

# Navy Advancement Center

Web site: <http://www.advancement.cnet.navy.mil/>

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## Advancement Handbook for Aviation Structural Mechanic (AM)

**The July 2001 handbook was reviewed during July 2002. This review resulted in numerous changes to the technical content. Discard previous versions and use this copy only.**

## PREFACE

The purpose of the Advancement Handbook is to help you focus your preparation for Navywide advancement-in-rating examinations. The bibliographies (BIBs), together with this Handbook, form a comprehensive examination study package. This Handbook provides skill and knowledge components for each paygrade of the Aviation Structural Mechanic (AM) rating, and it will help you concentrate your study on those areas that may be tested. This feature will help you get the most out of your study time.

Each page in Parts 1 through 4 of this Advancement Handbook presents general skill areas, specific skill areas, the knowledge factors associated with each skill area, the pertinent references that address each skill, and the subject areas that may be covered on the examination. The skill statements describe the skills you are expected to perform for each paygrade. The skill statements are cumulative; that is, you are responsible for the skills for the paygrade you are competing for, your present paygrade, and all paygrades below.

Although this Handbook is very comprehensive, it cannot cover all the tasks performed in the rating. As a result, the advancement examinations may contain questions more detailed than described in the “*Exam Expectations*” section of the skill areas.

Remember that advancement competition is keen, so your keys to advancement include not only comprehensive advancement examination study but also sustained superior performance.

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# Part 1

## Advancement Handbook for AM3

## Advancement Handbook for AM3

<p>General AM <i>Skill Area</i></p>	<p><b>MAINTENANCE OF HELICOPTER ROTOR BRAKES SYSTEMS</b></p>
<p>A <i>skill</i> you are expected to perform from the General Skill Area above:</p>	<p>Maintain Rotor Brakes Systems</p>
<p><i>Knowledge</i> you should have to perform this skill:</p>	<ul style="list-style-type: none"> <li>• Operation of helicopter rotor brake systems</li> <li>• Inspecting and troubleshooting rotor brake systems and related components</li> <li>• Removal and replacement of rotor brakes assembly and related components</li> <li>• Repairing and overhauling of rotor brakes assembly and related components (I-level)</li> <li>• Bench-checking components of rotor brakes assemblies and related components (I-level)</li> <li>• Hydraulic patch test checking and aircraft hydraulic servicing of the rotor brakes hydraulic system</li> <li>• Applying electrical power to aircraft</li> <li>• Functional check procedures for rotor brakes system</li> <li>• Corrosion detection, prevention, and preservations of the rotor brakes and related components</li> </ul>
<p><i>References</i> you should study to gain the knowledge you need to perform this skill:</p>	<ul style="list-style-type: none"> <li>• Aviation Structural Mechanic, Chapter 17 (NAVEDTRA 14315)</li> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 14022)</li> <li>• Basic Handling &amp; Safety Manual, Work Package 10 (NAVAIR 00-80T-96)</li> <li>• Aviation Hydraulics Manual, Chapters 3, 6, 8, and 9 (NAVAIR 01-1A-17)</li> <li>• Hose and Tube Manual, Chapters 2, 4, 6, 7, and 9 (NAVAIR 01-1A-20)</li> </ul>