AD - Aviation Machinist’s Mate

Aviation Machinist’s Mates are aircraft engine mechanics. They inspect, adjust, test, repair and overhaul aircraft engines and propellers. ADs also perform routine maintenance, prepare aircraft for flight and assist in handling aircraft on the ground.

WHAT THEY DO
• Maintaining and servicing aircraft engine, fuel and lubrication systems;
• Handling and servicing aircraft ashore or aboard ship;
• Performing complete aircraft turboshaft/turboprop engine repair;
• Determining reasons for engine degradation via spectrometric oil analysis tests;
• Evaluating jet engine performance, using jet test cells for fixed turbojet engines;
• Performing helicopter maintenance, installing and maintaining engines, drive accessories and gear boxes;
• Performing propeller repairs;
• Possibly functioning as aircrewman in various types of aircraft.

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.

<table>
<thead>
<tr>
<th>School</th>
<th>Present Location</th>
<th>Approximate Training Time</th>
<th>Subjects</th>
<th>Training Methods</th>
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</thead>
<tbody>
<tr>
<td>AD Core and Strand &quot;A&quot;</td>
<td>Pensacola, FL</td>
<td>4 weeks (core)</td>
<td>Aviation basic theory and basic skills</td>
<td>Group instruction in classroom and shop</td>
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<tr>
<td>School</td>
<td>Lemoore, CA</td>
<td>2 weeks (strand)</td>
<td>required for rating</td>
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<td>Virginia Beach /</td>
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<td>Norfolk, VA</td>
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<td>San Diego, CA</td>
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<td>Whidbey Island, WA</td>
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<td>Jacksonville, FL</td>
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<td>Tinker, OK</td>
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After completion of AD Core "A" school, Aviation Machinist's Mates attend one of three strands: Helo, Turbojet or Turboprop for two weeks before being 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. Additionally, you will likely attend an advanced technical school ("C" school) enroute to your first duty station. In the "C" school, you will specialize in the aircraft at your ultimate duty station, for example, the F/A-18 Hornet or EA-6B Prowler. During a 20-year period in the Navy, ADs spend about 50 percent of their time assigned to fleet units and 50 percent to shore stations.

WORKING ENVIRONMENT
Aviation Machinist’s Mates 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, outside on flight decks or flight lines at air stations.

OPPORTUNITIES
Opportunities are excellent for qualified applicants to enter the AD rating. About 6,100 men and women now work in this rating.

QUALIFICATIONS & INTERESTS
People in this rating should be able to express themselves clearly in speaking and writing. They should have no speech impediment, and they must pass hearing and color perception tests.

ADs need good memories and the ability to do repetitive tasks, perform detailed work and keep accurate records. Manual dexterity and teamwork are also vital.

Normal hearing and color perception are required for this rating.
MANAGE A NAVY CAREER WITH NAVY LADR
See the Navy LaDR (Learning and Development Roadmap) for this rating:
AD https://www.cool.navy.mil/usn/LaDR/ad_e1_e9.pdf

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 word processing or data entry applications and office management procedures. See the college credits available via a Joint Services Transcript for this rating:
AD https://www.cool.navy.mil/usn/jst/ad_jst.pdf

EARN DEPARTMENT OF LABOR (DOL) NATIONALLY RECOGNIZED APPRENTICESHIPS
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 apprenticeships:
https://usmap.netc.navy.mil/usmapss/static/navyRates.htm

EARN INDUSTRY RECOGNIZED CREDENTIALS
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.

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. See Related Civilian, Federal and Military Sealift Command Occupations for this rating on Navy COOL.

Visit the Navy COOL website:
AD https://www.cool.navy.mil/usn/enlisted/ad.htm

DOWNLOAD THE NAVY COOL APP
Navy COOL App (iOS):

Navy COOL App (Android):

Note: Since Navy programs and courses are revised at times, the information contained on this card is subject to change.
Revised: August 2020