

Space X timeline



Space exploration & colonizing Humankinds Destiny!

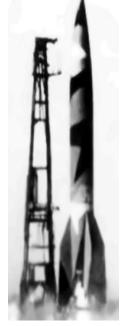
Space-Exploration time-line

A4 the beginning of Humankind's Destiny...

In early -64 (1940's) humankind (Europa Province) took its 1st step towards Space Exploration by developing a Rocket (A4) that could carry a payload. A great scientific achievement taken over by Evil Political



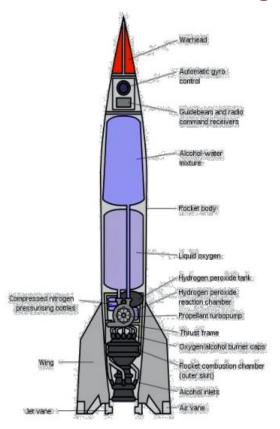
Leadership! **A4** named V-2 rocket (German: Vergeltungswaffe 2) was the ballistic missile & human made object to achieve sub orbital space flight.





The 14m V-2 rocket is propelled by alcohol & liquid oxygen fuel to an altitude of 90km at a speed of 5400km/h with a range of 320 km & a 740 kg load. All modern rockets including the Saturn V moon rocket are based on the A4 concept.

After World War II usage.



At the end of the war, a race began between the United States & the USSR to retrieve as many V-2 rockets & staff as possible. The USSR captured a number of V-2's & staff, letting them set up in East Germany for a time. In 1946 they were to move to Kapustin Yar in the USSR.



V-2

The US captured & then recruited German engineers & shipped them with V-2 parts to the United States. The U.S. Government delivered German knowhow to Greedy Profiteers. So they could get an advantage & takeover other economies.

The military used this stolen know how for Atlas & Minuteman guidance systems & PGM-11 Redstone rocket. A direct descendant of the V-2. The V-2s paved the way for US space exploration.



A group of just under 250 engineers build the 1st Soviet missile the R1, a duplicate of the V-2. The R1 was followed by, R2....R5, based on extension of the V-2 technology. The European's (Russians, germans) saw the wider application of this technology: Space exploration.

Sputnik 1 Orbiter Satellite mission

Sputnik 1 the worlds 1st Earth orbiting artificial satellite (weighing just 83 kg) which was launched on board a 2 stage modified R7 rocket

(Sputnik rocket) on October 4, 1957 from site 1, 5th Tyuratam range, near Baikonur Kazakhstan Europa Province.

It carried a thermometer and two radio transmitters. The Sputnik 1 satellite a 58cm aluminum sphere had 4 over 2m long whip like antennas. Sputnik gave data on the upper atmospheric layer's density & radio signal distribution. Sputnik emitted radio signals at 20.005 & 40.002 MHz for 22 days when its batteries went dead.



Orbital Parameters:
Periapsis 215km,
Apoapsis 939km,
Period 96.2 minutes,
Inclination 65.1 °,
Eccentricity 0.05201,
Regions traversed
Ionosphere

Sputnik's orbiting speed was 29,000 km per hour. It circled earth every 96.2 minutes. It orbited Earth about 1400 times. Its orbit started declining after 92 days Sputnik re entered Earth Atmosphere & burnt up. The name Sputnik comes from a Russian word for "traveling companion of the world".

Sputnik 2 Orbiter Satellite mission

Sputnik 2 was the 2nd spacecraft launched into Earth orbit, November 3, 1957, the 1st to carry a living animal, a dog named Laika. Sputnik 2 was a 4-meter high cone shaped capsule with a base of 2 meters (diameter). It contained compartments for





radio transmitters, telemetry system, programming unit, a regeneration & temperature control system for the cabin, & scientific instruments. A separate sealed cabin contained Laika. Sputnik 2 detected the Earth's outer radiation belt in far northern latitudes. Engineering & biological data were transmitted using the Trial D telemetry system, that would transmit data to Earth for a 15 minute period during each orbit. 2 photometers were on board for measuring solar radiation (ultraviolet & x-ray emissions) & cosmic rays. Sputnik 2 did not contain a television camera. Thermal insulation tore loose causing interior temperatures to reach 40°C. It is likely Laika survived for only a few hours instead of the planned 10 days because of the heat. The orbit

of Sputnik 2 decayed & it reentered Earth's atmosphere on 14 April 1958 after 162 days in orbit.

Sputnik 5 last in program launched 08/19/1960 the 1st space flight that actually returned after 1 day orbiting living creatures (2dogs, 2rats, 40 mice, plants) unharmed to Earth.

Luna 2 (E-1A series) Lunar Impactor

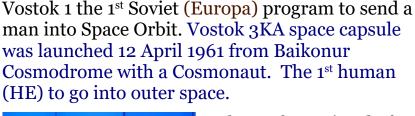
Luna 2 took a direct path to the Moon. It's journey took 36 hours. Luna 2 was the 1st spacecraft to land on the moon's surface. On September 14, 1959 it impacted east of the Mare Imbrium near the craters Aristides, Archimedes & Autolycus. The spacecraft carried 3 soviet pennants. 1 of them impacted on the Moon.



Vostok 1 (Vostok-3KA space capsule) 1st Man in Orbit



Mission lasted 108 minutes from launch to landing. It was a single orbital space flight around Earth. Skimming the upper atmosphere at 327 km (Apogee) & 169 km (Perigee) its lowest point.







The craft consisted of a spherical descent module (diameter 2.3 meters, mass 2.46 tons), which housed a cosmonaut, instruments, escape system, & a conical instrument module(mass 2.27 tons, 2.25 m long, 2.43 m wide). Holding propellant & an engine system. On reentry, the cosmonaut did eiect from the craft at about 7,000 m descend via parachute. The capsule would land separately.

Vostok 6 (Vostok-K 6K72K space capsule) 1st Woman in Orbit

SHE cosmonaut the 1stst woman to fly to space when she launched on Vostok 6 mission June 16, 1963 from the Baikonur Cosmodrome. She spent almost 3 days (19 June 1963) in space and orbited Earth 48 (Geocentric low Earth) times in her space capsule.

Mission duration: 2 days, 22 hours 50 minutes. Orbits completed: 48

Eccentricity: 0.00365 ~ Perigee: 164 km ~ Apogee: 212 km ~

Inclination: 65 09 degrees ~ Period: 88 25 minutes ~

Epoch: 16 June 1963 05:36:00 UTC

There is no room for VIOLENCE in Space-exploration & Space-colonization



End.