1911 – First Navy aircraft purchased from the Glenn Curtiss company of Hammondsport, NY

1921 – Bureau of Aeronautics was created. Prior to that, the ownership of all aircraft was distributed across the Navy

At the start of World War II, the Navy had 1,800 combat aircraft. By the end of the war, the Navy had 41,000 total aircraft.

1959 – BUAER merged with Bureau of Ordnance (BUORD) to form Bureau of Naval Weapons (BUWEPS)

1966 – Naval Air Systems Command (NAVAIRSYSCOM) established

1985 – NAVAIR now reports directly to Chief of Naval Operations (CNO)

1990’s – NAVAIRSYSCOM moves to Patuxent River Naval Air Station
NAVAIR’s Role in Naval Aviation

- Develop, acquire and support aircraft, weapons and related systems which can be operated and sustained at sea
- Provide analysis and decision support for cost / schedule / performance trades and investment decisions
- Increase Navy and Marine Corps capability, readiness and affordability in a joint / coalition environment

Our capabilities support the unique mission of naval aviation
NAVAIR Commander’s Intent

Three Priorities: MISSION – PEOPLE – RELATIONSHIPS

Shared Identity – We are providers. We enable readiness and field capabilities that meet Fleet requirements.

Shared Vision – Taking readiness and speed to new levels of performance will ensure the Fleet’s success

Strategic Imperatives: Increase Readiness and Speed

Increase material readiness
Deliver new capabilities with increased speed

Roles & Responsibilities:

Commands (NAWCs, FRCs) and PEOs own & execute; Competencies support
Team leads are empowered to LEAD

“NAVAIR’s success is measured by program / Fleet success. We share ownership in their performance and outcomes.” – VADM Dean Peters
“We must continue to improve our readiness for today’s fight, while at the same time ensuring we remain relevant for the conflicts we know will come in the future.”

– CMC Robert Neller

“Message from the Commandant”

“We have got to move faster. We have got to learn faster. We’ve got to adjust our acquisition systems to adopt that technology faster… I need an acquisition system that will allow for quick technology refreshes to continuously improve performance, rather than relying on massive game changers every 20 years”

– CNO John Richardson
## Strategy Alignment

<table>
<thead>
<tr>
<th>CNO</th>
<th>NAVAIR</th>
<th>CMC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengthen Naval Power</strong>&lt;br&gt;Ready to operate and fight, and advance information warfare capabilities</td>
<td><strong>Increase Readiness, Affordability and Speed</strong>&lt;br&gt;Ready to fight tonight – Capabilities and capacity to win the future</td>
<td><strong>Readiness</strong>&lt;br&gt;Expand readiness efforts, and experiment and test new concepts and capabilities</td>
</tr>
<tr>
<td><strong>High Velocity Learning at All Levels</strong>&lt;br&gt;Accelerate learning, innovation and creativity, and expand learning-centered technologies</td>
<td><strong>Learning, Knowledge Management</strong>&lt;br&gt;Encourage creativity, innovation, hands-on learning through collaboration tools</td>
<td><strong>Training and Simulation</strong>&lt;br&gt;Ensure business models and operating concepts are relevant and adaptive, and focus on innovation and learning</td>
</tr>
<tr>
<td><strong>Strengthen our Navy Team for the Future</strong>&lt;br&gt;Accelerate Sailor 2025 efforts and strengthen leadership development programs</td>
<td><strong>Agile, Adaptive Workforce</strong>&lt;br&gt;Smaller, flexible and empowered teams that take well understood, balanced risks, and develop leaders at all levels</td>
<td><strong>People</strong>&lt;br&gt;Ensure our workforce is the right size with the right skill sets, and focus on new-age training/education continuum</td>
</tr>
<tr>
<td><strong>Expand/Strengthen Network of Partners</strong>&lt;br&gt;Integration with Joint Services and increase interaction with industry, non-traditional partners</td>
<td><strong>Mature Government / Industry Partnerships</strong>&lt;br&gt;Robust government, industry and service partnerships, and FMS engagement</td>
<td><strong>Integration with Naval and Joint Force</strong>&lt;br&gt;Shape our force to operate as part of the Joint Force to leverage capabilities of all branches</td>
</tr>
</tbody>
</table>

Source: A Design for Maintaining Maritime Superiority Released 5 Jan 2016

Source: USMC FRAGO: Advance to Contact Released 19 Jan 2016
NAVAIR Snapshot

Full Life-Cycle Management
- Requests, Risks from Fleet, OPNAV
- Materiel Solution Analysis
- Technology Maturation & Risk Reduction
- Engineering and Manufacturing Development
- Production & Deployment
- Operations & Support

Products
- Tactical Aircraft
- Air ASW, Assault & Special Mission
- Unmanned Aircraft & Strike Weapons
- Common Systems, Mission Systems, Training, ALRE

NAWCWD
West Coast Hub
- Point Mugu
- North Island
- Atsugi, Japan

NAWCAD
East Coast Hub
- Patuxent River
- Cherry Point
- Lakehurst
- Jacksonville
- Orlando

COMFRC
Fleet Readiness Centers
- NAWCWD

FY16 Workforce Numbers
- 27,298 Civilians
- 1,654 Military
- 8,875 Contractors
Command Reporting Relationships

ASN (RD&A) ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT, AND ACQUISITION)

PEO (T) TACTICAL AIRCRAFT PROGRAMS

PEO (A) AIR ASW, ASSAULT & SPECIAL MISSION PROGRAMS

PEO (U&W) UNMANNED AVIATION & STRIKE WEAPONS

PEO (JSF) JOINT STRIKE FIGHTER

NAVAL AIR SYSTEMS COMMAND PATUXENT RIVER COMMANDER AIR-00

NAVAL HEADQUARTERS

NAVAIR HEADQUARTERS

NAVAIR RESERVE PROGRAM RESERVE DEPUTY COMMANDER

AIR-1.0 PROGRAM MANAGEMENT ASST. COMMANDER

AIR-2.0 CONTRACTS ASST. COMMANDER

AIR-7.0 CORPORATE OPERATIONS & TOTAL FORCE ASST. COMMANDER

AIR-10.0 COMPTROLLER

AIR-11.0 COUNSEL

REFERENCES: OPNAV 5450.350 and SNDL 5400.45

AS OF 12 JULY 2018

+ FLEET READINESS CENTERS (FRCs)

ECHELON II

ECHELON III

ECHELON IV

* REPORTS DIRECTLY TO AIR-00 FOR RESPECTIVE AREA OF RESPONSIBILITY
** REPORTS DIRECTLY TO AIR-09 FOR RESPECTIVE AREA OF RESPONSIBILITY + 4 INDUSTRIAL SITES FROM TOTAL OF 8 FRCs REPORT UP THROUGH COMFRC TO AIR-00
The Navy’s principal RDAT&E, engineering and fleet support activity for naval aircraft, engines, avionics, support systems and ship/shore/air integration.
Naval Air Warfare Center Weapons Division

Mission

The Naval Air Warfare Center Weapons Division (NAWCWD) is an organization within NAVAIR dedicated to maintaining a center of excellence in weapons development for the Department of the Navy.

Research and Development
Ranges and Facilities to Test and Evaluate Navy Systems
In-service Support/System Phase-out
Missiles/Freefall Weapons
Weapon System Integration
Electronic Warfare Systems
Land Range/Sea Range
Non-Lethal Weapons

Naval Air Warfare Center Weapons Division

China Lake, CA
Point Mugu, CA
Mission

Commander, Fleet Readiness Centers (COMFRC) delivers effective and efficient flight-line readiness through a globally managed, responsive and integrated sustainment system.
# Naval Aviation Maintenance

## Three Levels of Aircraft Maintenance

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>Level 1 – Organizational Level</th>
<th>Level 2 – Intermediate Level (Level 2)</th>
<th>Depot Level (Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Aircraft Maintenance</td>
<td>Squadron Level</td>
<td>Components / Engines</td>
<td>Scheduled maintenance</td>
</tr>
<tr>
<td></td>
<td>Servicing</td>
<td>Scheduled maintenance</td>
<td>Modifications</td>
</tr>
<tr>
<td></td>
<td>Replace Parts</td>
<td>In-service Repair</td>
<td>In-Service Repair</td>
</tr>
</tbody>
</table>

*BRAC 2005 Initiative: Single Off-Aircraft Maintenance Organization (COMFRC)*

Field Team In-Service Repair

Manufacture
NAVAIR Products

- Fixed Wing
- Rotorcraft
- Unmanned Air Systems
- Weapons
- Aviation Systems
PEO(A) Programs

- **PMA-261**
  Heavy Lift Helicopters

- **PMA-264**
  Air ASW Systems

- **PMA-275**
  V-22 Osprey

- **PMA-276**
  Light / Attack Helicopters

- **PMA-299**
  Multi-Mission Helicopters

- **PMA-290**
  Maritime Patrol & Reconnaissance Aircraft

- **PMA-271**
  Airborne Strategic Command, Control & Communications

- **PMA-207**
  Commercial Transport & Support

- **PMA-274**
  Presidential / Executive Lift Helicopters
PEO(U&W) Programs

PMA-281
Strike Planning and Execution Systems

PMA-201
Precision Strike Weapons

PMA-263
Small Tactical UAS

PMA-208
Navy Aerial Targets and Decoys

PMA-262
Persistent Maritime UAS

PMA-242
Direct and Time Sensitive Strike

PMA-266
Multi-Mission Tactical UAS

PMA-268
Unmanned Carrier Aviation

PMA-280
Tomahawk Weapons System
AIR-1.0 Programs

PMA-260
Aviation Support Equipment

PMA-226
Specialized and Proven Aircraft

PMA-209
Air Combat Electronics

PMA-205
Aviation Training Systems

PMA-202
Aircrew Systems

PMW/A-170
Communication and GPS Navigation
The Joint Strike Fighter (JSF) Program is the Department of Defense's focal point for defining affordable next generation strike aircraft weapon systems for the Navy, Air Force, Marines, and our allies. The focus of the program is affordability -- reducing the development cost, production cost, and cost of ownership of the JSF family of aircraft.
A group of professionals executing 2,075 work years of international work at eight geographic sites within nine commands, eight competencies, and 28 program offices; managing a portfolio of 1,103 open cases for 85 countries with an overall value of $40.8B and generating sales of $3.9B for FY17.
Delivering Results

<table>
<thead>
<tr>
<th>Actual FY17 Deliveries</th>
</tr>
</thead>
<tbody>
<tr>
<td>135 New Aircraft</td>
</tr>
<tr>
<td>24,291 Missiles / Bombs</td>
</tr>
<tr>
<td>137* Unmanned Air Vehicles (UAV)</td>
</tr>
<tr>
<td>7 UAV Ground Systems</td>
</tr>
<tr>
<td>55 Training Devices</td>
</tr>
<tr>
<td>536 Aircraft Repairs</td>
</tr>
<tr>
<td>(Includes Commercial/Inter-Service)</td>
</tr>
<tr>
<td>1,724 Engine Repairs</td>
</tr>
<tr>
<td>(Includes Commercial/Inter-Service)</td>
</tr>
<tr>
<td>65,159 Component Repairs</td>
</tr>
<tr>
<td>3,360 Support Equipment Repairs</td>
</tr>
</tbody>
</table>

* Includes Program of Record and Non-PoR UAVs for USMC (PMA-263)
Naval Aviation Enterprise

Mission

Sustain required current readiness and advance future warfighting capabilities at best possible cost.

NAVAIR is part of the Naval Aviation Enterprise (NAE)
Led by Commander, Naval Air Forces; Marine Corps Deputy Commandant for Aviation; Commander, NAVAIR
Includes all naval aviation communities
Facilitates collaboration, information sharing and process improvement
Helps stakeholders understand costs, readiness degraders and resources
Ensures naval aviation is aligned, from the warfighter at sea or on the ground to the providers in government and industry