**Electrician’s Mates (EM). EMs perform corrective and preventive maintenance on power and lighting circuits, electrical fixtures, motors, generators, voltage and frequency regulators, controllers, distribution switchboards, galley and laundry equipment.**

<table>
<thead>
<tr>
<th>YEARS OF SERVICE</th>
<th>CAREER MILESTONES</th>
<th>AVERAGE TIME TO ADVANCE</th>
<th>COMMISSIONING OR OTHER SPECIAL PROGRAMS</th>
<th>SEA/SHORE FLOW</th>
<th>TYPICAL CAREER PATH DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>27-30</td>
<td>EMCM</td>
<td>23.5 Yrs</td>
<td>CSEL, ECM, Brig, Senior Enl Academy (Instructor)</td>
<td>36</td>
<td>4th Shore Tour Billet: CSEL, ECM/TECHAD, Dir. Of Training, CNE staff advisor. Duty: BUPERS, Schoolhouse, ATG/Inspector i.e. (TYCOM Insp. Team) IMA/F Qualification: MTS, ATS, SEA/SEL</td>
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<td></td>
<td>EMCS</td>
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<td>EMC</td>
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<tr>
<td>20-23</td>
<td>EMCM</td>
<td>23.5 Yrs 18.4 14.7</td>
<td>CWO, CSEL, ECM, Brig</td>
<td>36</td>
<td>3rd Shore Tour Billet: CSEL, ECM/TECHAD, LCPO, Instructor, RDC. Duty: BUPERS, Schoolhouse, ATG/Inspector i.e. (TYCOM Insp. Team) IMA/F. Recruiting, RMC. Qualification: MTS, ATS, SEA/SEL, Instructor</td>
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<td>EMCS</td>
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<tr>
<td>17-20</td>
<td>EMCS</td>
<td>18.4 Yrs 14.7 9.4</td>
<td>CWO, OCS, MECP, CSEL, DAPA, USS CONSTITUTION, Brig</td>
<td>48</td>
<td>3rd Sea Tour Billet: LPO, DLCPO, LCPO, 3MC. Duty: Ship or Squadron/Battalion/INSURV Qualification: SW, AW, SCW, EXW, ETT, DCTT, 3MTT, “C”/“D” School, EDO/EOOW</td>
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<tr>
<td></td>
<td>EMC, EM1</td>
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<tr>
<td>YEARS OF SERVICE</td>
<td>CAREER MILESTONES</td>
<td>AVERAGE TIME TO ADVANCE</td>
<td>COMMISSIONING OR OTHER SPECIAL PROGRAMS</td>
<td>SEA/SHORE FLOW</td>
<td>TYPICAL CAREER PATH DEVELOPMENT</td>
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<tr>
<td>9-14</td>
<td>EM1, EM2</td>
<td>9.4 Yrs 4.3</td>
<td>NSW Special Boat Teams, ACUs, RIVRONs, Joint Commands.</td>
<td>60</td>
<td>2nd Sea Tour: Billet: WCS, LPO, 3MC Duty: Ship or Squadron/Battalion. Qualification: SW, AW, SCW, EXW, ETT, DCTT, “C”/“D” School, EDO/EOOW</td>
</tr>
<tr>
<td>6-9</td>
<td>EM1, EM2, EM3</td>
<td>9.4 Yrs 4.3 1.9</td>
<td>STA-21, OCS, MECP, Naval Academy, USS CONSTITUTION, DAPA</td>
<td>36</td>
<td>1st Shore Tour Billet: RDC, Recruiting, Instructor. Duty: Schoolhouse, RTC, ATG, IMA/F, Recruiting. Qualification: MTS, “C” or “D” School, Instructor</td>
</tr>
<tr>
<td>2-6</td>
<td>EM2, EM3</td>
<td>4.3 Yrs 1.9</td>
<td>NROTC, NSW Special Boat Teams, ACUs, RIVRONs, Joint Commands.</td>
<td>52</td>
<td>1st Sea Tour Billet: WCS, QAS, Operator/Maintenance Tech. Duty: Ship or Squadron/Battalion. Qualification: Repair EM, SW, AW, EPCC, SCW, EXW, ETT</td>
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<tr>
<td>1+/-</td>
<td>EM3, EMFN, EMFA</td>
<td>9 Months</td>
<td>Recruit Training and all schools or training events are required to be completed prior to reporting to their first operational command</td>
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</tbody>
</table>

Notes:

1. “A” School not required.

2. EM is a sea intensive rating (refer to Sea/Shore Flow front page). EMs are not required to hold a security clearance; however, there may be certain billets that require a clearance.

3. In rating shore duty is limited and is normally “A” or “C” School Instructors, ATG, RMCs/IMFs. Many Sailors can expect a tour as a Recruiter or Recruit Division Commander (RDC).

4. Tours at BUPERS and special billets such; Instructor, NPC, Staff duty (CNSL, CNAL, NSW), Safety Center, INSURV, etc. require special screening.

5. Tour at BUPERS 3 as an Enlisted Community Manager or Enlisted Community Manager Technical Adviser are for high-performing E8s or E9s. It is a highly competitive tour requiring thorough understanding of the Rating and manning and manpower policies. ECMs handle multiple Ratings affecting thousands of Sailors, adjudicate Career Waypoints applications, develop and present advancement quotas, school quotas, accession and strength policies and initiatives for community health.

6. EMI/EMC/EMCSs on ships that are eligible are encouraged to qualify EOOW.

7. Advancement to EMCM requires citizenship and access to classified information prior to meeting advancement eligibility, per BUPERSINST 1430.16F.
EM CAREER PATH
(SW)

8. NEC information:

   a. U35A - Electricians Mate Surface Ship Electrical Advanced Maintenance performs organizational corrective maintenance as well as provide a clear understanding of troubleshooting, fault isolation to the component level, and identification of medium safety awareness procedures regarding electrical and electronic equipment and systems. The hands-on knowledge and skills acquired will be used under limited supervision onboard naval vessels for all conditions of readiness.

   b. 762A - Electrical Motor Rewinder rewinds AC and DC motor and generator stators, rotors, field coils and armatures utilizing round wire or formed coils. Takes rewinding data, replaces brushes, adjusts brush rigging, dips, bakes, renew bearings, assembles and test runs.

   c. U38A - LHD-1 Electrical Component Maintenance Technician performs operational, preventive and corrective maintenance on LHD-1 unique electrical components, 400HZ Static Frequency Converters and the SSM Degaussing system.

   d. U39A - Navy Afloat Maintenance Training Strategy (NAMTS) performs Outside Electrical Repair intermediate-level electrical maintenance procedures on various shipboard equipment and systems in support of Fleet-directed requirements. Demonstrates knowledge of intermediate-level repair procedures, repair and maintenance standards, quality assurance specifications and proper use of IMA industrial machinery. Award of this NEC is based on documented completion of Fleet-specified tasks for this skill and demonstration of advanced-level proficiency during hands-on training and production work as specified in the current Job Qualification Requirement (JQR) located at https://www.portal.navy.mil/crmc/NAMTS/. Training is led by journeyman-level craftsmen and supplemented by appropriate self-paced instruction consistent with Department of Labor journeyman certification.

   e. U41A - Minesweeping Electrician operates, tests, adjusts, and performs organizational level maintenance on automatic degaussing equipment and all specialized electrical equipment involved in magnetic and acoustic mine sweeping. Uses tools, meters, and special test equipment necessary to correctly test, align, troubleshoot, and repair electrical and electronic components of the automatic degaussing and mine sweeping equipment. Sets up the equipment to conform to various operational orders.

   f. 763A - UNREP Electrical-Electronics Control Maintenance performs organizational level maintenance on electro hydraulic power and electronic controls associated with UNREP systems. Repairs circuits and control devices and perform systems test on UNREP systems.

   g. 764A - Shipboard Elevator Electronic/Electrical System Maintenance Technician tests, inspects and performs organizational level maintenance on shipboard weapons and cargo handling elevators on a system and component level. Troubleshoots and repairs electronic/electrical systems and equipment, such as controllers, sensors, switches, and the electrical components of hydraulic/mechanical interfaces. Coordinates efforts with operators and maintainers of other ratings using or servicing the systems.

   h. U42A - Steam Catapult Electrician performs organizational level maintenance on catapult and arresting gear systems, including synchros, repeaters, 110/220/440V electrical systems, contacts, relays, micro switches, series and parallel switches, pressure and temperature sensing switches, torque and gear limit switches, chronograph, and control console electrical functions. Reads and interprets electrical/mechanical drawings.

   i. U43A - LAMPS MK III RAST/HRS Electrical Maintenanceman performs maintenance on RAST system components. Repairs failed electrical and electronic components by removal and replacement to the lowest replaceable unit (LRU).

   j. 765A - Physical/Dimensional Calibration Specialist performs third echelon (MIRCS, FMCL, NCL) level duties involving physical, mechanical, plane and angular measurements and calibration, including flow and temperature measurement and calibration. Aligns, inspects, repairs, troubleshoots, modifies, and calibrates electro/mechanical test and monitoring systems (TAMS) using calibration and working standards.
k. U44A - LSD-41/49 Class Advanced Engineering Control System (A ECS-MCS) Maintenance Technician performs organizational level preventive and corrective maintenance, troubleshooting and fault isolation procedures on the Advanced Engineering Control System (AECS) onboard upgraded LSD 41/49 Class Ships. Training for the AECS includes: Machinery Control System (MCS), Local Area Network (LAN), Diagnostic Expert Test Engineering Reasoner (DEXTER), On-Board Trainer (OBT), and Ship Control System (SCS).

1. U16A - Shipboard Engineering Plant Program Manager administers, manages and evaluates shipboard engineering programs. Recognizes engineering systems and major components external to the propulsion plant which comes under the cognizance of the Engineering Officer of the Watch (EOOW). Evaluates operating conditions and makes recommendations to the engineering officer.

Considerations for advancement from E6 to E7

1. Sea Assignments (all)
   - LPO/ALPO/WCS at Sea/Operational/Joint
   - Qualified EDO/EOOW, NEC U35A SSEAMC, Chief of the Watch (CVN) a plus
   - At least one warfare pin
   - DCTT/ETT
   - Command Collateral with documented impact
   - Qualified 3M 301-305
   - FCPOA involvement
   - Sailor 360 involvement

2. Shore Assignments (all)
   - RDC(w/MTS)/ATG(w/ATS)/TYCOM Staff/BUPERS//Expeditionary Service/SPECWAR/Expeditionary/Rating Instructor (All screened billets)
   - Instructor Duty (805A) (MTS at all levels)
   - Completed PPME, USMAP

Considerations for advancement from E7 to E8

1. Sea Assignments (all)
   - Department LCPO/ LCPO FDNF a plus
   - Should be qualified EDO/EOOW/ Chief of the Watch (CVN)
   - NEC U16A a plus
   - At least one warfare pin
   - ETT Coordinator a plus
   - Command Collateral with documented impact
   - Command Warfare Coordinator
   - Completed PPME/JPME/USMAP/SEA
   - Active CPO Mess involvement, holding a position with documented performance
   - Sailor 360 involvement and leading a committee/Season

2. Shore Assignments (all)
   - Recruiting Duty (serving as LSO or RINC)/RDC/ATG (obtained ATS/MTS)/TYCOM Staff/BUPERS/SPECWAR/Expeditionary/Rating Instructor (obtained MTS) (All screened billets)/FLC’s (impact billet on the waterfront)/ASD (with documented impact) Disaster Preparedness operations team leader.
   - Completed PPME/JPME/SEJPME I/USMAP/SEA

Considerations for advancement from E8 to E9

1. Sea Assignments (all)
   - DLCPO/Readiness or LCPO(CVN) at Sea/Operational/Joint, FDNF a plus
   - At least one warfare pin

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EM CAREER PATH
(SW)

- ETT Coordinator, EOOW/EDO
- Command Collateral with documented impact
- Completed PPME/JPME/USMAP/SEA
- Active CPO Mess involvement, holding a position with documented performance
- Sailor 360 involvement and leading a committee/Season

2. Shore Assignments (all)
   - Recruiting Duty (serving as LSO or LCPO)/RDC (Ship LCPO)/ATG (obtained
     ATS/MTS)/TYCOM Staff/BUPERS/SPECWAR/Expeditionary/Rating Instructor (obtained MTS)
     (All screened billets)/FLC`s (impact billet on the waterfront)/ASD (with documented impact)
   - Completed PPME/JPME/SEJPME I and II/USMAP/SEA
   - Served as SEL or DLCPO