UNITED STATES MARINE CORPS

Road Map

The road to success for

MOS 6156

Tilt-Rotor Airframe Mechanic, MV-22

OVERVIEW:

The "Road Map to Success" is a training initiative to give every Marine a guideline from which to plan their career. Each MOS Road Map details the MOS Training, PME, Voluntary Education, and Billets recommended for each rank. These Road Maps "should not" be utilized by supervisors for performance evaluation of a Marine such as Proficiency/Conduct Marks or Fitness Reports, but as an option to enhance their future both in the military and beyond.

Upon graduation from MOS school, Marine receives a brief on:

Future MOS courses, MCI requirements, PME requirements, and the availability of college courses.

Gaining Command:

Realigns, supports, and enforces the road map.

1st Year

MOS: 6156, MV-22 Tilt Rotor Airframes Mechanic

- Complete Recruit Training
- Complete Marine Combat Training (MCT)
- Complete Aviation Structural Mechanic (N23WSG2)
- Complete Aviation Structural Mechanic Organizational Level Strand (N23WSH2)
- Complete V-22 Airframe Structures Course (M0568G1)
- Complete Naval Aviation Maintenance Program (NAMP) Indoctrination
- Complete Naval Aviation Occupational Safety and Health (NAVOSH) Indoctrination
- Obtain Hydraulic Contamination Certification
- Maintenance On-the-Job Training (MOJT) as required per MCO P4790.20

PME:

- Complete MCI (3420E) Personal Finance

Voluntary Education:

- Apprenticeship program for FAA Airframes and Power Plants (A&P) License is not available until individual has 30 months experience on both systems and attains the rank of Corporal (https://www.cnet.navy.mil/usmap/usmc_trades.html). This certification can be used in the future to attain a B.S. Aviation Maintenance Management through Embry-Riddle Aeronautical University Navy Distance Learning Program. (http://www.erau.edu/ec/wwc/03navy_prog.html).
- The body of knowledge required to attain the FAA Airframes and Power Plants License is offered through the A.S. Aircraft Maintenance Degree at Embry-Riddle Aeronautical University Navy Distance Learning Program. This may be utilized to attain the practical knowledge in preparation for the apprenticeship program.

Duty:

- MV-22 Airframe Mechanic

Special Duty:

- Recruiter's Assistance recommended prior to reporting to the FMF

2nd Year

MOS: 6156, MV-22 Tilt Rotor Airframes Mechanic

- Progress toward Individual Training Standards System (ITSS) Marine Corps Maintenance Training Management and Evaluation Program (MATMEP) Level III Qualification as per MCO P4790.20
- Obtain Tire and Wheel Certification
- Attend Fleet Aviation Specialized Operation FASO (D-555-0038) Naval Aviation Visual Identification Display System/Subsystem Capability Impact Reporting Course
- Attend FASO (D555-0023) Dispersed Technical Publication Librarian Course
- Begin Quality Assurance Collateral Duty Inspector (CDI) Syllabus

PME:

- Complete MCI (033N) Fundamentals of Marine Corps Leadership
- Complete MCI (602AP) Theory and Construction of Gas Turbine Engines

Voluntary Education:

- Apprenticeship program for FAA Airframes and Power Plants (A&P) License is not available until individual has 30 months experience on both systems and attains the rank of Corporal (https://www.cnet.navy.mil/usmap/usmc_trades.html). This certification can be used in the future to attain a B.S. Aviation Maintenance Management through Embry-Riddle Aeronautical University Navy Distance Learning Program. (http://www.erau.edu/ec/wwc/03navy_prog.html).
- The body of knowledge required to attain the FAA Airframes and Power Plants License is offered through the A.S. Aircraft Maintenance Degree at Embry-Riddle Aeronautical University Navy Distance Learning Program. This may be utilized to attain the practical knowledge in preparation for the apprenticeship program.

Duty:

- MV-22 Airframe Mechanic
- W/C Assistant Collateral Duty Assignment (I.E. Tool Control NCO, Safety NCO, DTPL...)

Special Duty:

- None recommended until the rank of Sergeant

3rd Year

MOS: 6156, MV-22 Tilt Rotor Airframes Mechanic

- Obtain ITSS MATMEP Level III Qualification as per MCO P4790.20
- Obtain Quality Assurance Collateral Duty Inspector Certification

PME:

- Complete MCI (6001AP) Aviation Maintenance Non-Commissioned Officer
- Read 2 books from the Commandant's Reading List

Voluntary Education:

- Apprenticeship program for FAA Airframes and Power Plants (A&P) License is not available until individual has 30 months experience on both systems and attains the rank of Corporal (https://www.cnet.navy.mil/usmap/usmc_trades.html). This certification can be used in the future to attain a B.S. Aviation Maintenance Management through Embry-Riddle Aeronautical University Navy Distance Learning Program. (http://www.erau.edu/ec/wwc/03navy_prog.html).
- The body of knowledge required to attain the FAA Airframes and Power Plants License is offered through the A.S. Aircraft Maintenance Degree at Embry-Riddle Aeronautical University Navy Distance Learning Program. This may be utilized to attain the practical knowledge in preparation for the apprenticeship program.

Duty:

- MV-22 Airframe Mechanic
- W/C Quality Assurance Collateral Duty Inspector
- W/C Primary/Assistant Collateral Duty Assignment (I.E. Tool Control NCO, Safety NCO, DTPL...)

Special Duty:

- None recommended until the rank of Sergeant

4th Year

MOS: 6156, MV-22 Tilt Rotor Airframes Mechanic

- Progress toward ITSS MATMEP Level IV Qualification as per MCO P4790.20
- Begin Collateral Duty Quality Assurance Representative CDQAR training syllabus
- Attend Aviation Technical Training AVTECHTRA (C-600-3183) Aircraft Corrosion Course
- Attend Aviation Technical Training AVTECHTRA (C-600-3182) Aircraft Paint/Finish Course
- Attend Aviation Technical Training AVTECHTRA (A-493-0072) Respiratory Protection program Management Course
- Attend Aviation Technical Training AVTECHTRA (C-600-3000) Aviation Gas Free Engineering Course (CDQAR Certification required)
- In preparation for future billets, the following courses are recommended:
  - Attend FASO (D-555-0045/0036) Naval Aviation O-Level Work Center Supervisor Course
  - Attend FASO (D-555-0040) Naval Aviation O-Level Maintenance Control Course
  - Attend FASO (D-555-0006/0046) Naval Aviation Quality Assurance Course

PME:

- Attend Corporal's Course (Resident)
- Complete MCI (8010) Sergeants Distance Education Program
- Complete MCI (605AP) Aviation Maintenance Work Center Supervisor
- Continue the Commandant's Reading List Program

Voluntary Education:

- Apprenticeship program for FAA Airframes and Power Plants (A&P) License is available once individual has 30 months experience on both systems and attains the rank of Corporal (https://www.cnet.navy.mil/usmap/usmc_trades.html). This certification can be used in the future to attain a B.S. Aviation Maintenance Management through Embry-Riddle Aeronautical University Navy Distance Learning Program. (http://www.erau.edu/ec/wwc/03navy_prog.html).
- The body of knowledge required to attain the FAA Airframes and Power Plants License is offered through the A.S. Aircraft Maintenance Degree at Embry-Riddle Aeronautical University Navy Distance Learning Program. This may be utilized to attain the practical knowledge in preparation for the apprenticeship program

Duty:

- MV-22 Airframe Mechanic
- W/C Crew / Shift Leader
- W/C Primary Collateral Duty Assignment (I.E. Tool Control NCO, Safety NCO, DTPL...)
- W/C Quality Assurance Collateral Duty Inspector

Special Duty:

- None recommended until the rank of Sergeant

Sergeant

MOS: 6156, MV-22 Tilt Rotor Airframes Mechanic

- Obtain ITSS MATMEP Level IV Qualification as per MCO P4790.20
- Obtain Collateral Duty Quality Assurance Representative CDQAR Certification
- If not previously; attend Aviation Technical Training AVTECHTRA (C-600-3183) Aircraft Corrosion Course
- If not previously; attend Aviation Technical Training AVTECHTRA (C-600-3182) Aircraft Paint/Finish Course
- If not previously; attend Aviation Technical Training AVTECHTRA (A-493-0072) Respiratory Protection Program Management Course
- If not previously; attend Aviation Technical Training AVTECHTRA (C-600-3000) Aviation Gas Free Engineering Course (CDQAR Certification required)
- Attend any/all of the following courses (as required by billet):
  - Attend FASO (D-555-0045/0036) Naval Aviation O-Level Work Center Supervisor Course
  - Attend FASO (D-555-0040) Naval Aviation O-Level Maintenance Control Course
  - Attend FASO (D-555-0006/0046) Naval Aviation Quality Assurance Course
- Submit Warrant Officer package if desired (8 years)

PME:

- Attend Sergeant's Course (Resident)
- Complete MCI (7100) SNCO Career Distance Education Program
- Continue the Commandant's Reading List Program

Voluntary Education:

- Complete the apprenticeship program for FAA Airframes and Power Plants (A&P) License (https://www.cnet.navy.mil/usmap/usmc_trades.html). This certification can be used in the future to attain a B.S. Aviation Maintenance Management through Embry-Riddle Aeronautical University Navy Distance Learning Program. (http://www.erau.edu/ec/wwc/03navy_prog.html).
- Obtain FAA Airframes and Power Plants License.
- Commence / Complete A.S. Professional Aeronautics Degree

Duty:

- Recommend the following billet assignments:
  - W/C Crew / Shift Leader
  - W/C ANCOIC/NCOIC
  - W/C Collateral Duty Quality Assurance Representative
  - Quality Assurance Representative
  - Maintenance Controller

Special Duty:

- Recommend one of the following special duty assignments:
  - Drill Instructor
  - Recruiter
  - Marine Security Guard
  - MOS Instructor ("C" School)

Staff Sergeant

MOS: 6156, MV-22 Tilt Rotor Airframes Mechanic

- Work Center
  - If not previously; attend FASO (D-555-0045/0036) Naval Aviation O-Level Work Center Supervisor Course
- Maintenance Control
  - If not previously; attend FASO (D-555-0040) Naval Aviation O-Level Maintenance Control Course
  - Obtain Safe for Flight Certification
  - Obtain Project/Priority Certification
  - Obtain Cannibalization Authority
- Quality Assurance
  - If not previously; attend FASO (D-555-0006/0046) Naval Aviation Quality Assurance Course
  - Attend FASO (D-555-0007) Aviation Technical Publication Library Custodian Course
  - Obtain Quality Assurance Representative Qualification
  - Obtain Hydraulic Contamination Analysis Certification
- Attend Naval Aviation Maintenance Training Unit NAMTRAU (C-600-3210) Senior Enlisted Aviation Maintenance (SEAM) Course.
- Submit Warrant Officer package if desired (8 years)

PME:

- Attend SNCO Career Course (Resident)
- Complete MCI (8200) SNCO Advanced Distance Education Program
- Complete MCI (606AP) Aviation Quality Assurance Supervisor
- Continue the Commandant's Reading List Program

Voluntary Education:

- Commence / Complete A.S. Professional Aeronautics Degree
- Commence Bachelors Degree in any of the following:
  - B.S. Professional Aeronautics
  - B.S. Aviation Maintenance Management (FAA A&P Required)
- Degree Completion Program

Duty:

- Recommend the following billet assignments:
  - W/C SNCOIC
  - W/C Collateral Duty Quality Assurance Representative
  - Quality Assurance Representative
  - Maintenance Controller

Special Duty:

- Recommend one of the following special duty assignments:
  - Drill Instructor
  - Recruiter
  - Marine Security Guard
  - MOS Instructor ("C" School)

Gunnery Sergeant

MOS: 6156, MV-22 Tilt Rotor Airframes Mechanic

- Maintenance Control
  - Attend FASO (D-555-0003) Naval Aviation Material Control Management Course
  - Attend FASO (D-516-0001) Naval Aviation Weight and Balance Course
  - Attend FASO (D-555-0039) Naval Aviation Logs and Records Course
- Quality Assurance
  - Attend FASO (D-555-0039) Naval Aviation Logs and Records Course
- Attend Naval Aviation Maintenance Training Unit NAMTRAU (C-600-3210) Senior Enlisted Aviation Maintenance (SEAM) Course (SEAM II if available).
- Submit Warrant Officer package if desired

PME:

- Attend SNCO Advanced Course (Resident)
- Complete MCI (7400) Warfighting Skills Distance Education Program
- Continue the Commandant's Reading List Program

Voluntary Education:

- Commence / Complete Bachelors Degree in any of the following:
  - B.S. Professional Aeronautics
  - B.S. Aviation Maintenance Management (FAA A&P Required)
  - B.S. Technical Management Occupational Safety and Health Specialty
  - B.S. Technical Management Logistics Specialty
- Degree Completion Program

Duty:

- Recommend the following billet assignments:
  - W/C SNCOIC/Division Chief
  - Quality Assurance Division Chief
  - Maintenance Control SNCOIC/Chief

Special Duty:

- Recommend one of the following special duty assignments:
  - "B" Billet (if not previously)
  - MOS Instructor ("C" School)
  - CNAL AMMT / MAW LOGMAT Inspector

Master Sergeant

MOS: 6019, Aircraft Maintenance Chief

- Attend FASO (D-555-0034) Naval Aviation Maintenance Officer Course
- Attend Naval Aviation Maintenance Training Unit NAMTRAU (C-600-3210) Senior Enlisted Aviation Maintenance (SEAM) Course (SEAM II under development)

PME:

- Attend Maintenance Chief's Symposium
- Attend E-8 Seminar
- Continue the Commandant's Reading List Program

Voluntary Education:

- Commence Masters Degree in any of the following:
  - M.S. Aeronautical Science
  - M.S. Management
  - M.S. Technical Management
  - M.S. Technical Management Occupational Safety

Duty:

- Recommend the following duty assignments:
  - Maintenance Control Chief (Squadron)
  - Maintenance Chief (Squadron)
  - Division Chief (MALS)
  - Production Control Chief (MALS)

Special Duty:

- Recommend one of the following special duty assignments:
  - HQMC
  - SNCOIC MOS "A" or "C" School
  - MAW LOGMAT Inspector

Master Gunnery Sergeant

MOS: 6019, Aircraft Maintenance Chief

- If not previously; attend FASO (D-555-0034) Naval Aviation Maintenance Officer Course
- Attend Naval Aviation Maintenance Training Unit NAMTRAU (C-600-3210) Senior Enlisted Aviation Maintenance (SEAM) Course (SEAM II under development)

PME:

- Attend Maintenance Chief's Symposium
- Attend E-9 Seminar
- Attend Russell Leadership Conference
- Continue the Commandant's Reading List Program

Voluntary Education:

- Commence Masters Degree in any of the following:
  - M.S. Aeronautical Science
  - M.S. Management
  - M.S. Technical Management
  - M.S. Technical Management Occupational Safety

Duty:

- Recommend the following duty assignments:
  - Maintenance Chief (Squadron, MALS, MAG, MAW)
  - SNCOIC MOS "A" or "C" School
  - MAW LOGMAT Chief Inspector

Special Duty:

- HQMC

6156 - 6019 Road Map

Aviation Maintenance Degrees

The following degrees are available through the Navy College Program Distance Learning Partnership with Embry-Riddle Aeronautical University

A.S. Aircraft Maintenance:

Occupational Specialty: Any MOS

Degree Requirements:	63
Technical Core: (30 Semester Hours)	
General Aeronautics and Applications	3
Aircraft Electrical Systems Theory	3
Airframe Structures and Applications	4
Airframes Systems and Applications	3
Power Plant Theory and Applications	4
Aircraft Propulsion and Applications	4
Technical Electives: (9 Semester Hours)	
Aviation Maintenance, Aeronautical Science, Avionics Technology, Management, Computer Science, **and** Electrical Engineering **or**	9
Aircraft Maintenance Practicum and Advanced Aircraft Maintenance Practicum	9
General Education: (33 Semester Hours)	
Communication Theory and Skills	3
Lower Level Humanities	3
Lower Level Social Sciences	6
Introduction to Computer Based Systems **or** Introduction to Computers and Applications	3
Principles of Management	3
College Mathematics for Aviation **or** Quantitative Methods I **or** College Algebra	3
College Mathematics for Aviation II **or** Statistics with Aviation Applications **or** Business Statistics	3
Explorations in Physics	3
Degree Summary:	
Technical Core	30
Technical Electives	9
General Education	33

A.S. Professional Aeronautics:

Occupational Specialty: Any MOS

Degree Requirements:	60
Technical Core: (18 Semester Hours)	
History of Aviation, Aeronautical Science, Aviation Maintenance, Air Traffic Control, Safety, **and** Management	18
Technical Electives: (9 Semester Hours)	
Aviation Legislation	3
Principles of Management	3
Microeconomics	3
General Education: (27 Semester Hours)	
Communication Theory and Skills	9
Lower Level Humanities	3
Lower Level Social Science	3
Introduction to Computer Based Systems **or** Introduction to Computers and Applications **or** Computer Science	
College Algebra	3
Statistics with Aviation Applications **or** Business Statistics	3
Explorations in Physics	3
Open Electives: (12 Semester Hours)	12
Degree Summary:	
Technical Core	18
Technical Electives	9
General Education	27
Open Electives	12

All of the Degree Completion Courses described herein are available through the Navy College Program Distance Learning Partnership with Embry-Riddle Aeronautical University in Distance Learning (Online) and Resident Learning (Campus) formats. Most campus locations are within the vicinity of Marine Corps Bases/Stations.

Recommended ACE Accreditations

It is at the discretion of the College/University to recognize course accreditation during the application process for a degree.

Military Education:

Title	Military ID	ACE ID	Credits	Level
Recruit Training	808	MC-2204-0038	8	Lower
Aviation Structural Mechanic	C-603-0175	NV-1704-0464	5	Lower
Aviation Structural Mechanic O-Level Strand	C-603-0176	NV-1704-0463	6	Lower
MCI Personal Finance	3420E	MC-1401-0009	1	Lower
MCI Fundamentals of USMC Leadership	033N	MC-1406-0023	1	Lower
Corporal's Course (Resident)	L9K	MC-1405-0051	4	Lower
Sergeant's Course (Resident)	T4M	MC-2204-0143	7	Lower
MCI Sergeants Distance Education	8010	MC-2204-0127	7	Lower
SNCO Career Course (Resident)	T8A	MC-2204-0140	7	Lower
SNCO Career Distance Education	7100	MC-2204-0139	4	Lower
SNCO Advanced Course (Resident)	T8H	MC-2204-0076	9	Lower
SNCO Advanced Distance Education	8200	MC-2204-0142	3	Lower
MCI Warfighting Skills Program	7400	MC-2204-0112	2	Lower
MCI Theory/Construction of Turbine Engines	602	MC-1710-0004	2	Vocational
MCI Aviation Maintenance NCO	6001A	MC-1704-0010	3	Lower
MCI Aviation Maintenance W/C Supervisor	605	MC-1406-0042	2	Vocational
MCI Aviation Quality Assurance Supervisor	606A	MC-1405-0047	1	Lower
Aircraft Paint/Finish	C-600-3182	NV-1704-0594	2	Lower
FASO Naval Aviation Logs and Records	D/E-555-0039	NV-1408-0046	2	Lower
FASO Naval Aviation Maintenance Control	D/E-555-0040	NV-1408-0047	2	Lower
Drill Instructor School	81E	MC-1406-0036	8	Lower
Recruiter School	81C	MC-0327-0001	5	Lower
Marine Security Guard School	81H	MC-1728-0006	4	Lower
Classroom Instructor (MOS) School	A-012-0077	NV-1406-0044	3/3	Low/Up

Military Skills:

Description	Military ID	ACE ID	Credits	Level
Level III ITSS MATMEP (SSgt)	6156	MCE-6156-001	12/2	Lower/Upper
Level IV ITSS MATMEP (GySgt)	6156	MCE-6156-001	22/3	Lower/Upper
Master Sergeant	6019	MCE-6019-001	9/9	Lower/Upper
Master Gunnery Sergeant	6019	MCE-6019-001	9/15	Lower/Upper

In the accreditation process:

- *Military education may be primarily accredited toward Elective Credit Hours (General Education).*
- *Military skills may be primarily accredited toward Technical Credit Hours (Core Education).*