

Manned Space Exploration

From Start to Gemini

The Space Race

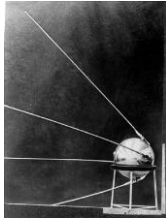
- USA & Soviet Union were allied to defeat Hitler during WWII.
- Germany had all good rocket scientists.
- Once we defeat Hitler, we take $\frac{1}{2}$ & USSR takes $\frac{1}{2}$ of the rocket scientists so we can make bigger, better weapons.
- Cold War starts at the end of WWII.
- Arms race starts between US & USSR



Click on the picture to follow link to You Tube

USSR Takes the Lead

- USSR takes the lead by:
 - 1st Satellite in space – Sputnik
 - 1st living thing in space – Laika the dog
 - 1st person in space & to orbit – Yuri Gagarin



US Plays “Catch Up”

- We get rocket scientist Werner Von Braun from Germany after WWII
- JFK establishes NASA – **National Aeronautics and Space Administration**
- **Our rockets are unreliable – explode often**



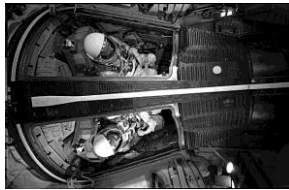
We decide to go..

- Kennedy makes his famous speeches



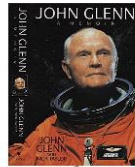
USA Manned Space Program

Program	# of Astronauts	Purpose
Mercury	One astronaut	To see if we could survive or live in space
Gemini	Two astronauts	To see if we could work and Rendezvous
Apollo	Three Astronauts	Land safely and explore the moon
Shuttle	5 – 7 astronauts	Cargo ship to transport into low Earth orbit
International Space Station	Varies	Permanent Manned presence in space



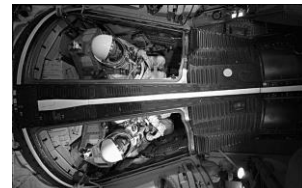
Project Mercury

- Purpose: See if man could survive in space
- 1 astronaut per flight
- Original Mercury 7 Astronauts: **Alan Shepard, Gus Grissom, John Glenn, Wally Schirra, Scott Carpenter, Gordon Cooper and Deke Slaton**
- **1st American in space: Alan Shepard** (oops, he had to go potty)
- **2nd American in space: Gus Grissom**
- **3rd American in space & 1st in orbit: John Glenn**



Project Gemini

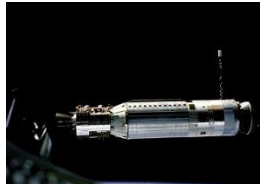
- Purpose: To see if we could work and Rendezvous
- 2 astronauts per flight
- 12 Gemini flights, 10 were manned
- Major objectives achieved
 - rendezvous and docking with other orbiting vehicles
 - maneuver the docked vehicles in space
 - Space walk
 - Perfect reentry & landing spacecraft



Gemini 3 – 1st 2 manned flight (Grissom & Young)



Gemini 4 - ED White: 1st USA to Space Walk



Gemini 8 – Neil Armstrong -Docked but tumbled out of control, crew almost lost



Gemini 6 & 7 – in space at same time, dock together successfully

End of Part 1