



Machinist's Mate, Non-Nuclear, Submarine Auxiliary receive extensive training in the operation and maintenance of hydraulic power plants, hoists and cylinders, oxygen generators, atmosphere control equipment, refrigeration systems, emergency diesel engines, pressurized air systems, and plumbing systems. Responsible for the operation, routine care, and repair of Submarine auxiliary systems, firefighting, and damage control equipment. These mechanical specialists are vital elements in the day-to-day operation and combat survivability of the Submarine.

YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO ADVANCE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
26-30	MMACM	20.4 Yrs	FORCM, COB/CMC Program, CSEL, DEI	36	4 th Shore Tour Billet: CSEL, DEI Duty: TYCOM/GRP/SQD/SRS/ BUPERS/NPC
23-26	MMACM MMACS	20.4 Yrs 16.7	COB/CMC Program, CSEL, DEI	42	4 th Sea Tour Billet: LCPO/3MC/COB/CSEL/ DEI Duty: Submarine/Submarine Tender/NSW Qualification: DCPO/COW/ DOOW/Pilot
20-23	MMACM MMACS MMAC	20.4 Yrs 16.7 13.7	CWO, CSEL, COB/CMC Program ECM, DEI	36	3 rd Shore Tour Billet: CSEL/Instructor/ Staff/DEI Duty: TYCOM/GRP/SQD/SRS/ School House/BUPERS/NPC/ NSW/IMA Qualification: MTS/DEI/NAMTS
16-20	MMACM MMACS MMAC MMA1	20.4 Yrs 12.5 13.7 8.0	LDO, CWO, OCS, MECP, COB, CSEL, DEI	42	3 rd Sea Tour Billet: LCPO/COB/3MC Duty: Submarine/Submarine Tender/NSW/DEI Qualification: DCPO/COW/ DOOW/Pilot
12-16	MMACS MMAC MMA1	12.5 Yrs 13.7 8.0	-	36	2 nd Shore Tour Billet: Instructor/RDC/Staff/DEI Duty: TYCOM/GRP/SQD/SRS/ School House/RTC/NSW/ IMA Qualification: MTS/DEI/NAMTS
8-12	MMAC MMA1 MMA2	9.5 Yrs 8.0 3.5		54	2 nd Sea Tour Billet: LPO/LCPO Duty: Submarine/Submarine Tender/NSW Qualification: DCPO/COW/ DOOW/Pilot/QAI/QAP/QAS
4-8	MMA1 MMA2 MMA3	8.0 Yrs 3.5 2.5	STA-21, OCS, MECP	36	1 st Shore Tour Billet: Instructor/RDC Duty: RTC/School House/ SRS/NSW/IMA Qualification: MTS/NAMTS

Revised: May 2025





YEARS	CAREER	AVERAGE	COMMISSIONING	SEA/SHORE	TYPICAL CAREER PATH
OF	MILESTONES	TIME TO	OR OTHER SPECIAL	FLOW	DEVELOPMENT
SERVICE		ADVANCE	PROGRAMS		
1-4	MMA2	3.5 Yrs	Naval Academy,	51	1 st Sea Tour
	MMA3	2.5	NROTC		Billet: Operator and Mechanic.
					Duty: Submarine.
					Qualification: Submarine Warfare/
					AUX FWD/AFT or AOW/DSL
					OP/AMR or AMR2/BDW/
					Craftsman/Maintenance Person/
					CMPO/RPPO/Workcenter
					Supervisor
1+/-	MMAFN	9 Mos			Recruit Training and all schools or
	MMAFA				training events required to be
	Accession				completed before reporting to their
	Training				first operational command

Notes:

- 1. "A" school is required.
- 2. Personnel in a Designator-8 status are disqualified from Submarine service, are not eligible for advancement, and are not reassigned to Submarines without prior approval of NAVPERSCOM.
- 3. Acronyms:

3MC: Maintenance Material Management Coordinator

AERR Advancement Exam Readiness Review

AMR: Auxiliary Machinery Room AOW: Auxiliaryman of the Watch

AUX AFT: Auxiliaryman Aft
AUX FWD: Auxiliaryman Forward
BDW: Below Decks Watch
CDO: Command Duty Officer

CMPO: Controlled Material Petty Officer

COB: Chief of the Boat COW: Chief of the Watch

CSEL: Command Senior Enlisted Leader

DCPO: Duty Chief Petty Officer
DOOW: Diving officer of the Watch
DEI: Diesel Engine Inspector

DSL OP: Diesel Operator

ECM: Enlisted Community Manager

GRP: Submarine Group

MTS: Master Training Specialist

NAMTS Navy Afloat Maintenance Training Strategy

NSW: Naval Special Warfare
OCS: Officer Candidate School
QAP: Quality Assurance Planner
QAI: Quality Assurance Inspector
QAS: Quality Assurance Supervisor
RPPO: Repair Parts Petty Officer
SQD: Submarine Squadron

SRS: Submarine Readiness Squadron
TRE: Tactical Readiness Evaluation
TRR: Training Readiness Review
TYCOM: Submarine Type Commander

2





4. Rating NECs:

Q10B: Machinist's Mate Auxiliary (MMA) Leading Chief Petty Officer (LCPO)

Q33B: SSN 774 Diesel Engine (Caterpillar) Maintenance Technician Q34A: SSN 774 Class Advanced Auxiliary Equipment Technician

Q53A: Low Pressure Electrolyzer (LPE) Operator

735B: Automated Electrolytic Oxygen Generator (AEOG) Mechanical Maintenance Technician

739B: SSN/SSBN Diesel Engine (Fairbanks-Morse) Maintenance Technician

740B: Electrolytic Oxygen Generator (Model 6L16) Operator/Mechanical Maintainer

742B: Refrigeration and Air Conditioning Systems Technician

747B: Diesel Engine Inspector

756A: Barber

761C: Submarine Auxiliaryman Valve Repair Technician (NAMTS)761D: Submarine Auxiliaryman Pump Repair Technician (NAMTS)

785A: SDV MK8/MK11 Team Technician

789A: Unmanned Undersea Vehicle (UUV) Operator

797B: Submarine Auxiliaryman Refrigeration Repair Technician (NAMTS) 797C: Submarine Auxiliaryman Hydraulic Repair Technician (NAMTS)

785A: SDV MK8/MK11 Team Technician 804G: Expeditionary Force-Combat Skills

854A: Naval Special Warfare (Combat Service Support)

- 5. Consideration should be given to sailors who have displayed sustained superior performance while serving in Naval Special Warfare (NSW) assignments. These assignments include but are not limited to Naval Special Warfare Command, NSW Groups, and detachments. Such assignments may not be typical of the traditional career path, yet still provide unique leadership and career enhancing opportunities valuable to a well-rounded naval career.
- 6. This list is not comprehensive or in order of precedence. Advancement in the MMA rating is enhanced by superior performance documented in the candidate's evaluations for the following:
 - Command Impact
 - Inspection performance/results
 - Squadron rankings
 - Command rankings
 - Critical Billets (TYCOM/GRP/ISIC/Forward Deployed Naval Forces/Oversea)
 - Squadron recognized unit awards
 - Significant Contributions to rating (AERR, TRR, Instructor, Inspection Team)
 - TYCOM, GROUP, ISIC, Shore Command Leading/Department LCPO

Consideration for advancement from E6 to E7

- FULLY QUALIFIED:
 - Have served as LPO for greater than 12 months, AND
 - Have ALL the following qualifications:
 - AMR (SSN) or AMR2 (SSBN/SSGN)
 - OAI
 - COW (21/688/SSBN/SSGN) or DCPO (VACL)
- BEST QUALIFIED:
 - If they meet the FULLY QUALIFIED standard, AND
 - Qualified DOOW (21/688/SSBN/SSGN) or Pilot (VACL), AND
 - Have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA

Revised: May 2025





Candidates must qualify or re-qualify At Sea watches within the required timeframe per the community Continuing Training and Qualifications Manual (CTQM) COMSUBLANT/COMSUBPACINST 3500.3 (Series) to receive credit for best qualified.

Due to the repetitive nature of the Submarine rating billet profiles, repeat tours of similar assignments should not be viewed negatively towards performance and career progression.

For candidates who have only served on one submarine, i.e., follow-on sea tours were at Special Projects, a submarine tender, or NSW, the board MUST carefully weigh their achievements and demonstrated leadership when determining if they are BEST QUALIFIED since it is understood they might not have had the opportunity to meet the qualification standard.

The following qualification equivalents are to be used for Sailors serving at NSW locations:

UIC 55457, 55458, 0010C, and 0995B

FULLY QUALIFIED if they have served as an LPO AND are qualified Command Duty Officer (CDO) (Ship's DCPO equivalent).

BEST QUALIFIED status should be given to those Sailors who meet the FULLY QUALIFIED standard AND are qualified Navy Expeditionary Warfare Specialist (EXW), AND Small Boat Officer/Petty Officer in Charge (POIC) OR Dry Combat Submersible (DCS) Maintenance Supervisor OR SEAL Delivery Vehicle (SDV) Maintenance Supervisor OR Dry Deck Shelter (DDS) Lift Captain. All qualifications listed under BEST QUALIFIED apart from EXW are equivalent in their scope of responsibilities to COW.

Candidates serving or who have served as a SDV Maintenance Supervisor in a Task Unit for greater than 12 months have met the standard for having served as an LPO.

The following qualification equivalents are to be used for Sailors serving at the identified Special Project:

Detachment Underwater Research and Development (UR&D):

Fully QUALIFIED if they have served as an LPO AND are qualified either STBD Tethered Management System (TMS), OR Remote Operated Vehicle (ROV) Pilot, OR Port Payload (PPHL), or Mission Navigation Watch, OR EES1 Technician.

BEST QUALIFIED if they meet the FULLY QUALIFIED standard AND are qualified either Mission Duty Chief (MMP DCPO) or COW/DCPO as stated above.

Detachment TRITON:

FULLY QUALIFIED if they have served as an LPO AND are qualified Mission Watch Supervisor (MWS).

BEST QUALIFIED if they meet the FULLY QUALIFIED standard and are qualified Mission Control Officer (MCO) or COW/DCPO as stated above.

Detachment POSEIDON:

FULLY QUALIFIED if they have served as an LPO AND are qualified Mission Watch Supervisor (formerly Projects Watch Supervisor (PWS).

BEST QUALIFIED if they meet the FULLY QUALIFIED standard AND are qualified either MCO or COW/DCPO as stated above.

For candidates who have converted into the submarine force, the board MUST consider the Sailor's achievements and demonstrated leadership in their previous community when determining if they are BEST QUALIFIED since it is understood they might not have had the opportunity to meet the qualification standard.

Candidates serving or who have served as a 3MC or DEI for greater than 12 months have met the standard for having served as an LPO or LCPO.

4





Personnel assigned to RTC, OTC, and Naval Academy as a Recruit Division Commander, are carefully screened and selected for this high-priority assignment.

UIC 4000Y:

FULLY QUALIFIED status should be given if they have served as a Department Leading Petty Officer (LPO).

BEST QUALIFIED if they meet the FULLY QUALIFIED standard AND if they are qualified Command Duty Officer (CDO) (Ship's DCPO equivalent).

UICs 45242, 60162, 60163, and 0998L:

FULLY QUALIFIED if they have served as an LPO for greater than 12 months and have qualified their UUV senior in-rate watch of UUV Specialist and CDO (Ship's DCPO equivalent).

BEST QUALIFIED if they meet the FULLY QUALIFIED standard AND are qualified Mission Control Officer (MCO) (Chief of the Watch (COW) equivalent), (Combat Systems Officer of the Watch (CSOOW) equivalent) AND have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA.

UIC 3992J:

FULLY QUALIFIED if they have served as an LPO for greater than 12 months and have qualified their UUV senior in-rate watch of UUV Pilot.

BEST QUALIFIED if they meet the FULLY QUALIFIED standard AND are qualified Command and Control Watch Officer (C2WO), (COW) equivalent) (Battle Watch Captain (BWC) AG rating equivalent) (Fleet Intelligence Officer IS rating equivalent) (CSOOW) IT rating equivalent) AND have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA.

Consideration for advancement from E7 to E8

- FULLY QUALIFIED:
 - If they have served as LCPO at sea for 12 months, AND
 - Qualified DOOW (21/688/SSBN/SSGN) or Pilot (VACL)
- BEST QUALIFIED:
 - If they meet the FULLY QUALIFIED standard, AND
 - Served as mission/deployment/patrol DOOW (21/688/SSBN/SSGN) or Pilot (VACL), AND
 - Have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA.

Candidates must qualify or re-qualify At Sea watches within the required timeframe per the community Continuing Training and Qualifications Manual (CTQM) COMSUBLANT/COMSUBPACINST 3500.3 (Series) to receive credit for best qualified.

Due to the repetitive nature of the Submarine rating billet profiles, repeat tours of similar assignments should not be viewed negatively towards performance and career progression.

For candidates who have only served on one submarine, i.e., follow-on sea tours were at Special Projects, a submarine tender, or NSW, the board MUST carefully weigh their achievements and demonstrated leadership when determining if they are BEST QUALIFIED since it is understood they might not have had the opportunity to meet the qualification standard.

The following qualification equivalents are to be used for Sailors serving at NSW locations:

UIC 55457 and 55458





FULLY QUALIFIED if they have served as an LCPO AND are qualified CDO (Ship's DCPO equivalent).

BEST QUALIFIED status should be given to those Sailors who meet the FULLY QUALIFIED standard AND are qualified Navy Expeditionary Warfare Specialist (EXW) AND Small Boat Officer/Surface Support Officer in Charge (SSOIC) (DOOW/PILOT equivalent) OR Dry Deck Shelter (DDS) Lift Captain (COW equivalent).

UIC 0010C and 0995B

FULLY QUALIFIED if they have served as an LCPO AND are qualified CDO (Ship's DCPO equivalent).

BEST QUALIFIED status should be given to those Sailors who meet the FULLY QUALIFIED standard AND are qualified Navy Expeditionary Warfare Specialist (EXW) AND Dry Combat Submersible (DCS) Maintenance Supervisor (COW equivalent).

The previously listed qualification equivalents are to be used for Sailors serving as an LCPO at the identified Special Project with the addition of the following:

UIC 4000Y

FULLY QUALIFIED status should be given if they are qualified as the following: Command Duty Officer (Ship's DCPO equivalent).

BEST QUALIFIED if they have served as Department LCPO / Department Head.

UICs 45242, 60162, 60163, and 0998L:

FULLY QUALIFIED if they have served as an LCPO for 12 months and meet the FULLY QUALIFIED and BEST QUALIFIED standards for advancement from E6 to E7.

BEST QUALIFIED if they meet the FULLY QUALIFIED standard AND are qualified MCO (COW equivalent) (Combat Systems Officer of the Watch (CSOOW) equivalent), Command Duty Officer (Ship's DCPO equivalent) AND have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA.

UIC 3992J:

FULLY QUALIFIED if they have served as an LCPO for 12 months and meet the FULLY QUALIFIED and BEST QUALIFIED standards for advancement from E6 to E7.

BEST QUALIFIED if they meet the FULLY QUALIFIED standard AND are qualified C2WO, (COW equivalent) (BWC AG rating equivalent) (Fleet Intelligence Officer IS rating equivalent) (CSOOW IT rating equivalent) AND have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA.

Consideration for advancement from E8 to E9

- FULLY QUALIFIED:
 - If they have served as LCPO at sea for 12 months, AND
 - Served as mission/deployment/patrol DOOW (21/688/SSBN/SSGN) or Pilot (VACL)
 - BEST QUALIFIED:
 - If they meet the FULLY QUALIFIED standard, AND
 - Are qualified COB or serving as COB, AND
 - Have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA.

Special consideration should be given for serving as COB overqualified COB.

6





Candidates must qualify or re-qualify At Sea watches within the required timeframe per the community Continuing Training and Qualifications Manual (CTQM) COMSUBLANT/COMSUBPACINST 3500.3 (Series) to receive credit for best qualified.

Due to the repetitive nature of the Submarine rating billet profiles, repeat tours of similar assignments should not be viewed negatively towards performance and career progression.

For candidates who have only served on one submarine, i.e., follow on sea tours were at Special Projects, a Submarine Tender, or NSW, the board MUST carefully weigh their achievements and demonstrated leadership when determining if they are BEST QUALIFIED since it is understood they might not have had the opportunity to meet the qualification standard.

The following qualification equivalents are to be used for Sailors serving at NSW locations:

UIC 55457, 55458, 0995B, and 0010C

FULLY QUALIFIED status should be given if they have served as a Senior Enlisted Advisor (SEA).

BEST QUALIFIED status should be given if they are qualified Chief of the Boat AND have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA.

The previously listed qualification equivalents are to be used for Sailors serving as an LCPO at the identified Special Project with the addition of the following:

UICs 4000Y, 45242, 60162, 60163, 0998L, and 3992J:

FULLY QUALIFIED if they meet they meet the FULLY QUALIFIED and BEST QUALIFIED standards for advancement from E7 to E8.

BEST QUALIFIED if they meet the FULLY QUALIFIED standard AND are qualified Chief of the Boat AND have a history of sustained superior performance defined as a majority of their Individual Trait Averages ABOVE RSCA.

Revised: May 2025