

The Centennial of Naval Aviation

1911 - 2011



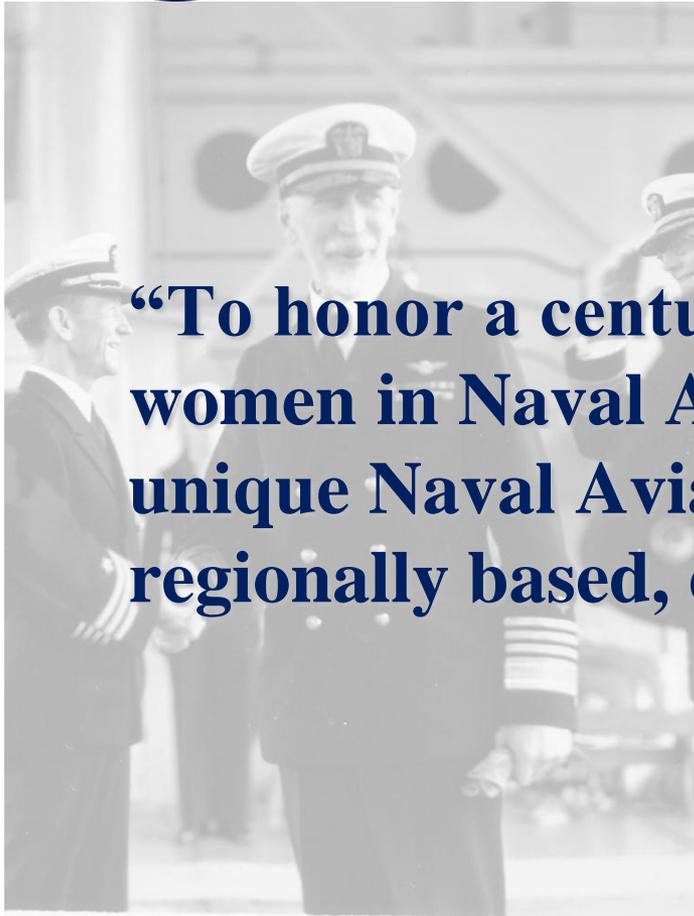
Celebrating 100 Years
of Progress and Achievement





Centennial Mission Statement

“To honor a century of mission-ready men and women in Naval Aviation and to recognize unique Naval Aviation achievements through regionally based, event driven celebrations.”





March 25, 1898

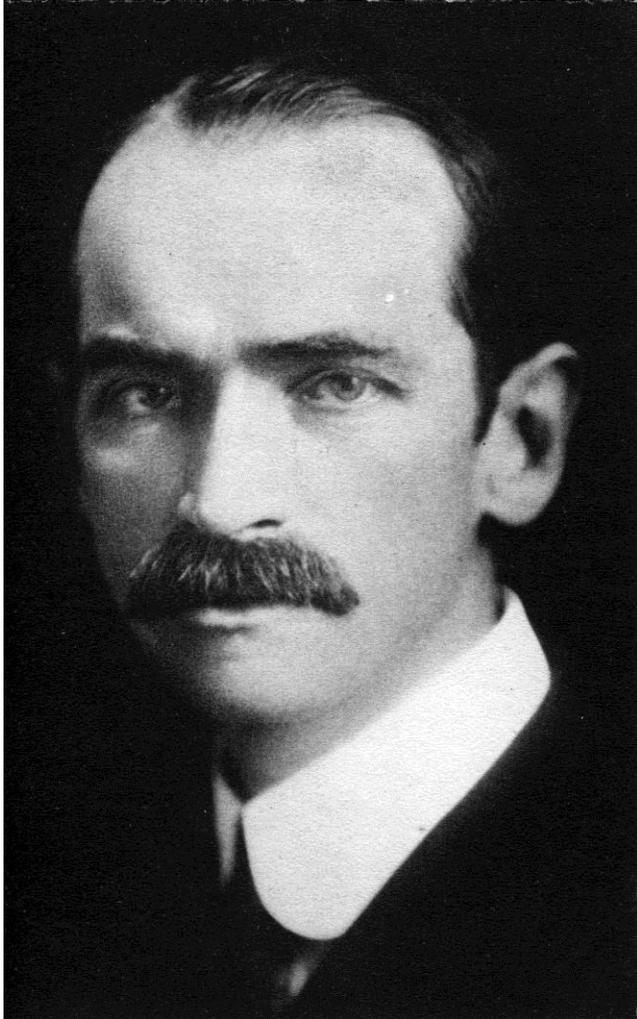


Assistant Secretary of the Navy Theodore Roosevelt recommended to the secretary that he appoint two officers, with representatives from the War Department, to examine Professor Samuel P. Langley's flying machine and report on its practicability and potentiality for use in war.

In the following years representatives from the Navy were at air meets and demonstrations staged by the Wright brothers in 1908 and 1909.



Glenn Hammond Curtiss



Civilian Entrepreneur/Early Aviation Pioneer

- 1887-1930. Born in Hammondsport, NY
- Quest for more speed
 - Builder of bicycles, gasoline motors and eventually motorcycles
- Becomes interested in aviation as a market for Curtiss gasoline motors
- Partner in Aerial Experiment Assn
- Wins permanent possession of Scientific American trophy for aerial flight
- Knew the key market for the aeroplane was the military

“Father of Naval Aviation”



CAPT Washington Chambers

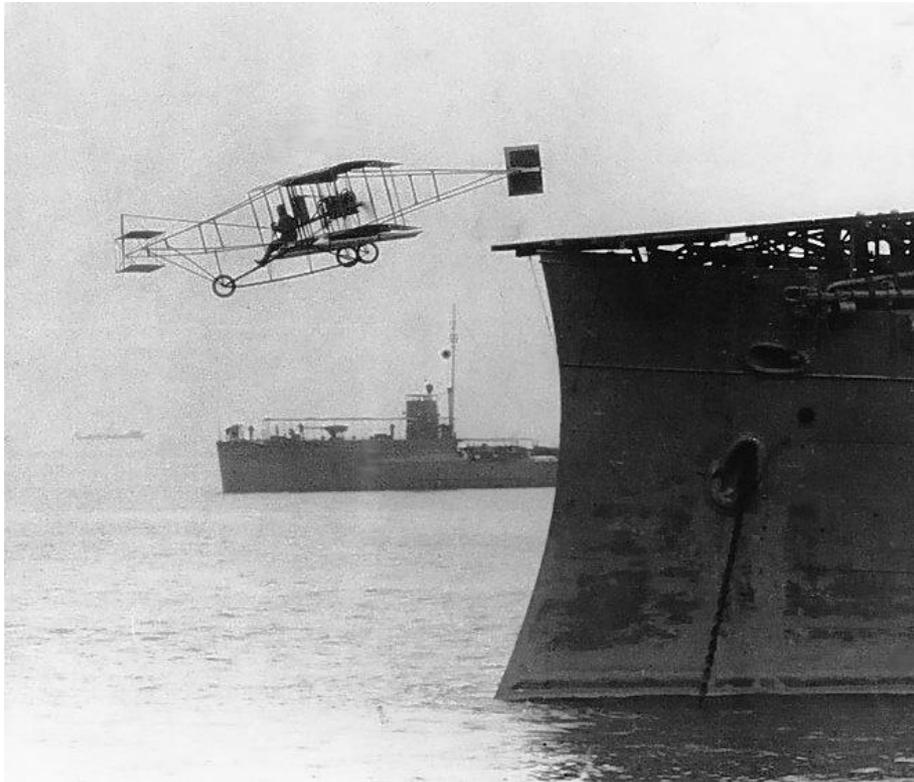


First Aviation Officer for the Navy

- September 16, 1910, Chambers was designated the person whom all aviation matters were to be referred.
- Addresses all correspondence to Navy dealing with aeronautics.
- In 1910, he was told by the Navy that aerial machines “did not merit funding.”



First Successful Takeoff From Ship

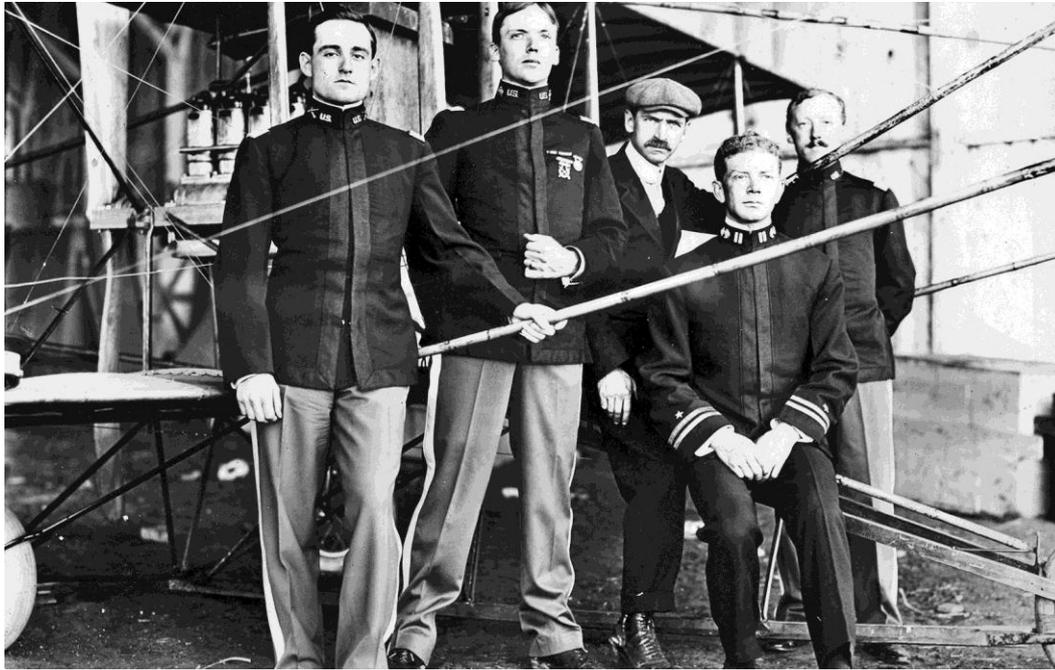


November 14, 1910

- USS BIRMINGHAM (CL-2, Armored Cruiser) with temporary wooden deck installed
- Chesapeake Bay, VA
- Eugene Ely, civilian pilot flying the Curtiss "Hudson" Flyer



Curtiss Flying School



November 29, 1910

- Curtiss writes SECNAV offering free flight instruction to one military officer.

December 23, 1910

- School opens at North Coronado Island, CA
- 1st class includes 3 Army officer and 1 Navy officer.

From left to right:

Capt John Walker, USA, Capt Paul Beck, USA, Glenn H. Curtiss,
LT Theodore Ellyson, USN, and Capt George Kelly, USA.



LT Theodore “Spuds” Ellyson



Naval Aviator # 1

- Detailed to Curtiss flying school in December 1910
- Flight instruction at North Coronado Island in San Diego Bay
- Supports Curtiss Development of Hydroaeroplane
- Flies A-1 Triad on July 1, 1911



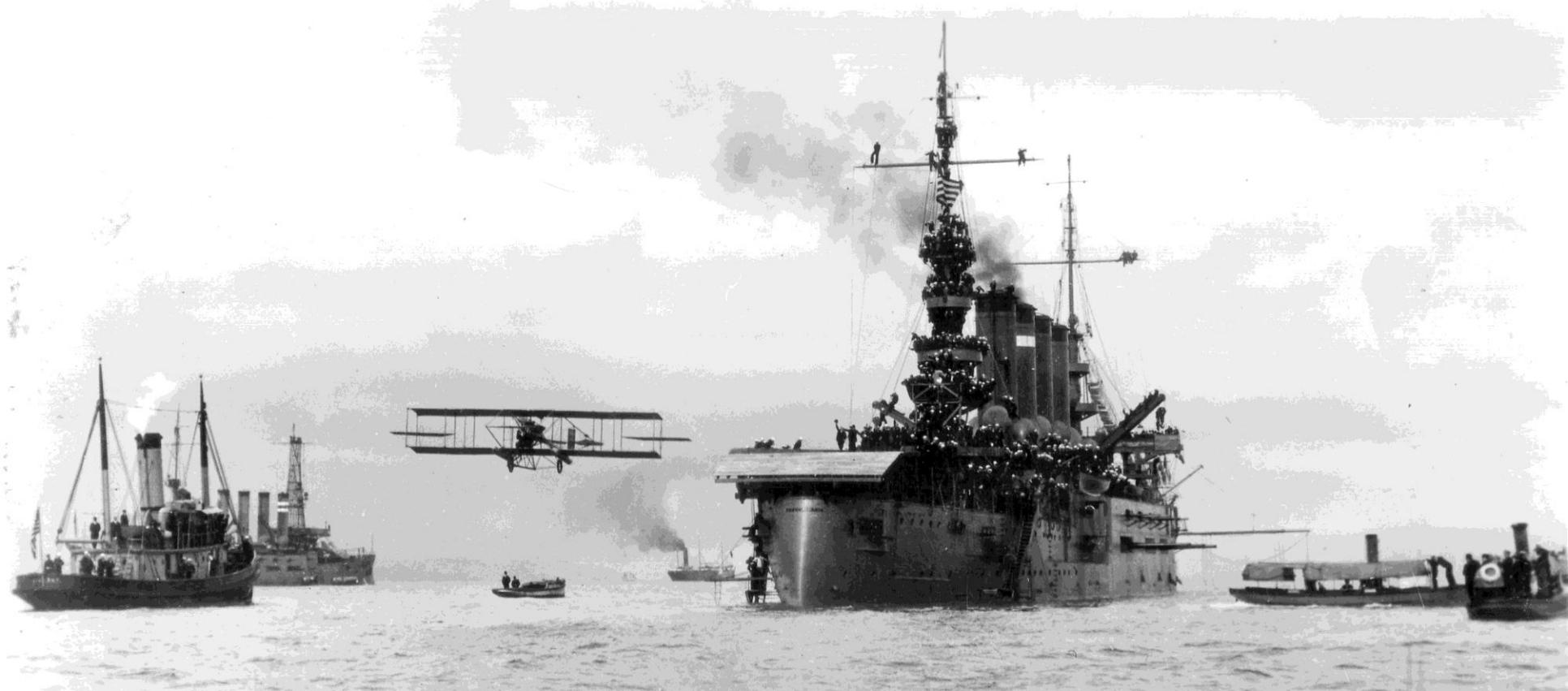
First Landing on Ship



January 18, 1911
USS PENNSYLVANIA, San Francisco Bay, CA



Subsequent Take-off

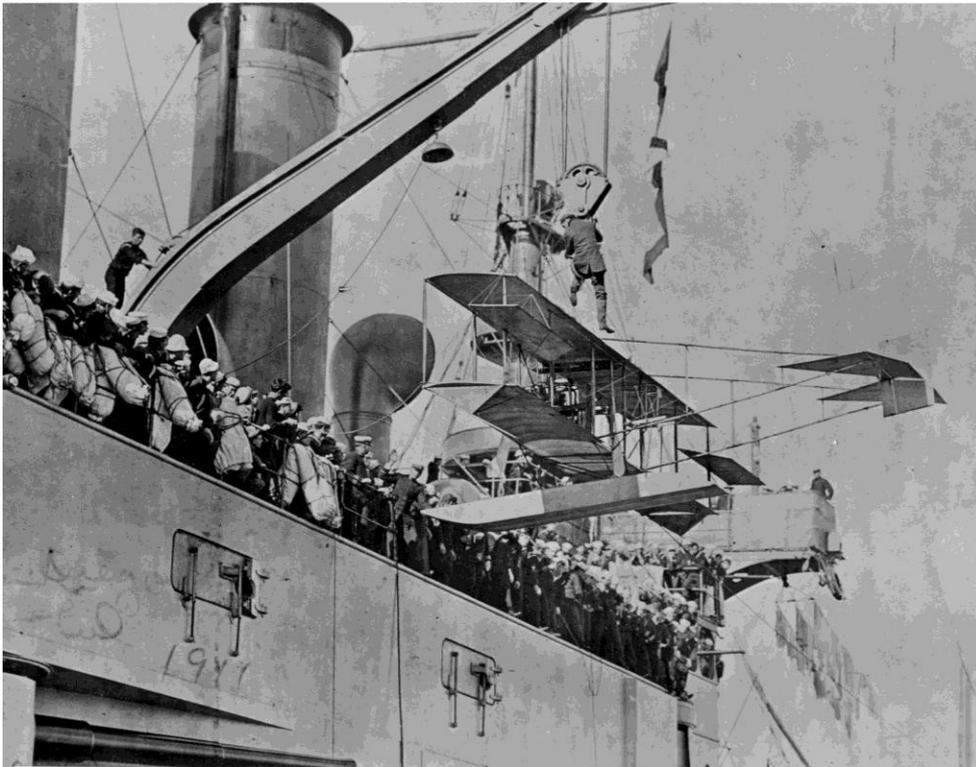


Take-off one hour later, January 18, 1911
USS PENNSYLVANIA, San Francisco Bay, CA



San Diego Bay – February 17, 1911

SECNAV Meyer States:

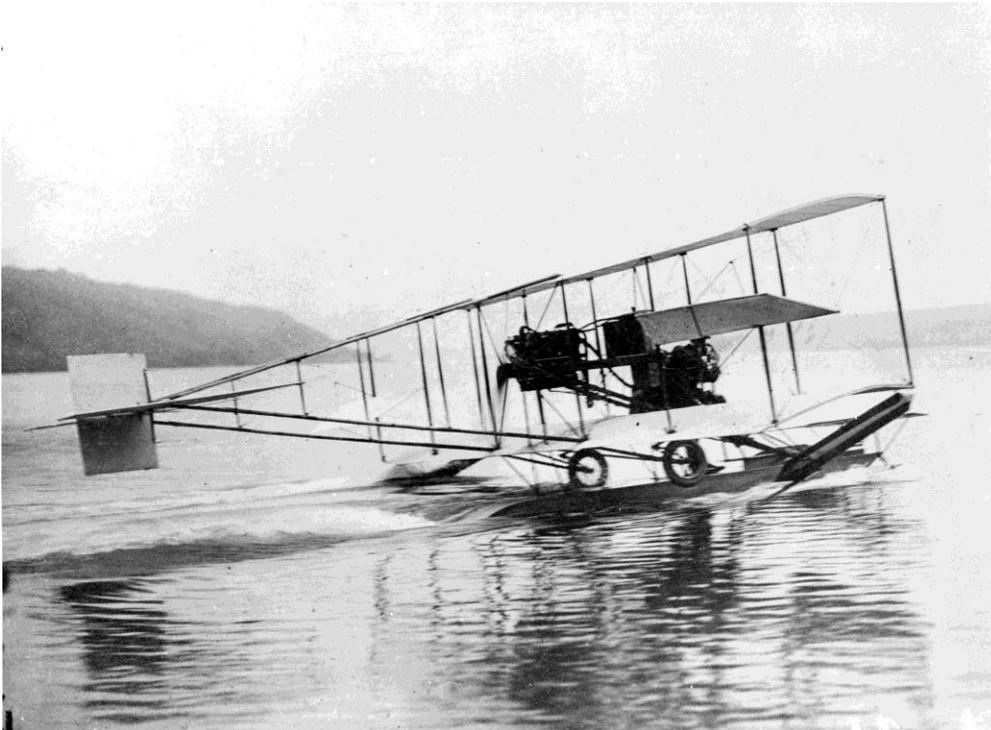


- "When you show me that it is feasible for an aeroplane to alight on the water alongside a battleship and be hoisted aboard without any false deck to receive it, I shall believe the airship is of practical benefit to the Navy."
- Curtiss obliges February 17, 1911
- Meyer supports a \$25,000.00 appropriation for Naval Aviation to purchase aircraft



Navy's First Aircraft

Curtiss A-1 Triad



- Ordered May 8, 1911 marking the official “Birthday of Naval Aviation”
- “Triad” because it flies the skies and can land on sea or ground with its retractable beaching gear
- Delivered to Navy at Hammondsport NY July 1, 1911



First Marine Aviator



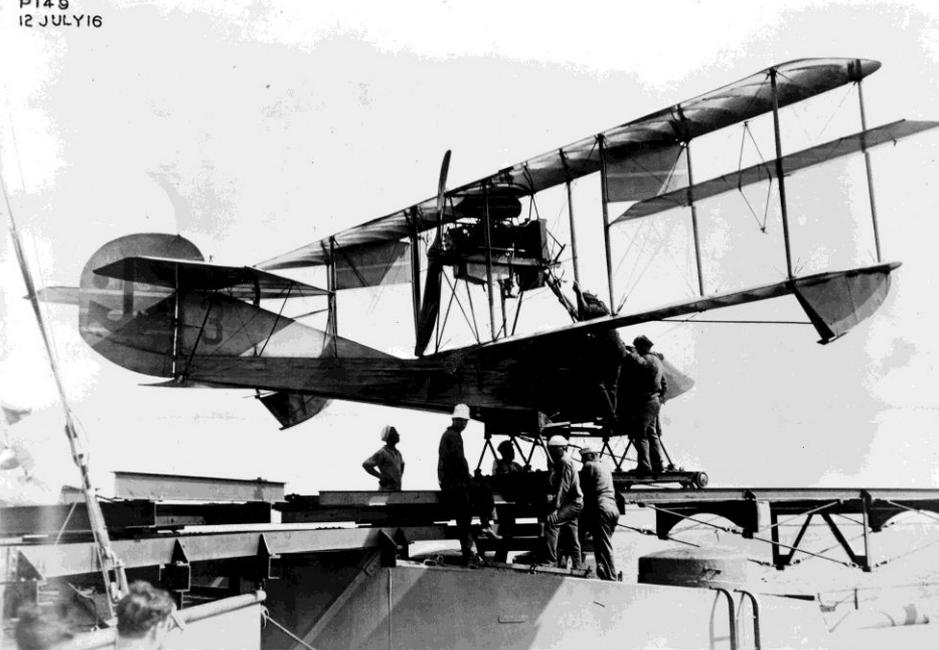
1st Lt Alfred A. Cunningham, USMC

- Naval Aviator Number 5
- Marine Aviator Number 1
- Taught to fly by Burgess
- May 22, 1912- reports to aviation camp at Annapolis, MD marking the official “Birthday of Marine Aviation.”



First Combat – Mexico 1914

P149
12 JULY16



From USS MISSISSIPPI to Veracruz,
Mexico

- April 25, 1914
- AB-3 Flying Boat
- LT Bellinger and LT Saufley taken under fire
- First ordnance expended from Navy aircraft was a bar of soap



First Coast Guard Aviator

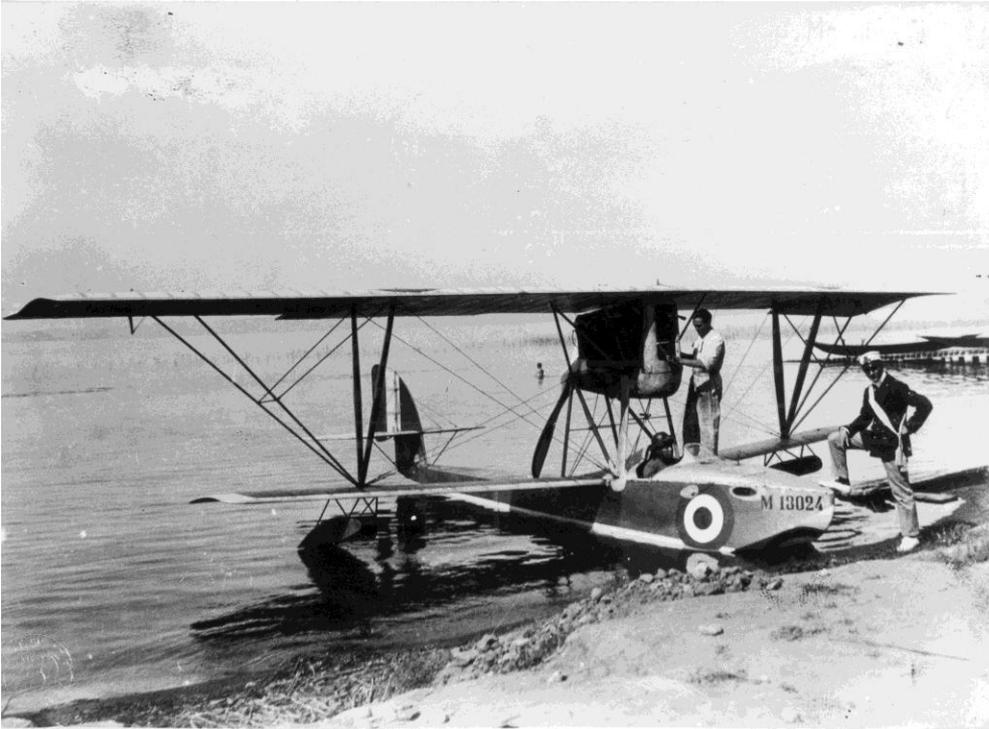


LT Elmer Stone, USCG

- Earned wings April 10, 1917
- Naval Aviator Number 38
- Coast Guard Aviator Number 1
- One of the Pilots of NC-4 on the first successful transatlantic flight



World War I

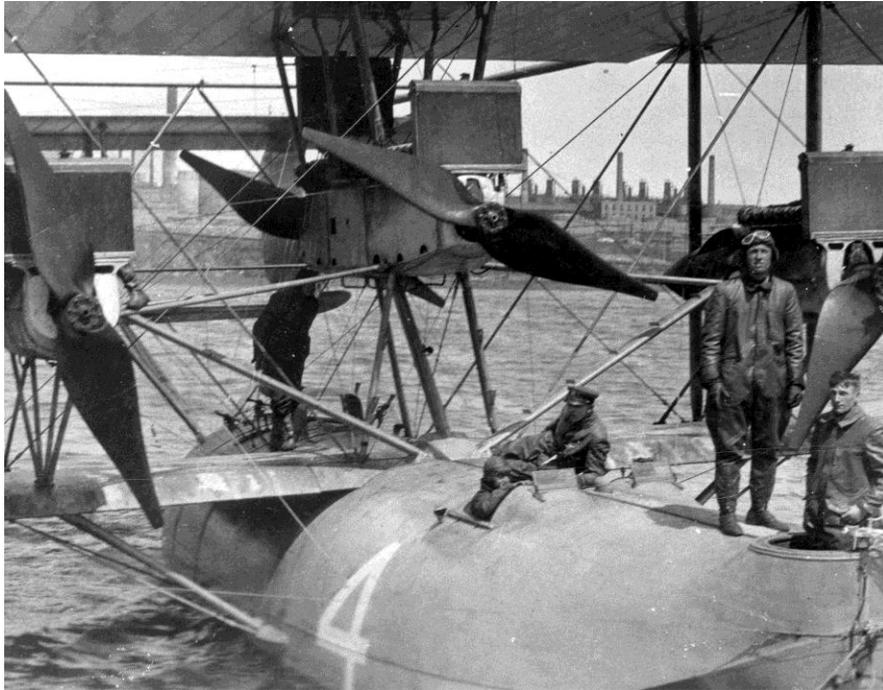


Macchi M.5

- At start, USN had ~52 aircraft. By the end, over 2,000.
- First Yale Unit
 - Included LTjg David Ingalls, first Navy Ace
- 1st Naval Aviator Medal of Honor
- US contribution in aircraft primarily in Curtiss seaplanes
- Marines
 - Northern Bombing Group flying DH-4s and DH-9s



NC-4: First Across the Atlantic



Three aircraft for attempt:

- NC-1 ditched at sea - Recovered
- NC-3 ditched at sea - Sailed to Azores
- NC-4 successfully completes flight, May 1919



USS LANGLEY (CV-1) 1922

Navy's First Carrier



- Converted collier USS JUPITER
- Re-commissioned in 1922
- First takeoffs and landings in 1922
- ADM Reeves develops the weapon
- Converted to seaplane tender in 1936 before it sunk in Java Sea February 27, 1942



LEXINGTON and SARATOGA 1927



First two Fleet Carriers

- Built as Armored Cruisers converted during construction
- Biggest US carriers until Midway Class
- Prove independent offensive carrier ops in Fleet Problem IX in 1929.
- LEXINGTON (CV-2) sunk at Coral Sea
- SARATOGA (CV-3) survives war but is sunk at Bikini





USS RANGER (CV-4) 1934



First carrier to be designed and built from the keel up

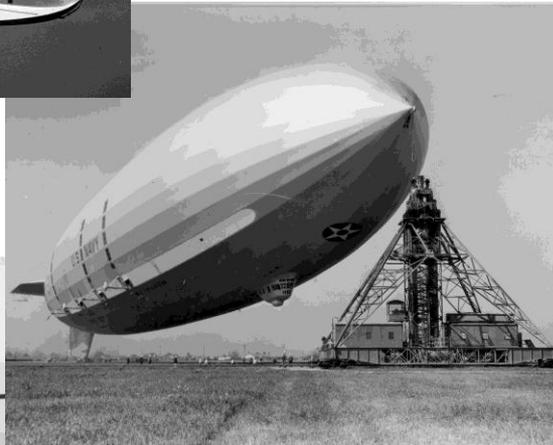
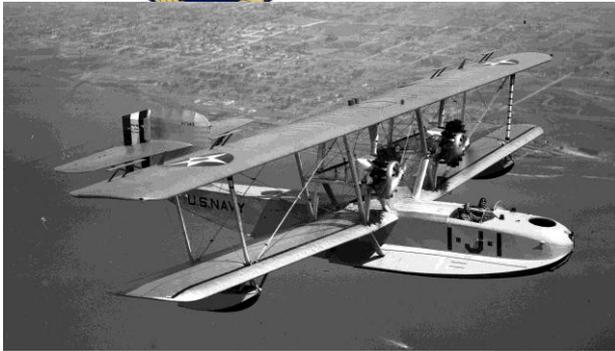
- Commissioned June 4, 1934
- Participated in both Atlantic and Pacific in WWII.
- Survives War – then scrapped



The Golden Age 1920 -1940

Naval Aviation comes of age

- Navy Bureau of Aeronautics
- Airships
- Seaplanes
- Autogiros
- Transition from wood to metal, enclosed cockpits, retractable gear, monoplane
- Fleet problems establish tactics





WWII - The Tide Turns



- Tokyo: April 1942 - US Army Air Force B-25s bomb mainland Japan from USS HORNET
- Coral Sea: May 1942 - Opposing forces never in sight of one another
- Midway: June 1942 - 1 US and 4 Japanese carriers sunk,
- Guadalcanal: August to November 1942 - A foothold in the Solomons



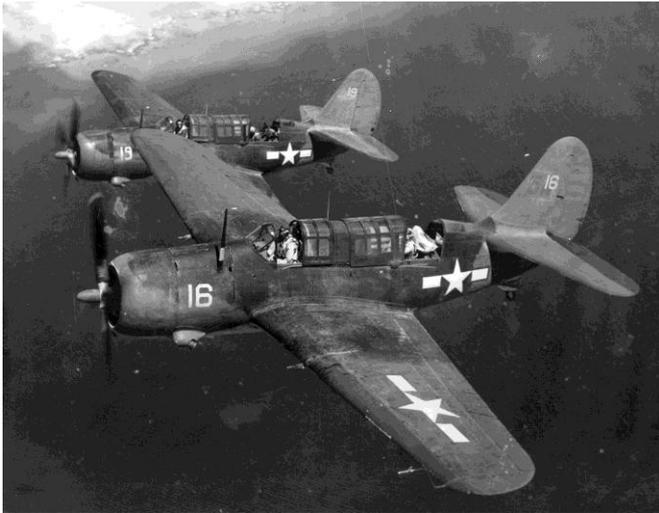
Hit Hard, Hit Fast, Hit Often: 1943-45



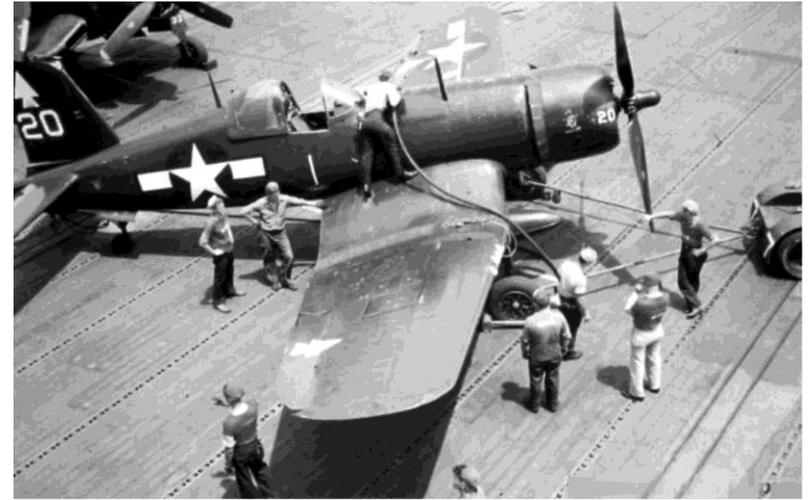
- US industrial base reaches its stride, over 40,000 aircraft in inventory
- New classes of Fast Attack, Light and Escort Carriers
- Aircraft under development begin to reach the fleet (F6F, F4U, SB2C)
- Island hopping/bypass



Victory 1945



Curtiss SB2C
Helldiver



Chance Vought
F4U Corsair



Grumman F6F
Hellcat



Post WWII: A New Way of Business



McDonnell FH-1 Phantom



Sikorsky R-4

- Midway Class Carrier
- Helicopter
- Gas Turbine Propulsion
- Guided Missiles
- Pilotless Aircraft
- Admiral's Revolt - 1949



Korea: 1950 - 1953



Vought F4U-5NL Corsair

- First aviation on station is Navy
- Close Air Support
- Medevac / Search and Rescue
- Pilotless aircraft



Grumman F9F Panther



Sikorsky HO3S



Post Korea



- Second “Golden Age” of Naval Aviation
- Jet is adapted to carrier use
 - Steam catapult
 - Angled Deck
- Missile technology
- Many experimental aircraft in post-Korea years
- Airborne Early Warning
- Anti-Submarine Warfare





Vietnam 1962 - 1975



Sikorsky UH-34 Sea Horse



McDonnell Douglas F-4 Phantom II

- Helicopter essential tool in aerial assault, CSAR and light attack
- Very first use of precision guided munitions (late war)

Lessons learned set stage for next generation of aircraft and capabilities

- PGMs
- Electronic Attack
- Airborne Early Warning
- Stealth
- Tactics
- Joint operations



Post-Vietnam



Grumman F-14 Tomcat

- F-14 and F/A-18
- AV-8A
- Precision guide munitions development
- LAMPS ASW helicopters
- Mine hunting



Desert Shield/Storm



Grumman A-6E Intruder

- Joint Air Operations
 - Air Tasking Order
- Precision weapons used in quantity
- Six carriers
- UAVs



Current Hardware





Future



F-35C



P-8A



F-35B



MH-60R



X-47B



Ways to find out more



Official Navy Site:

www.navy.mil/centennialofnavalaviation

Facebook

“Like” – Naval Air Forces

Twitter

@flynavy

Quarterly magazine – “Centennial”

All issues available at official
Navy site and under the “Boxes”
tab on Facebook



Centennial of Naval Aviation 1911-2011

**Thank you for your support
and celebration of the
United States Sea Services!**