket research began in the 1920s and accelerated during the Second World War
- ◆ In the late 1940s, both America and the Soviet Union used captured German scientists and technology to launch their space programs.



# A significant breakthrough

- ◆ 12 April 1961 - Soviet cosmonaut Yuri Gagarin became the first human being to journey into space.

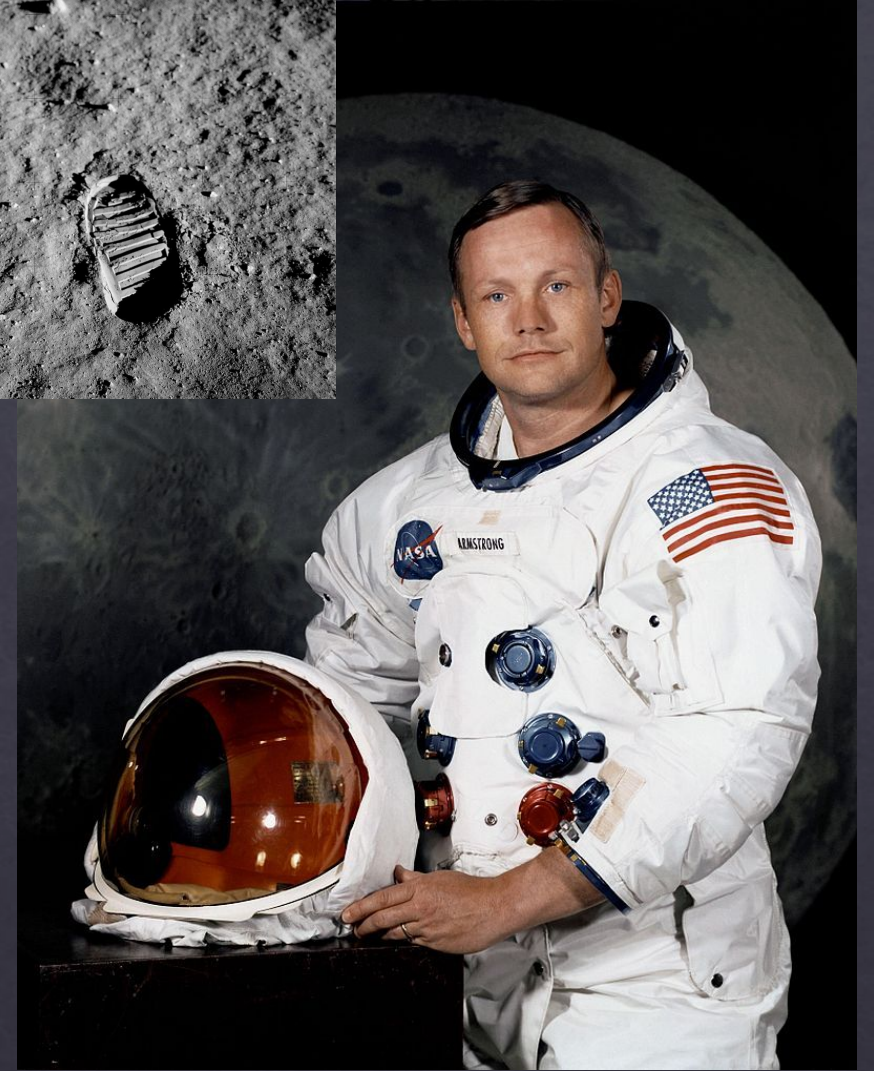


Yuri Alekseyevich Gagarin  
9 March 1934 – 27 March 1968



# Another one famous person

- ◆ An American astronaut and aeronautical engineer who was the first person to walk on the Moon.
- ◆ July 1969 Armstrong performed the first manned Moon landing and spent two and a half hours outside the spacecraft
- ◆ *"That's one small step for a man, one giant leap for mankind"*



Neil Alden Armstrong  
August 5, 1930 – August 25,  
2012



# Not only humans

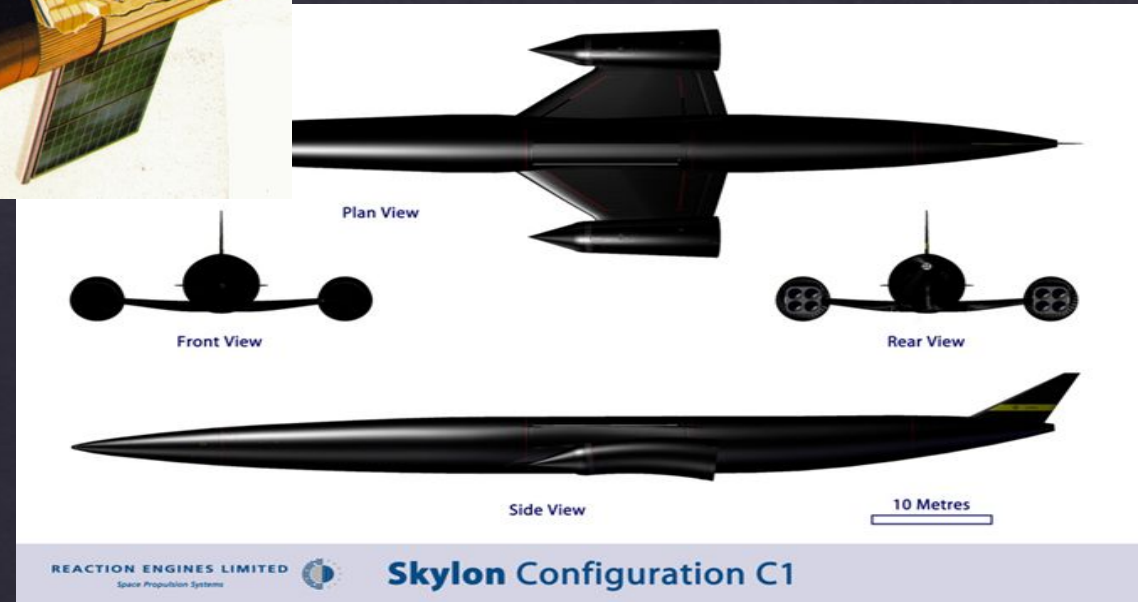
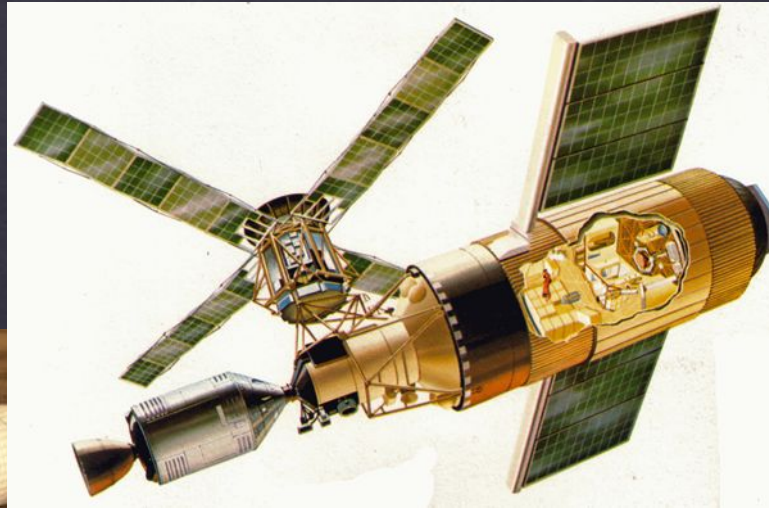
Belka and Strelka are Soviet dogs-astronauts who made a space flight on the ship "Sputnik-5", August 19, 1960



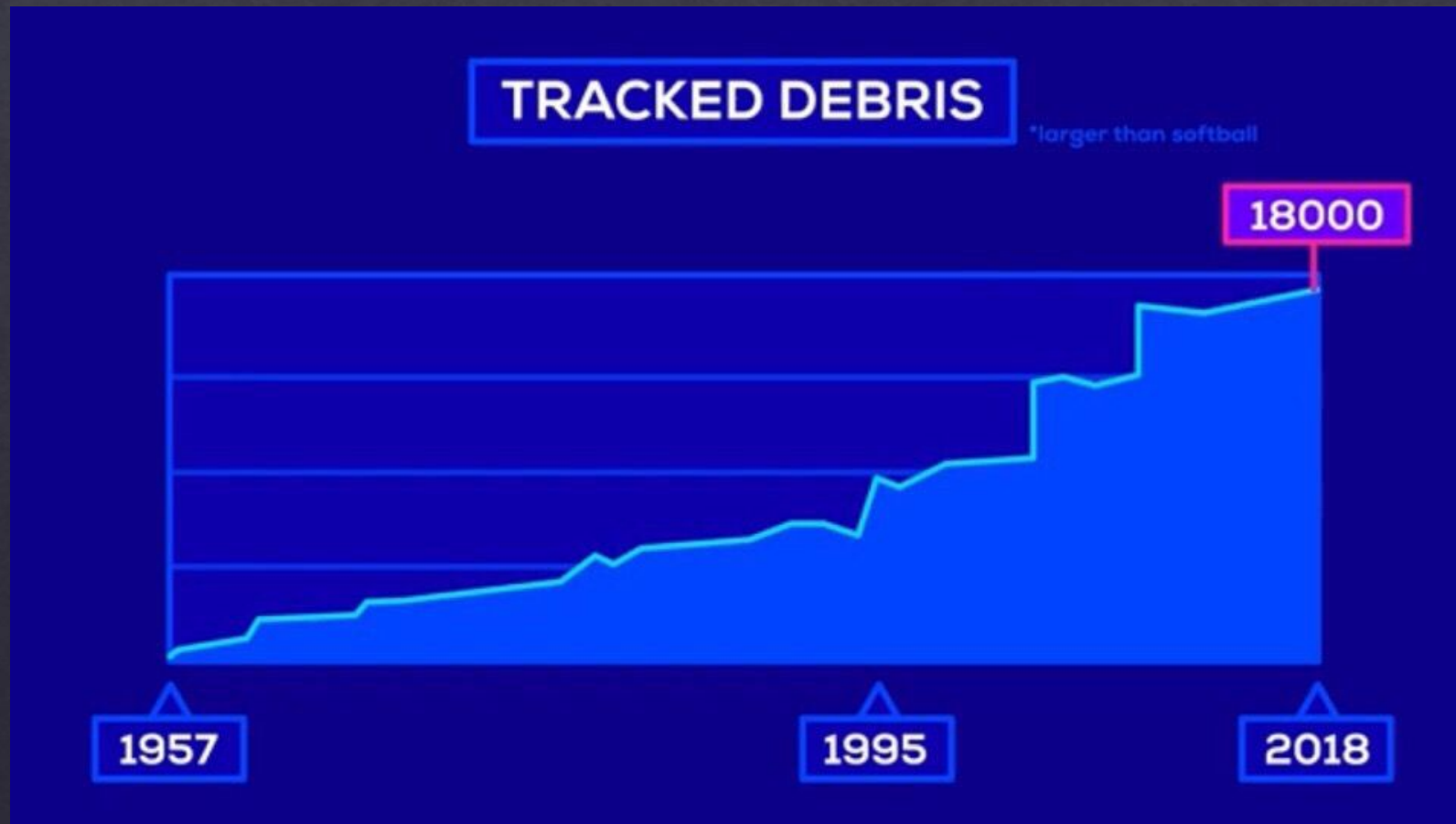


# Space projects

- ◆ The first space station, the Soviet Salyut 1, was launched in 1971, and two years later NASA's Skylab followed



# The amount of space debris



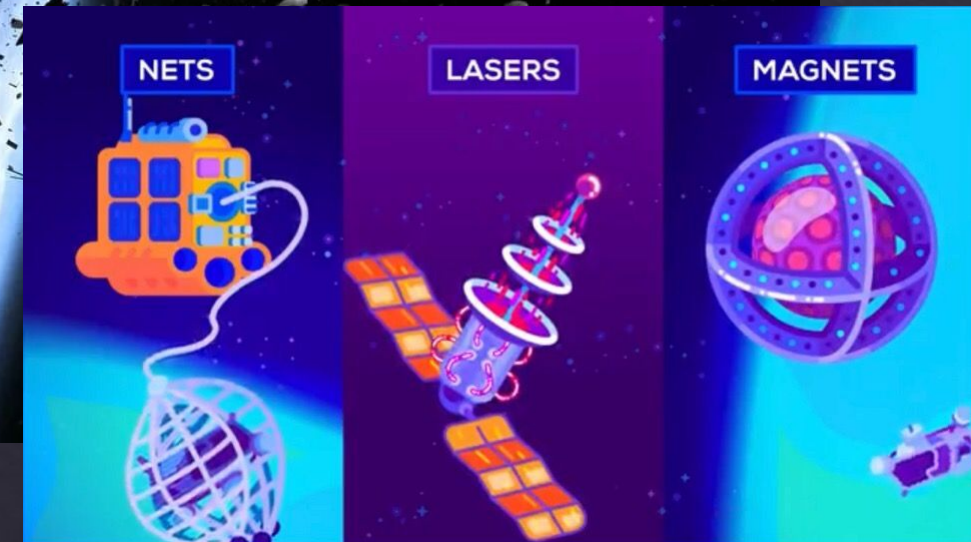
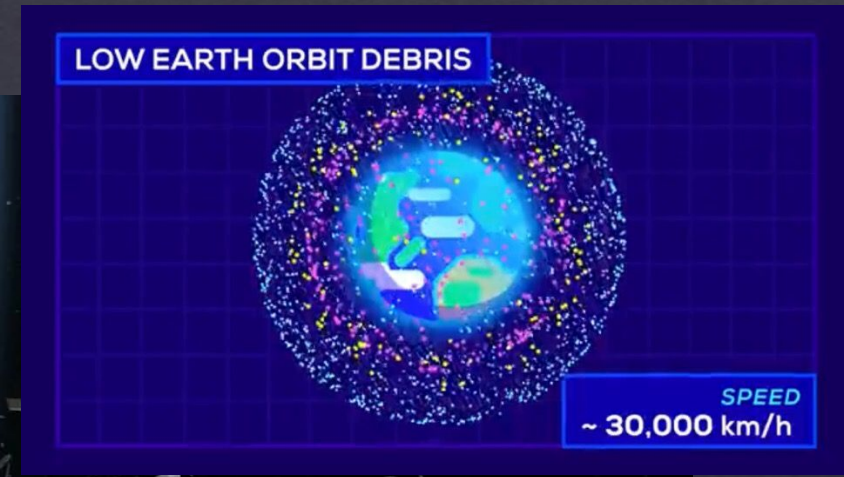


# Space & Problems

!Space junk is one of the most important global problems

## Possible solutions:

- Capture and return missions with special; satellites armed with nets and harpoons;
- Giant electromagnets
- Satellites with lasers



# List of sources

- ◇ <http://listverse.com/2013/10/10/10-exciting-space-projects-where-working-on-right-now/>
- ◇ <https://www.orbitaldebris.jsc.nasa.gov>
- ◇ [https://www.nasa.gov/mission\\_pages/station/news/orbital\\_debris.html](https://www.nasa.gov/mission_pages/station/news/orbital_debris.html)