



# AM – Aviation Structural Mechanic

**Aviation Structural Mechanic** maintains all aircraft main and auxiliary hydraulic power systems, actuating subsystems and landing gear. Responsible for maintenance on the aircraft fuselage (mainframe) wings airfoils, and associated fixed and moveable surfaces and flight controls.

Aircrew volunteers from this rating perform in-flight duties in various types of aircraft.

These technicians may also volunteer to fly as Naval aircrew. Aircrew performs numerous in-flight duties and operates aircraft systems in turbojet, helicopter, or propeller aircraft. Aircrew earns additional pay for flying. (See the Aircrew Program for details.)

## What They Do

- Remove, repair and replace hydraulic system pumps, auxiliary power systems and unit actuating subsystems;
- Maintain aircraft landing gear system, brakes and related pneumatic systems, reservoir pressurization, emergency actuating devices, pumps, valves, regulators, cylinders, lines and fittings;
- Service pressure accumulators, emergency air bottles, oleo struts, reservoirs and master brake cylinders;
- Inspect, removes and replace components of hydraulic systems;
- Replace gaskets, packing, and wipers in hydraulic components;
- Remove, repair and replace aircraft fuselage, wings, fixed and movable surfaces, airfoils, regular seats, wheels and tires, controls and mechanisms;
- Remove, install and rig aircraft flight control surfaces;
- Fabricate and assemble metal components and make minor repairs to aircraft skin;
- Install rivets and metal fasteners;
- Fabricate repairs for composite components;
- Perform non-destructive dye penetrant inspections (NDI)
- Perform daily, preflight, post flight and other periodic aircraft inspections.

## Working Environment

Aviation structural mechanics may be assigned to sea or shore duty any place in the world, so their working environment varies considerably. They may work in hangars or hangar decks, or outside on flight decks or flight lines at air stations. A high noise level is a normal part of their work environment. AM's work closely with others, do mostly physical work and require little supervision. AM's may also serve as flight engineers aboard certain aircraft.

## Opportunities

Excellent opportunities exist for qualified applicants to enter this rating. Approximately 8,000 men and women currently work in this rating.

## Qualifications and Interests

Aviation structural mechanics require an orientation toward tools and equipment should possess manual dexterity and be physically fit. They must be able to keep records, have a knack for getting along well with other people and work as part of a team. The ability to do repetitive tasks and perform detailed work is also helpful.

**Normal hearing and color perception is required for this rating.**

## **Career Path After Recruit Training**

Enlistees are taught the fundamentals of this rating through on-the-job training or formal Navy schooling. Advanced technical and operational training is available in this rating during later stages of career development.

School	Present Location	Approximate Training Time	Subjects	Training Methods
Class "A" Technical School	Pensacola, FL	Approximately 9 Weeks	Basic aviation structural mechanic course, basic aviation theory course, and skills required for specialized AM rating	Group instruction, classroom and shop. After completion of Core "A" school, AMs attend either a one-week Intermediate Level maintenance school or a three-week Organizational Level maintenance school

AMs may be assigned to aviation squadrons, aircraft carriers or to other Navy ships carrying aircraft, to naval air stations or other aviation shore facilities in the United States or overseas. Normally, each time AMs are assigned to units with new equipment, they return to school for specialized training. During a 20-year period, AMs spend about 50 percent of their time assigned to fleet units and 50 percent to shore stations.



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## Earn College Credit



The American Council on Education recommends that semester hour credits be awarded in the vocational certificate and lower-division bachelor's/associate's degree categories for courses taken in this rating on office machines and general clerical procedures. To see the college credits available via a **Joint Service Transcript** for this rating:

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[https://www.cool.navy.mil/usn/jst/am\\_jst.pdf](https://www.cool.navy.mil/usn/jst/am_jst.pdf)

## Earn Department of Labor (DOL) Nationally Recognized Apprenticeships



USMAP

The United Services Military Apprenticeship Program (USMAP) is a formal military training program that provides active duty and Full Time Support (FTS) Service members the opportunity to improve their job skills and to complete their civilian apprenticeship requirements while they are on active duty. The U.S. Department of Labor (DOL) provides the nationally recognized "Certificate of Completion" upon program completion. Visit United Services Military Apprenticeship Program (USMAP) for LS apprenticeships.

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<https://usmap.netc.navy.mil/usmapss/static/navyRates.htm>

## Earn Industry Recognized Credentials



Navy Credentialing Opportunities On-Line (Navy COOL) Navy COOL catalogs and defines comprehensive information on occupational credentials - including certifications, licenses, and apprenticeships - correlating with every Navy rating and some collateral duties. It provides "how to" instructions for pursuing these credentials, links to credentialing organizations, and cross-references to programs that help Sailors pay for credentialing fees. Shortly following the initial rating technical training (Class "A" technical school), Sailors may be able to take advantage of earning civilian/industry certifications & licenses (credentials), funded through Navy COOL. Visit the Navy COOL website to view these opportunities. See the link below.

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<https://www.cool.navy.mil/usn/enlisted/am.htm>

Download the Navy COOL App:

Navy COOL App (iOS):

<https://itunes.apple.com/us/app/navy-cool/id1053982994?ls=1&mt=8>

Navy COOL App (Android):

<https://play.google.com/store/apps/details?id=com.tracen.navycool>

## Manage a Navy Career with Navy LaDR (Learning and Development Roadmap)



To see the Navy LaDR (Learning and Development Roadmap) for this rating:

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[https://www.cool.navy.mil/usn/LaDR/am\\_e1\\_e9.pdf](https://www.cool.navy.mil/usn/LaDR/am_e1_e9.pdf)

## Earn Skill Sets Towards Civilian Related Occupations



The skill sets for this rating crosswalk to civilian related occupations listed by the U.S. Department of Labor. To see Related Civilian, Federal, and Military Sealift Command Occupations for this rating, see the link below.

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<https://www.cool.navy.mil/usn/enlisted/am.htm>

Revised: 2/19