

c. Requirements. Must be a graduate of the Space and Waveform Integration Officer Course (M09CHP1); or the Network Engineering Officers Course (M09DRS1); or the Data Systems Engineering Officers Course (M09D2M1); or the Electromagnetic Spectrum Management Course (F0224L1).

d. Duties. For a complete listing of duties and tasks, refer to reference (i), Communications Training and Readiness Manual.

e. Related Standard Occupational Classification (SOC) Title and Code. None.

f. Related Military Skill

- (1) Space and Waveform Integration Officer, 0620.
- (2) Transmissions Chief, 0629.
- (3) Network Engineering Officer, 0630.
- (4) Network Chief, 0639.
- (5) Strategic Electromagnetic Spectrum Officer, 0640.
- (6) Spectrum Manager, 0648.
- (7) Data Systems Engineering Officer, 0670.
- (8) Data Systems Chief, 0679.

4. MOS 0620, Space and Waveform Integration Officer (SWIO) (III) (CW05 to WO) PMOS, DIR C4

a. Summary. Space and Waveform Integration Officers (SWIO), design, engineer, plan, and direct Over-The-Air (OTA) transport of MAGTF and C/JTF communications networks to include the integration of multiple spectrum dependent platforms in support of Department of Defense Information Network (DODIN) Operations. SWIOs engineer secure and resilient OTA transport architectures which leverage space capabilities for the MAGTF and C/JTF across the range of military operations. SWIOs must be thoroughly familiar with and trained in military and commercial OTA transport and space systems. SWIOs must be educated and trained in electromagnetic spectrum theory, space policy, space theory, waveform theory, waveform analysis, waveform engineering, waveform integration, and OTA transport security measures. SWIOs determine the effects of waveform compatibility in order to prescribe defensive countermeasure techniques of electromagnetic interference in a contested, degraded, and operationally limited (CDO) environments. SWIOs plan for the effective use and integration of disparate OTA transport platforms and systems into a complex bandwidth constrained operational electromagnetic environment (EME) within the breadth of the space domain. Additionally, they conduct technical analysis required to integrate communications systems in the development of Marine Corps plans and policy for current and future operations.

b. Prerequisites

(1) Warrant Officers assigned this MOS must have previously served in one of the following related MOSs 0621, 0627, or 0629.

(2) MOS 0621 or 0627 must have completed the Transmissions Supervisor Course located at Pendleton (M10BNPB), Camp Lejeune (M03BNPG), and Okinawa (M22BNP4) at the Regional Communications Training Center.

(3) MOS 0629 must have completed the Transmissions Chief Course (M09BNL1).

(4) Security requirement: secret security clearance eligibility. Some operational billets may require top secret or top secret with sensitive compartmented information eligibility.

c. Requirements

(1) Complete the Space and Waveform Integration Officer Course (M09CHP1) at Twenty-nine Palms, CA.

(2) CWO4:

(a) Complete the Basic Space Operations Course (Space 200), (F25M013) at the Peterson AFB, CO.

(b) Complete the Joint C4 Planners Course (A09CGH1) at U.S. Army Signal School, Ft Gordon, GA.

(c) Complete the Advanced Extremely High Frequency (AEHF) Mission Planning Element Communication Tactical Course (A09DS21) at U.S. Army Signal School, Ft Gordon, GA.

d. Duties. For a complete listing of duties and tasks, refer to reference (i), Communications Training and Readiness Manual.

e. Related Standard Occupational Classification (SOC) Title and Code. None.

f. Related Military Skill

(1) Cyber Network Operations Officer, 0605.

(2) Transmissions System Operator, 0621.

(3) Troposcatter Transmissions System Operator, 0623.

(4) Satellite Transmissions System Operator, 0627.

(5) Transmissions Chief, 0629.

5. MOS 0630, Network Engineering Officer (III) (CWO5 to WO) PMOS, DIR C4

a. Summary. Network Engineering Officers analyze, design, deploy, maintain and manage network infrastructure to enable command and control. The position encompasses both the theoretical and engineering aspects of specifying, designing, implementing and managing enterprise level classified and unclassified networks. Typical duties include mission planning, budgeting, quality control, advanced technical analysis during the planning, installation, operation, maintenance and secure integration of communication network architectures. Critical to this ability is advanced knowledge of routing/switching, quality of service (QOS), implementation/management of the cable plan, circuit provisioning, transport, internet protocol (IP)

management, encryption management, boundary cybersecurity, network monitoring and end to end support of deployed and garrison networks to include external connectivity to joint, national, and coalition systems. They provide technical direction informing the overall communications control effort relating to the security, installation and performance of network infrastructure within the MAGTF, joint, coalition, garrison, and tactical network environments.

b. Prerequisites

(1) Warrant Officers assigned this MOS must have previously served in one of the following related MOSs: 0631, 0639, 0671, or 0679.

(2) MOS 0631 must have completed the Network Supervisor Course located at Camp Pendleton (M10KBSB), Camp Lejeune (M03KBSG), and Okinawa (M22KBS4) at the Regional Communications Training Centers.

(3) MOS 0639 must have completed the Network Chief Course (M0923X1).

(4) Security requirement: secret security clearance eligibility. Some operational billets may require top secret or top secret with sensitive compartmented information eligibility.

c. Requirements

(1) Complete the Network Engineering Officers Course (M09DRS1) at Twentynine Palms, CA.

(2) Upon completion of the Network Engineering Officers Course, Warrant Officers must forward a request to HQMC C4 (06xx OccFld sponsor) for PMOS approval.

d. Duties. For a complete listing of duties and tasks, refer to reference (i), Communications Training and Readiness Manual.

e. Related Standard Occupational Classification (SOC) Title and Code. None.

f. Related Military Skill

(1) Cyber Network Operations Officer, 0605.

(2) Network Administrator, 0631.

(3) Network Chief, 0639.

6. MOS 0640, Strategic Electromagnetic Spectrum Officer (III) (CW04 to WO) PMOS, DIR C4

a. Summary. Strategic Electromagnetic Spectrum Officers, supervise and manage the planning and use of electromagnetic spectrum for all spectrum-dependent systems in support of MAGTF, joint, and coalition requirements. They develop documentation required to ensure effective employment of spectrum-dependent systems in support of current and future Electromagnetic Spectrum Operations (EMSO). Strategic Electromagnetic Spectrum Officers must be thoroughly familiar with and trained in national, international, DoD, joint and service level spectrum policy, allocations and frequency assignment procedures; spectrum supportability and certification procedures; spectrum

analysis and engineering; effects of electromagnetic compatibility (EMC); various waveform employment; coordination of host nation approval (HNA); transmission theory; and determination, mitigation and resolution of electromagnetic interference (EMI) in a denied degraded contested environment (D2CE). Strategic Electromagnetic Spectrum Officers develop policy and guidance for effective and efficient spectrum use; provide oversight of Marine Corps use of national level and DoD associated spectrum databases; supervise and manage the coordination, de-confliction and integration of spectrum-dependent (S-D) equipment and systems into the operational electromagnetic environment (EME). Strategic Electromagnetic Spectrum Planning and Engineer Officers must be knowledgeable of all DoD/service and commercial S-D equipment and systems to include, but not limited to command and control, communications, intelligence, surveillance and reconnaissance (ISR) assets, aviation platforms, radar and navigation, electronic warfare (EW), munitions and weapons systems, etc.

b. Prerequisites

(1) Must possess MOS 0648 for a minimum of 3 years.

(2) Security requirement: top secret with sensitive compartmented information access eligibility.

c. Requirements

(1) Complete the Electromagnetic Spectrum Management Course (F0224L1), Biloxi, MS.

(2) Upon completion of the Strategic Electromagnetic Spectrum Management Course, Warrant Officers must forward a request to HQMC C4 (06xx OccFld) sponsor for approval.

d. Duties. For a complete listing of duties and tasks, refer to reference (i), Communications Training and Readiness (T&R) Manual.

e. Related Standard Occupational Classification (SOC) Title and Code. None.

f. Related Military Skill

(1) Cyber Network Operations Officer, 0605.

(2) Spectrum Manager, 0648.

7. MOS 0670, Data Systems Engineering Officer (III) (CWO5 to WO) PMOS, DIR C4

a. Summary. Data Systems Engineer Officers analyze, design, deploy, maintain and manage services in support of command and control. The position encompasses both the theoretical and engineering aspects of specifying, designing, implementing and managing enterprise level classified and unclassified applications. Typical duties include mission planning, budgeting, quality control, advanced technical analysis during the planning, installation, operation, maintenance and secure integration of data systems to include active directory management, cloud services, disaster recovery, cybersecurity, database management, scripting, hardware/software management, storage area network (SAN), network attached storage (NAS), virtualization and messaging in support of deployed and garrison systems and services. They

provide technical direction to the subsets of system administration, application development, and unified communication (UC) administration in conjunction with the overall communications control effort relating to the security, installation and performance of services within MAGTF, joint, coalition, garrison, and tactical network environments.

b. Prerequisites

(1) Warrant Officers assigned this MOS must have previously served in one of the following related MOSs: 0631, 0639, 0671, or 0679.

(2) MOS 0671 must have completed the Data Systems Supervisor Course located at Camp Pendleton (M10385B); or Okinawa (M223854) at the Regional Communications Training Centers.

(3) MOS 0679 must have completed the Data Systems Chief Course (M0923W1).

(4) Security requirement: secret security clearance eligibility. Some operational billets may require top secret or top secret with sensitive compartmented information eligibility.

c. Requirements

(1) Complete the Data Systems Engineering Officers Course (M09D2M1) at Twentynine Palms, CA.

(2) Upon completion of the Data Systems Engineering Officers Course, Warrant Officers must forward a request to HQMC C4 (06xx OccFld sponsor) for PMOS approval.

d. Duties. For a complete listing of duties and tasks refer to reference (i), Communications Training and Readiness Manual.

e. Related Standard Occupational Classification (SOC) Title and Code. None.

f. Related Military Skill

(1) Cyber Network Operations Officer, 0605.

(2) Data Systems Administrator, 0671.

(3) Data Systems Chief, 0679.

(4) Defensive Cyberspace Chief, 0689.

8. MOS 0691, Communications Training Instructor (LtCol to Capt) and (CW05 to WO) NMOS (0602, 0605, 0620, 0630, 0640, 0670), DIR C4

a. Summary. Communication Training Instructors (CTI) are subject matter experts in communications concepts and theories, equipment capabilities and employment strategies. CTIs are proficient in the development of personnel and skillset evaluation. Communications Instructors are capable to plan and execute the unit training and readiness program, qualify or certify Marines to serve in critical billets or cyberspace workforce roles. Additionally, CTIs will play a critical role in executing the 06xx Force Modernization