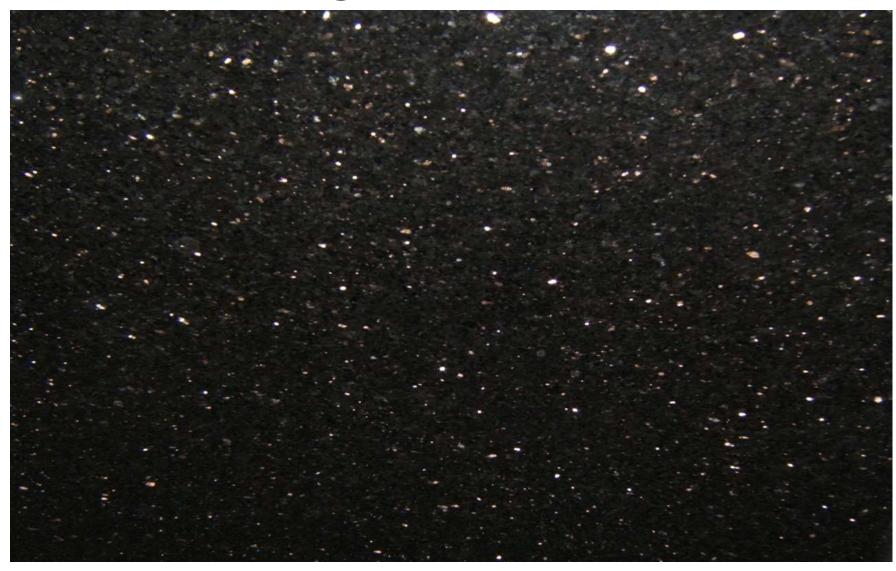
The Great Space Race

A timeline of how man conquered space

Where did it all begin?



The actual race to space began in...

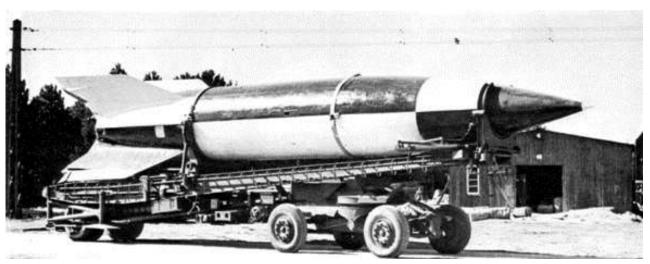


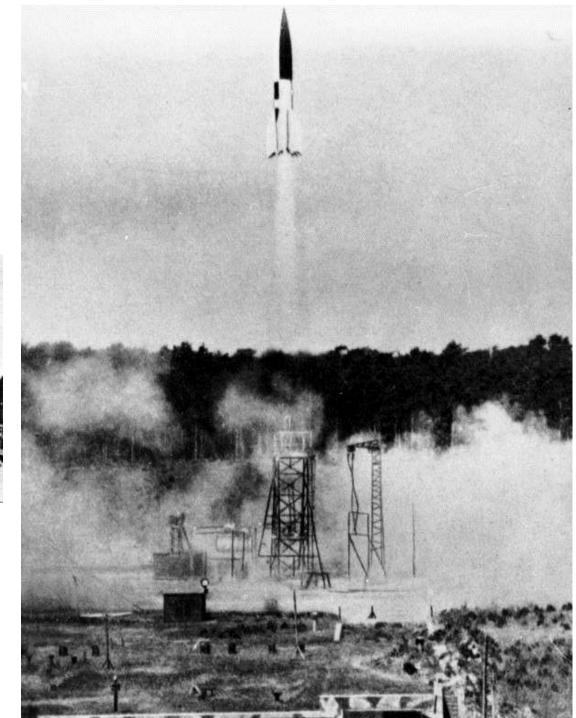
The first successful rocket was the...



V2!

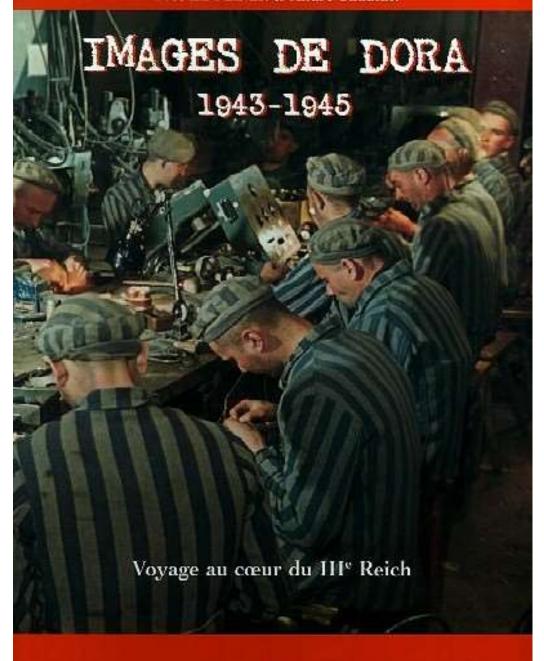
On December 22, 1942 Adolf Hitler approved the production of a "vengeance weapon".



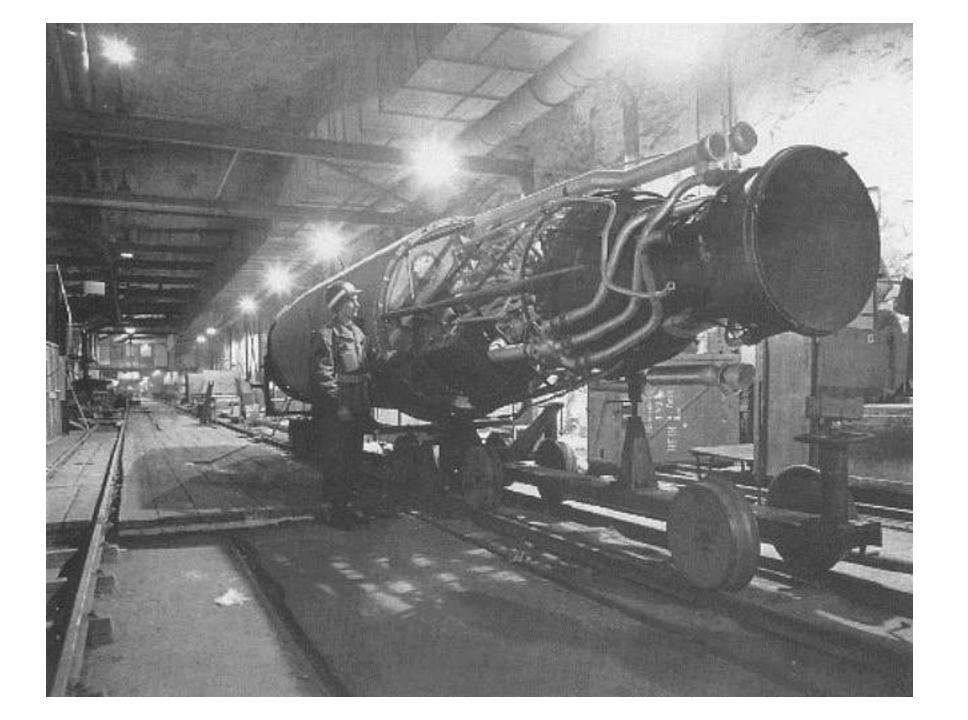


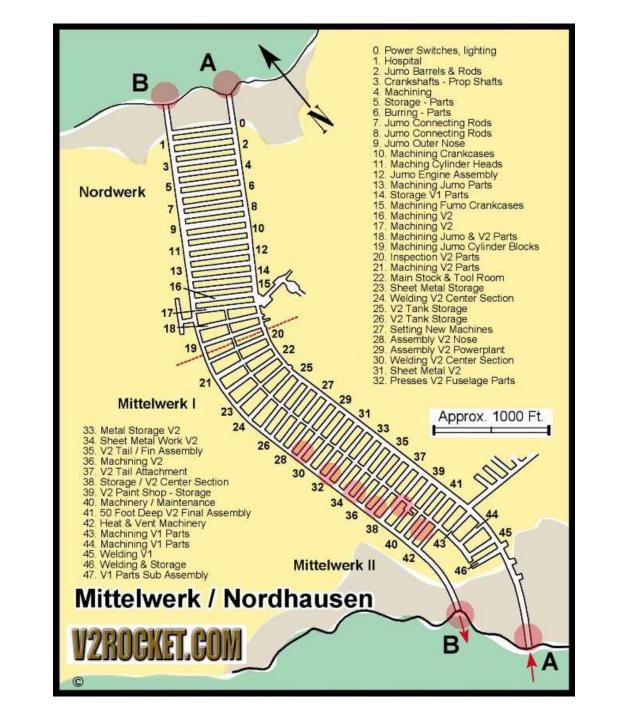


Yves LE MANER & André SELLIER

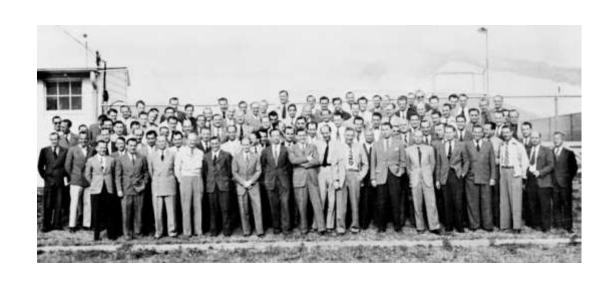


La Coupole Courre d'histoire de la Giserre et des l'asses



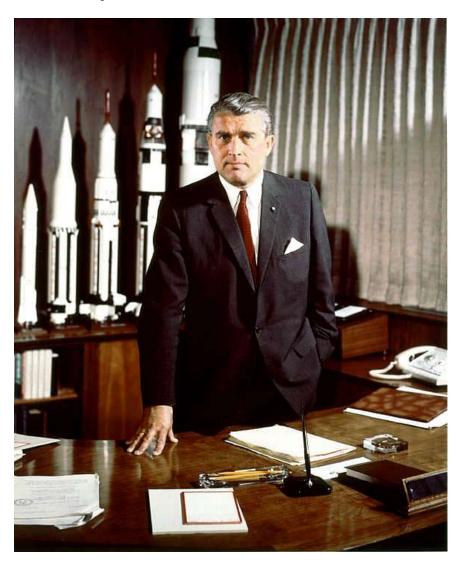


May 1945 Germany surrenders!



- 300 trainloads of V2 rockets are captured and shipped to the US.
- We also took 126 of Germany's rocket designers too!

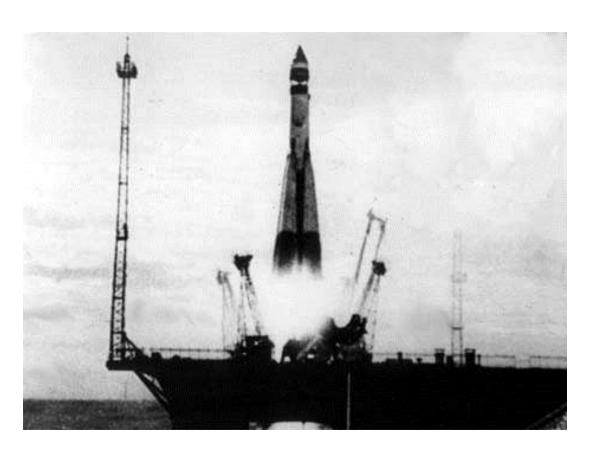
Project Paperclips



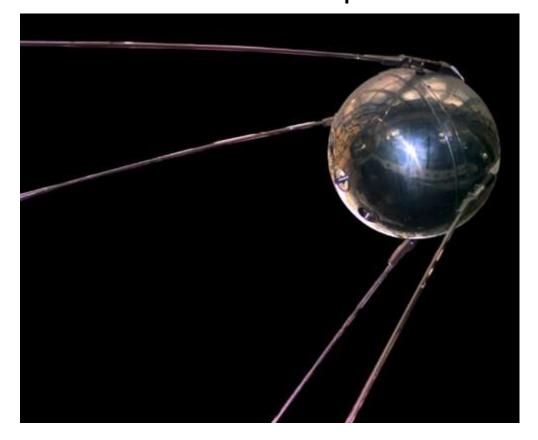
The US and the USSR competition for space



October 4, 1957



• The USSR launched Sputnik 1



State Collage 20 Hollidaysburg 27 Punxsurawaey 19 Morris Twp. 25 DeBais 41 Huntingdea 19 Bellefoate 28 Clearfield 7 Philipsburg 0 Curwensville 13 Penss Valley 12 Clarion 0 Tyrone 12 Lock Havea 6

THE PROGRESS

Russians Launch Man-Made Satellite



Runway Project Parker Dam Drained Clearfield Lions May Be Finished For Cleaning, Will Be To Mark 15th Within Month Restocked With Trout Year Monday

Is More Name For

Acting District

Road Engineer

'It Seems to Me' Progress Colone

West Virginia Toom Coptures U. S. Henors

Hoffa Won't Fire U. S. Scientists Little Moon
First Shot In
Labor Civil War
Warras Uslow Will
Defend Self II
Espelled by APL-00 Sept. Nat analysis of the National Sept. Sept.

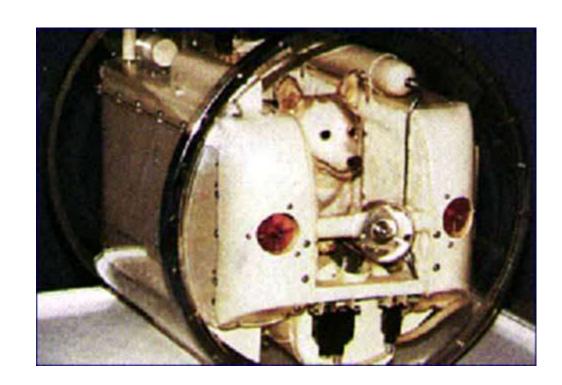
In Arkansas, Rockefeller Says

Flu-Like Illness



Sputnik 2

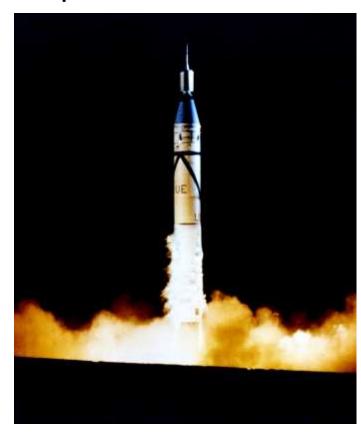
• Sputnik 2 carried a dog named Laika





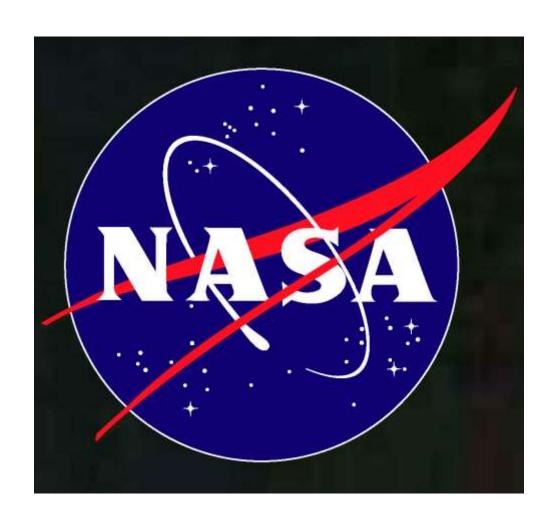
January 31, 1958

• The US space program began with Explorer 1.





NASA is established!



Project Mercury

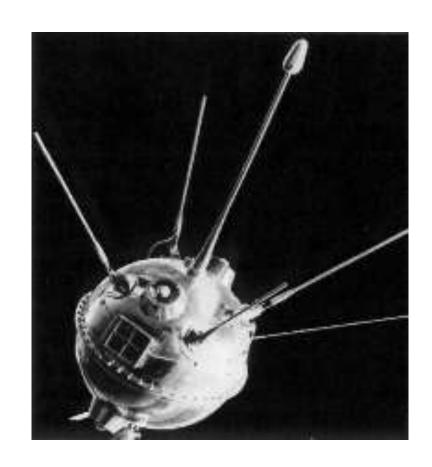
 Goal of this program was to get a human to space, observe how a human performs in space and then return him safely!





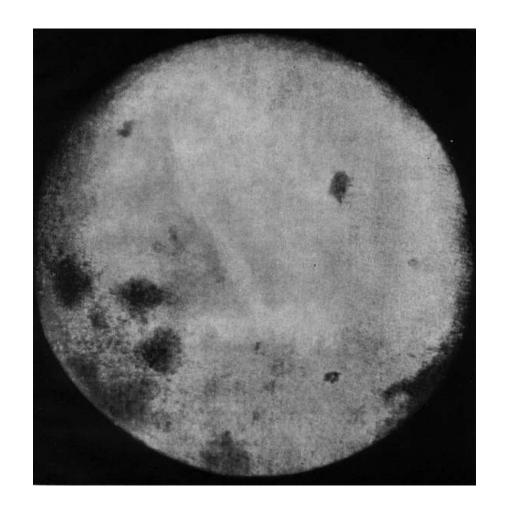
USSR creates Luna 1





The Moon or Bust!

 USSR had hit the moon and taken pictures of the far side of the moon!



In 1960 President Kennedy is elected!



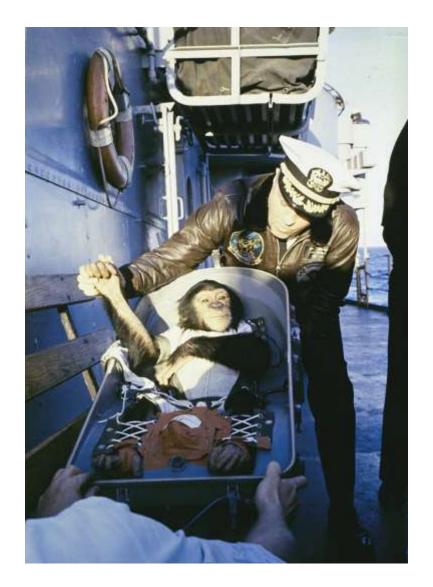
Testing the limits!

• A chimp named Ham is sent on a 16 minute space flight.





Did Ham make it back?



Day #2 — The Space Race Continues

President Kennedy Speaks

Kennedy Speaks



The 1960's are BUSY!

• 1961 – First man in space







Reds Orbit, Recover Space Man, Snatch Another Scientific First

Skeptics Feel Feat May Have Been Earlier

Nikita's Diplomacy May Grow Harder Less Compromising Attitude By Soviet Chief Expected

Merit Plan On Judges

Is Advanced Feed Market Sense Process of the sense of the sense process of the sense process of the sense of

Member, pote-ory and warmer, ASC Head 100 20 to 0 to 100 20 to 0 to 100 20 to 0 to



Muscovites Cheer Success



Three Fire Muscovites Acting Like Pittsburghers After Series

ancke

anche

Asc Head

Drenner, Grabe Barr

As to state the state of the state of





Scientists Praising Soviet Space Feat

Pages 9, 13, 16, 39



May 5, 1961

Alan Shepard becomes 1st
 American in Space







HOME

U.S. Man In Space Returns Safely

Larger Efforts Ahead, JFK Says

'Long Way to Go, We Are Behind in Fields of Space," President Tells Newsmen

WASSPETTIN, No. 2—16— relations Records and today to the retail of Ambrito's first extens specifically depth of the second specific first and the second specific first and the second specific first and the second specific first specific first specific first specific first specific first specific first specific specific first specific

Kennedy Salutes Shopard for Feat, Invites Him to Call at White House

which had a state copied and over it do a tambout "Black to desire the copied and the copied and

Absorbed Bristoner | Security of Security

PG&EPlans DAT'S MAJOR Flight Story in Huge Plant AT A GLANCE Terse Language

Trugge risking

ATA GLANCE

Der Estibay

The Great Annual Control of the Control

And the second s

What a Ride! **Astronaut Quips**

Picked Up in Atlantic After 19-Minute Historic Feat; Could See All East Coast

Ship Named 'Freedom 7'

Puzzle in Tomorrov's

TRIBUNE



President Kennedy wants Congress to finance NASA to put a man on the moon!



67

Space is open to us now; and our eagerness to share its meaning is not governed by the efforts of others. We go into space because whatever mankind must undertake, <u>free</u> men must fully share.

I therefore ask the Congress, above and beyond the increases I have earlier requested for space activities, to provide the funds which are needed to meet the following national goals:

First, I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to earth.

This is a technological enterprise in which we are well on the way to striking progress, and which gives promise of some day providing a means for even more exciting and ambitious exploration of space, perhaps beyond the moon, perhaps to the very ends of the solar system itself.

Third, an additional \$50 million will make the most of our present leadership by accelerating the use of space satellites for world-wide communications. When we have put into space a system that will enable people in remote areas of the earth to exchange messages, hold conversations,

and eventually see television programs, we will have achieved a success as beneficial as it will be striking.

Fourth, an additional £75
million -- of which £53 million is for
the Weather Bureau -- will help give us
at the earliest possible time a satellite system for world-wide weather
observation. Such a system will be of
inest*mable commercial and scientific
value; and the information it provides
will be made freely available to all
the nations of the world.

Let it be clear that I am asking the Congress and the country to accept a firm commitment to a new course of action --

years and carry very heavy costs -- the and estimated \$7-9 billion additional over the next five years. If we were to go only halfway, or reduce our sights in the face of difficulty, it would be better not to go at all.

Let me stress also that more than the property of the control of the pob.

This decision demands a major national commitment of scientific and technical manpower, material and facilities, and the possibility of their diversion from other important activities where they are already thinly spread. It means a decree of dedication.

The US suffers a setback

• The hatch on the Liberty Bell 7 blows and the capsule sinks to the bottom of the ocean





The USSR strikes back!

August 1961 they complete the first day long flight.

The US strikes back!

• February 1962 John Glen has the first orbital flight for the US.





John Glen – A National Hero

"Al the Now Bork Times. LATE CITY EDITION THAT STATE OF THE CITY EDITION THE CITY EDITION THE CITY EDITION THAT STATE OF THE CITY EDITION THE CITY EDITION

PICKED UP IN CAPSULE BY DESTROYER; PRESIDENT WILL GREET HIM IN FLORIDA

GLENN ORBITS EARTH 3 TIMES SAFELY;











Jersey Bus Strike Settled; KENNEDY PRAISES The President's Statement OL (LEN FLOW)



A USSR first in 1962

Vostok 3 launches!

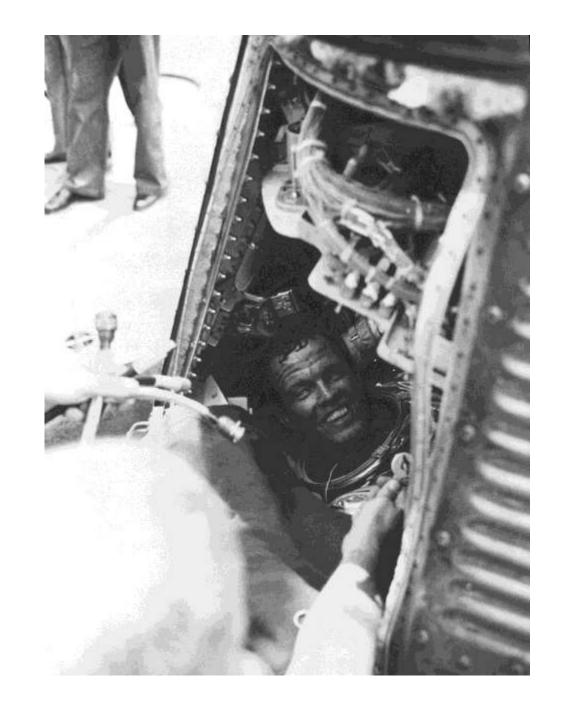


One day later Vostok 4 launches!

They become the first country to control 2 rockets in orbit.

1963

• Gordon Cooper becomes the 1st American to sleep in space.



USSR 1963

• They send the first woman into space.





The US has a setback

• President Kennedy is assassinated in Dallas, TX.



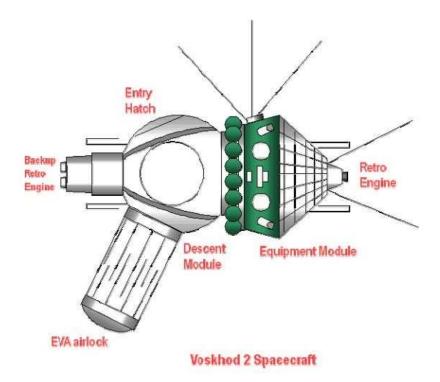


1965 – a USSR first

• They conduct the first spacewalk.

• A spacewalk is when astronauts leave the spacecraft and can move outside of the spacecraft.







THE LINCOLN STAR

ISSIAN TAKES SPACE SWIM

Johnson Offers

To Call Guard

Netgrout, Mr. 45-20, tries to state materials in Carry, C. Naline and publy in recorded like product American in triest and triest state of the st

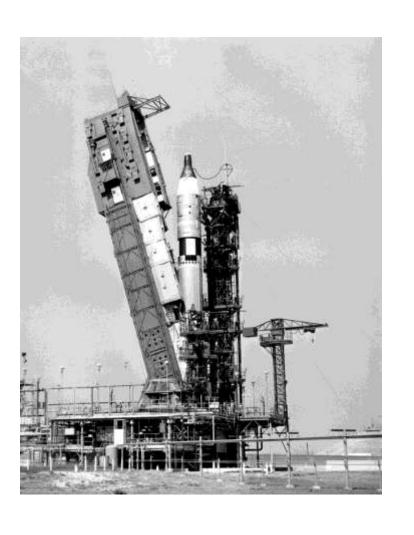


a fine of the case of the case

Target Soon To Be Moon



The US would not be outdone in 1965!







Project Gemini begins for the US

 These missions were designed to be longer and include multi-ship docking.

• Gemini means "twin"...why would NASA need these missions to be

successful?







The birth of Apollo

• 1967 NASA began the famous Apollo Missions



Meanwhile, back in the USSR

• Yuri Gagarin is killed in a fighter jet crash.



Apollo Missions

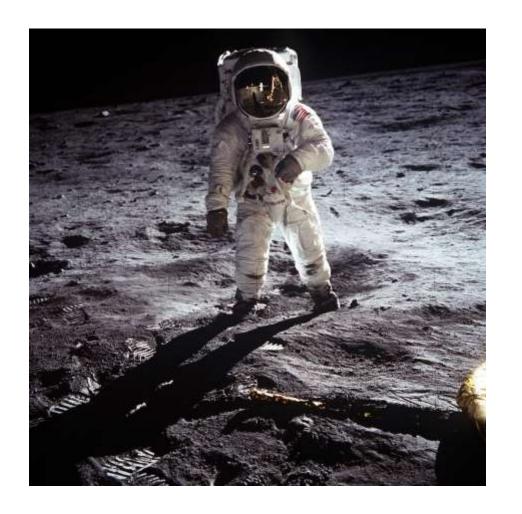
Apollo 1 – blew up before launching





Apollo 11

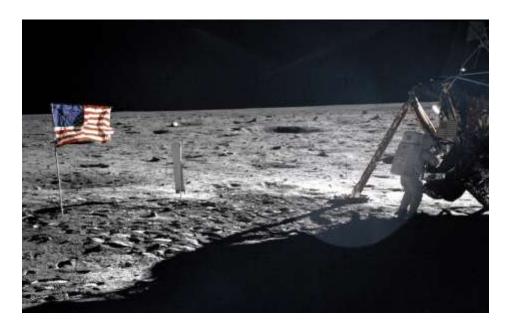
- Americans had successfully landed on the moon.
- It took less than 10 years to complete this task



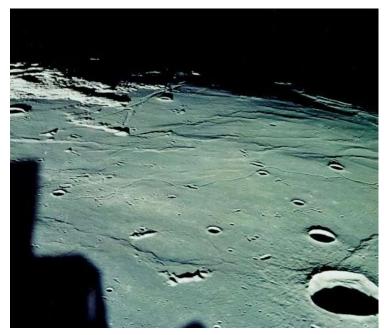


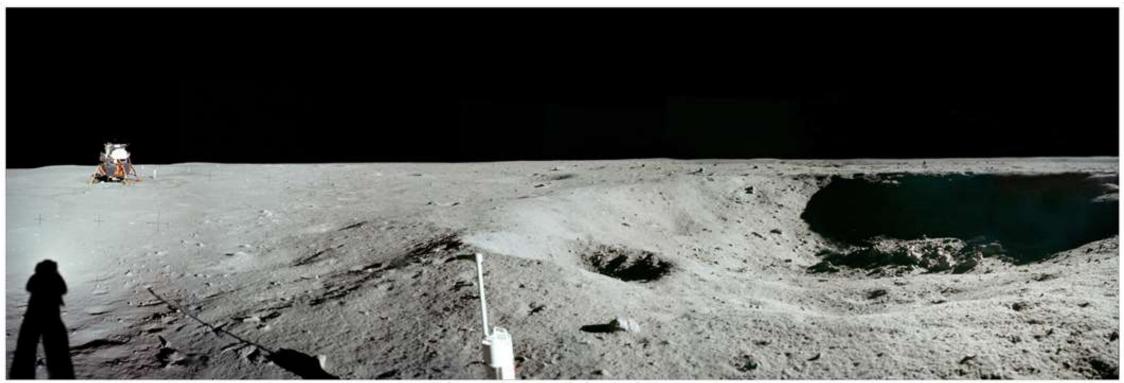












Apollo 11 - Commander Neil Armstrong's pan of East Crater, with LM Eagle in the background

'One Small Step For Man... One Giant Leap For Mankind'

We're On The Moon: Liftoff Scheduled This Afternoon

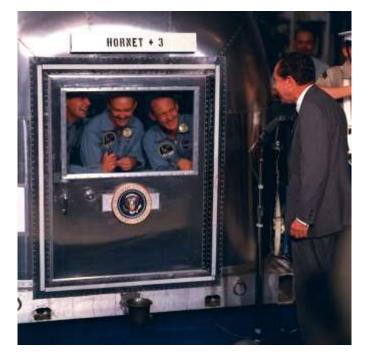








"Coming Down . . . Looking Good . . . Eagle Has Landed!"







Apollo 13

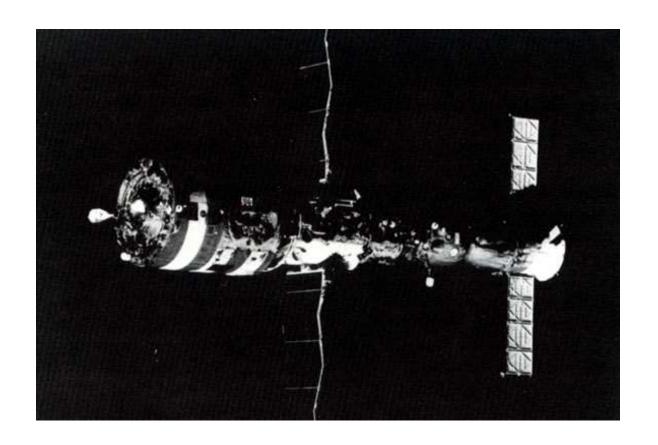
- Failed to land on the moon due to system failures.
- They made a movie about this mission.





The first space station

• Launched in 1971 by the USSR



Soyuz-Apollo Joint Mission



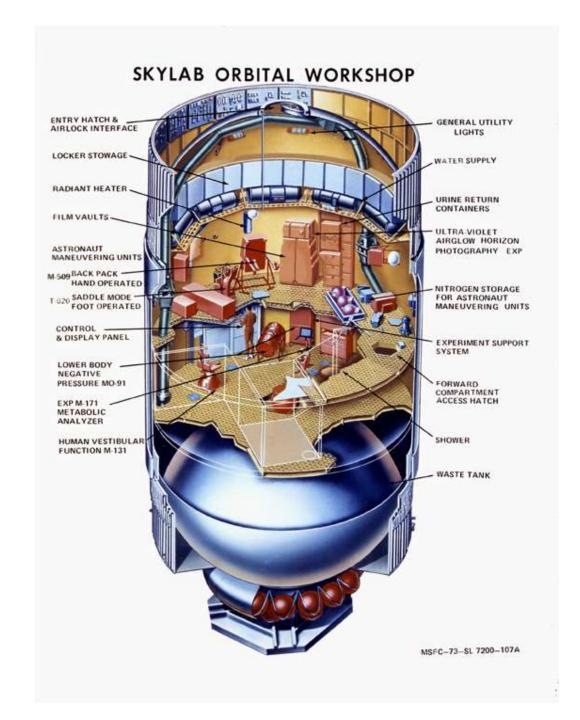
- July, 1975
- Video Clip

Day #3 — The Space Race Comes to an End

Skylab

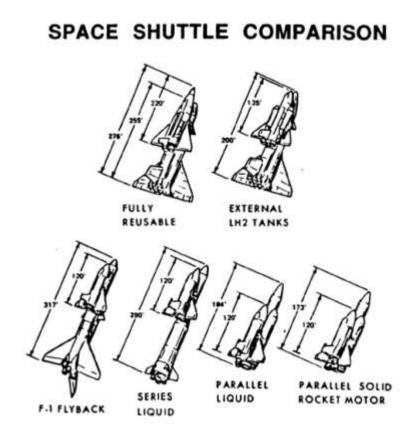
• 1973 – the US space station





1976 – Space Shuttle Enterprise

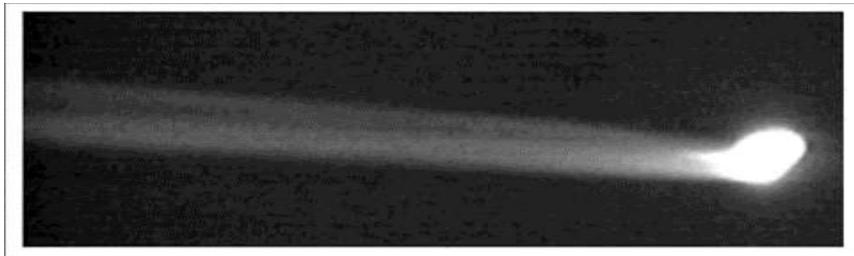
 Originally called the Constitution, but fans of Star Trek petitioned the White House to change the name.



April 12, 1981

 Columbia has heat tile issues.
 Crew said had they known of this issue at take off, they would have ejected to safety.





June 18, 1983

• Challenger 7 – Carrying the first woman.





August 30, 1983

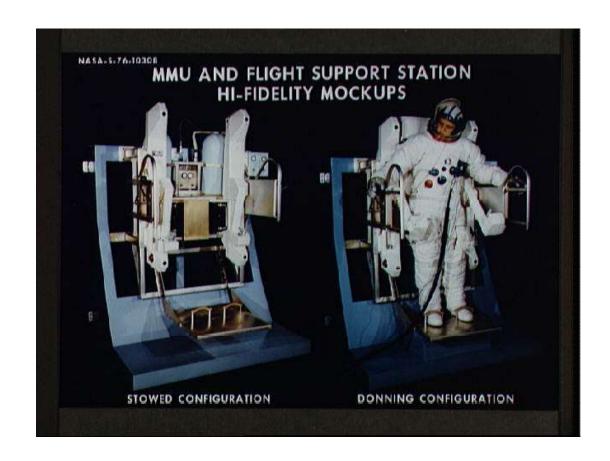
Challenger 8 – First African
 American in space

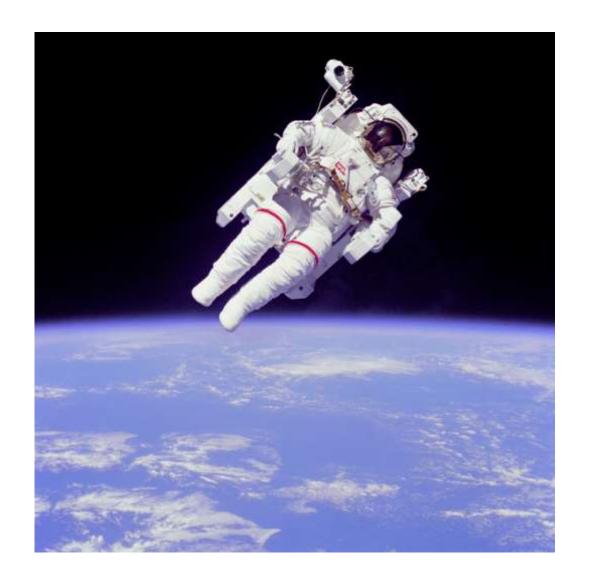


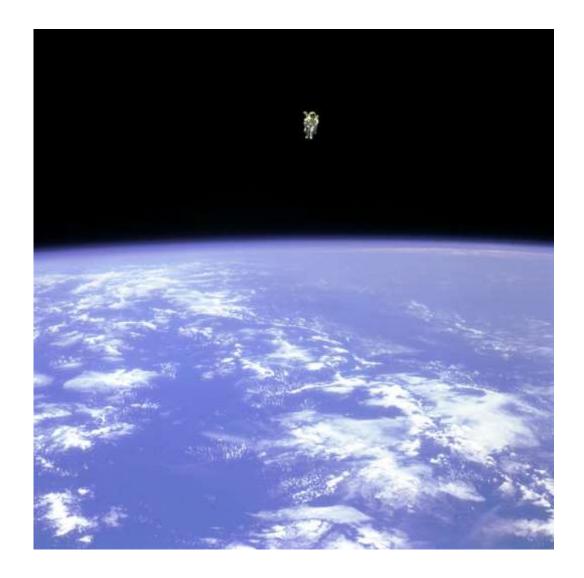


February 3, 1984

• Challenger 10 – first untethered space walk.





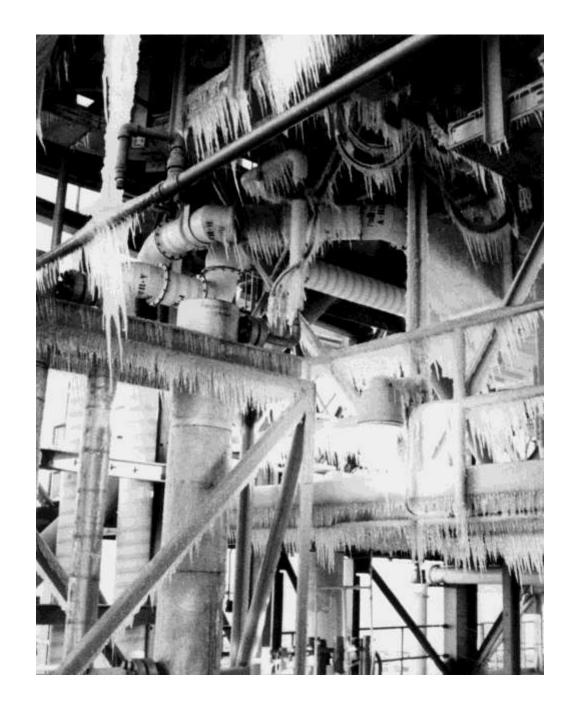


January 28, 1986

• Challenger launched carry the first teacher.





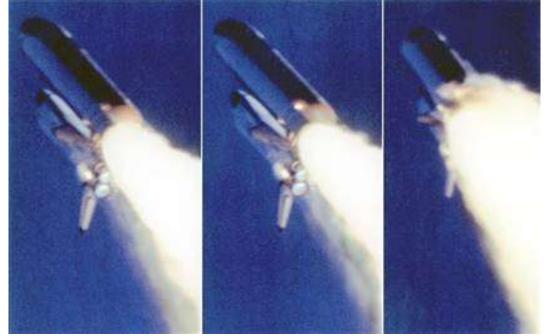


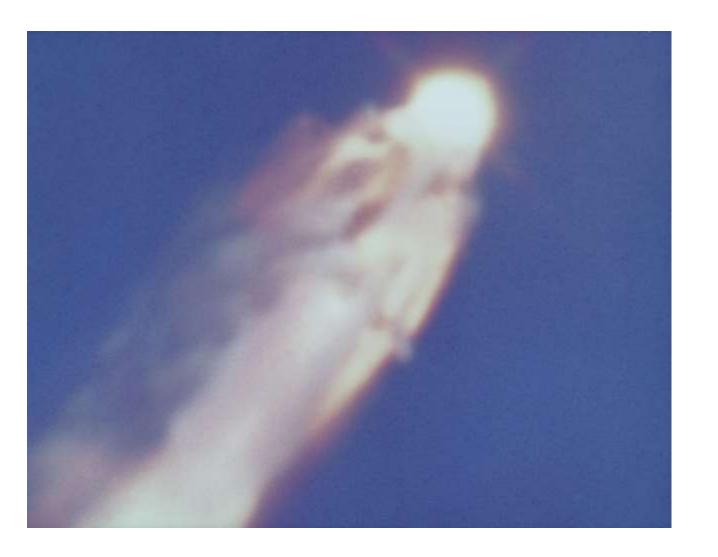






















February 1986

- USSR launches MIR.
- This was the first space station



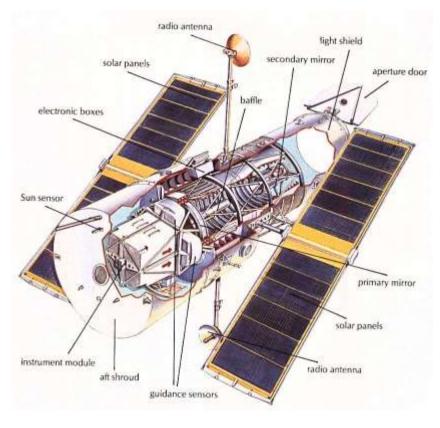
April 24, 1990

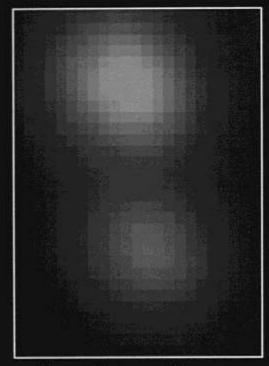
• The US launches the first pieces of the Hubble Telescope.



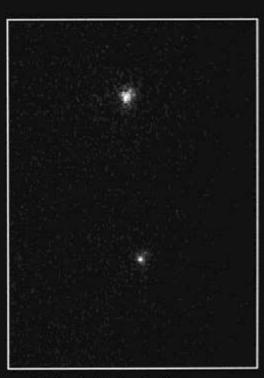








Ground-based Image Nordic Optical Telescope



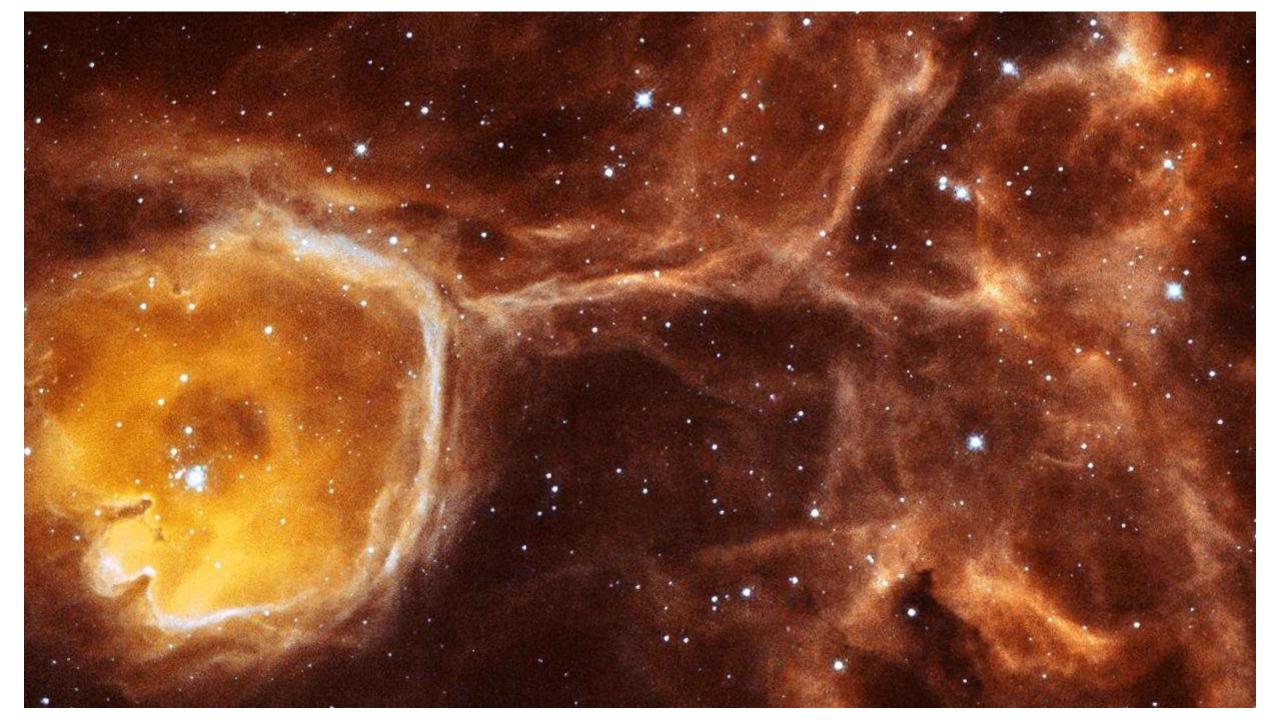
Faint Object Camera Hubble Space Telescope

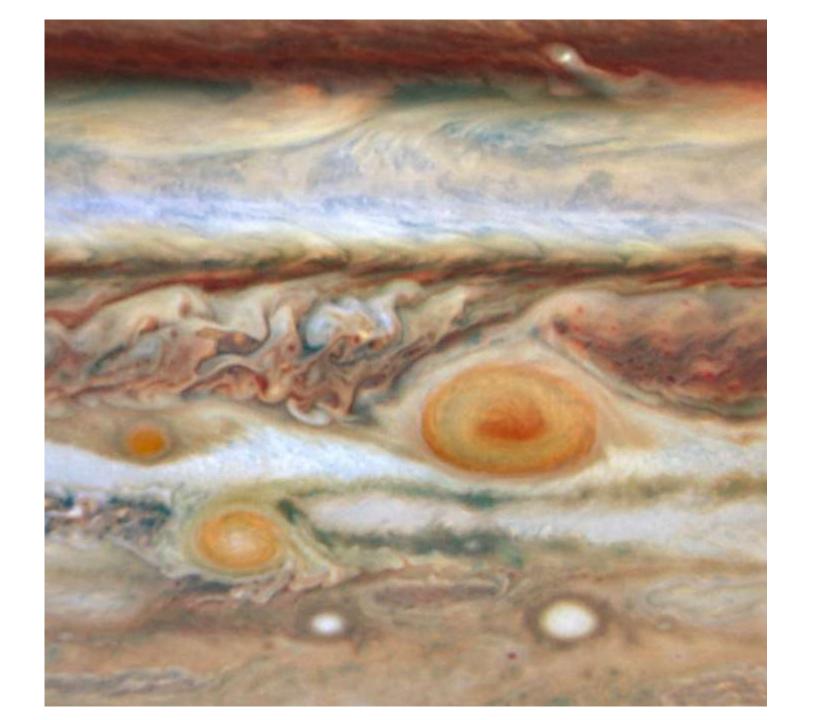
NASA















June 27, 1995

• The US Shuttle docks with MIR



November 20, 1998

• The first pieces of International Space Station (ISS) is launched on a Russian rocket.





