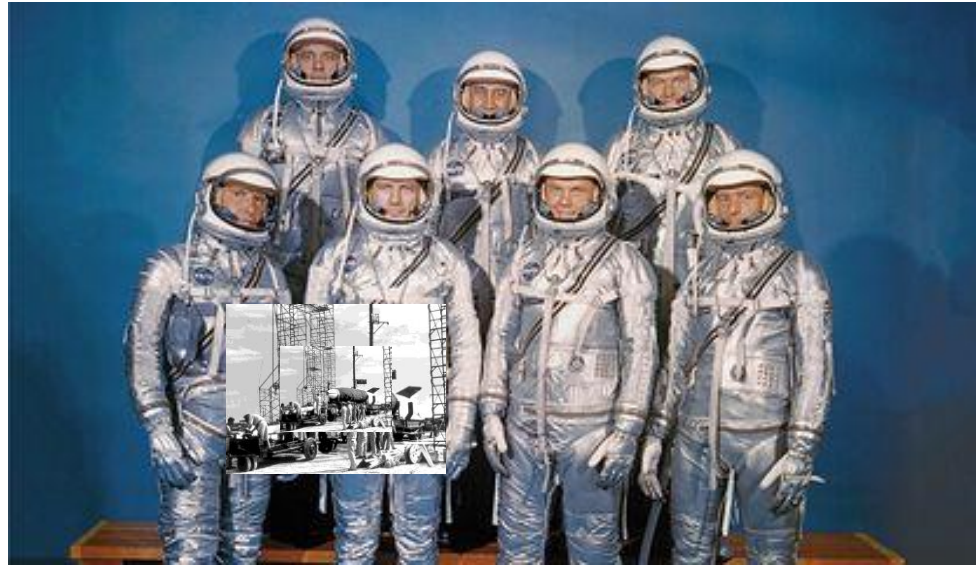


# Cape Canaveral Air Force Station History





## Creation of Missile Test Range at Cape Canaveral, Florida

- Prior to and during World War II, Germany was vastly ahead of the rest of the world in missile warfare research and development
- Following WWII, political friction between the United State and the Soviet Union resulted in accelerated expansion in defensive weaponry between both sides, which eventually lead to the “Cold War”
- Collecting as much valuable technological information as possible – to include missile development -- from the Germans at the end of WWII, both the Soviet Union and the U.S. started an armament competition that pushed technology to unprecedented levels
- By the end of the 1940s, the U.S. had selected Cape Canaveral, Florida, as the location for testing missile technology due to its sparsely populated location near the coast and Great Britain’s permission granted to the U.S. to allow our rockets to overfly Bermuda
- The area started being cleared for launch complexes in 1949, but was not an easy task as workers had to deal with poisonous snakes, the Florida heat, alligators, and enormous mosquitos



# Eastern Test Range

- The late 1940s and early 1950s saw constant change at the Cape as the critical urgency to research, develop, test, build, and deploy missile weaponry changed the landscape
- Established as a military station, the Air Force changed station names frequently
- The first name for the military station in 1950 was *Joint Long Range Proving Ground* and fell under the headquarters of Patrick Air Force Base
- Even though components for the rockets were built in other facilities around the country, they were shipped to, assembled, and tested at the Cape
- As experience and expertise evolved, more missile variants were created, requiring more land to be cleared and more facilities to be built
- Construction was at a frantic pace, both on-base and off-base



# Launch pads and blockhouses

- 'Launch Complexes' were sites that were cleared for monitoring and launch of rockets
- They included a concrete pad, assembly area (if done at the pad), vehicle transport (truck or train), structural gantries (allowing access to lower and upper sections of rocket), underground passageways, and 'blockhouses'
- Blockhouses were structures which housed the launch control center and consisted of personnel and equipment
- The first blockhouse was a temporary plywood structure that was formerly a local bathhouse and was set up 500 feet from the launch site
- Later blockhouses were made of concrete and sand with walls sometimes 8 feet thick -- but were still located very close to the launch site





## Economical and housing effects on local communities

- The Cape Canaveral area was a miserable place to live and work in the early 1950s
- Housing was so scarce in the local towns of Cocoa, Cocoa Beach, and Titusville that workers had to live in tents until quarters were built
- The rapid growth by 1960 around the Air Force Missile Test Center had increased by 371% due to the influx of engineers, technicians, scientists, and their families
- Cocoa Beach in particular became a classic “boomtown”, along with the once small sleepy towns of Titusville and Cocoa



# Space age “Space Race” with the Soviet Union

- The race into space took on a new life when the Soviet Union successfully launched their satellite “Sputnik 1” on October 4, 1957 at 7:28pm
- The military and political implications caused a critical acceleration to the U.S. space program
- In quick response, the U.S. launched “Explorer 1” on January 31, 1958 – which marked the beginning of the U.S. Space Age, and the beginning of the Cold War “Space Race.”



Soviet Union’s Sputnik 1



United States’ Explorer 1

# United States' emerging spaceflight program

- National Air and Space Administration was established in 1958
- The new agency had a distinctly civilian orientation and worked with the military to continue the ultimate quest for manned spaceflight and eventual landing on the moon
- *Project Mercury* was the first human spaceflight program and ran from 1958-1963 and its goal was to put a man into Earth orbit and return him safely
- *Project Gemini* was the second human spaceflight program which ran from 1961-1966 and pioneered the orbital maneuvers necessary to achieve space rendezvous and docking
- *Project Apollo* was the third human spaceflight program which ran from 1966-1972 and succeeded in landing the first humans on the moon
- Kennedy Space Center was built just to the north of the Cape Canaveral Air Force Station, but did not become operational until December 1968, after which all of the manned spaceflight operations moved to this new facility during the Apollo and Shuttle programs
- Cape Canaveral Air Force Station continued to launch missile tests, satellites, and spaceflight exploration missions – and continues very much in use today
- The lessons learned in the missile program directly transferred to the manned space program, as seen with the replacement of only the space capsule for the warhead on the Redstone missile



# Mercury 7

## America's first astronauts

**NOTE:** All astronauts at this time were required to be test pilots

Virgil Ivan "Gus"  
Grissom



WWII U. S. Army aviator  
Korean War U. S. Air Force aviator  
Second American to fly in space  
Killed during Apollo 1 prelaunch test in  
a fire at the launch pad



Alan Shepard  
U. S. Naval aviator  
First American to travel into space  
Walked on the moon in 1971

John Glenn



U. S. Marine Corps aviator  
First American to orbit the world,  
circling 3 times in 1962  
U.S. Senator for Ohio 1974-1999  
Flew into space in 1998 at the age of 77

Donald Kent "Deke"  
Slayton



WWII U. S. Army Air Corps aviator  
Only original Mercury 7 astronaut not to fly in Mercury  
program due to a heart condition  
First Chief of the Astronaut Office and Director of Flight  
Crew Operations



# Mercury 7

## America's first astronauts (Continued)

**NOTE:** All astronauts at this time were required to be test pilots

Gordon Cooper



U. S. Air Force aviator

First American to spend entire day in space and sleep in space  
Piloted last Mercury program spaceflight mission and the last astronaut to orbit the earth flying solo

Scott Carpenter



U. S. Naval aviator

Second American to orbit the earth  
Joined U.S. Navy SEALAB project as an aquanaut  
Spent 28 days living on the ocean floor off the California coast on SEALAB II project

Walter Schirra Jr.



U. S. Naval aviator

Only original Mercury 7 astronaut to fly in Mercury, Gemini, and Apollo programs

## **A walkthrough History of the Cape Canaveral Air Force Station**

**Objectives:** Students will develop an understanding of the role and purpose of the nation's missile and space program in Florida's history

SS.4.A.4.1 Explain the effects of technological advances on Florida

SS.4.A.6.3 Describe the contributions of significant individuals to Florida

AA.4.A.8.3 Describe the effect of the United States space program on Florida's economy and growth

**Essential Question:** How would the state of Florida be different today if Cape Canaveral and the missile testing and space program had selected another location besides Florida? How would this have affected Florida's economy and tourist industry?