Military Branch: Army

Military Occupation: MICROWAVE SYSTEMS OPERATOR-MAINTAINER

Military Code: 25P

Training Levels: 2 different training levels- 25P30, 25P40.

Go To: Occupation Details   Civilian Competencies   ACE Credit Recommendations

Below are brief synopses of the Occupation and Training received by servicemen and women in this profession. Expanded information on both Occupation and Coursework can be obtained by clicking on these links.

Full Microwave Systems Operator- Maintainer Occupation- link

Full Microwave Systems Operator- Controller Coursework- link

Occupation Details- Synopsis

The Microwave Systems Operator-Maintainer supervises, installs, operates, and maintains strategic microwave communications systems, and associated antennas, multiplexing, and COMSEC equipment. Perform engineering quality control and continuity testing of circuits, trunks, links, systems, and facilities; and maintains tactical Line of Sight (LOS), Tropospheric (TROPO) scatter communications systems and associated equipment. *At Skill Level 30:* The Microwave Systems Operator-Maintainer establishes and maintains files, COMSEC materials and other signal administration functions; supervises the operation, maintenance, troubleshooting and systems analysis of microwave communications and technical control systems or facilities; supervises direct support maintenance on associated equipment and unit level maintenance on COMSEC devices; ensure that governing regulations on accountability, maintenance, and TEMPEST standards are complied with; establishes workload, work schedules, and repair priorities; performs or supervises quality control and technical evaluation inspections; implements restoration priorities for circuit, trunk, and system outages; coordinates Continuity of Operations Plan (COOP); and coordinates logistical support, as established in the facility Standing Operating Procedures (SOP), or commercial activities contract. *At Skill Level 40:* Able to perform the duties required for Skill Level 30; the Microwave Systems Operator-Maintainer supervises, plans, and directs the installation, operation, and maintenance activities of microwave communications and technical control systems and facilities; provides technical advice and assistance to subordinates; writes operating policy and procedures for microwave and technical control facilities; manages Signal Security (SIGCEC), ECCM and COMSEC procedures; determines capabilities and limitations of assigned equipment; establishes and maintains liaison with supported and supporting units and activities; develops and conducts training for subordinate personnel; and assimilates data and submits statistical and other reports to operational control elements.

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Related Training Outcomes and Competencies:

Training for this position is comprised of multiple trainings. This is 1 of up to 5 training versions for this occupations.

MICROWAVE SYSTEMS OPERATOR-MAINTAINER COMMON CORE

Course Number: 101-25P10, Phase 1.

Length: 10 weeks (378 hours).

Exhibit Dates: 10/13–Present.

Learning Outcomes: Upon completion of the course, the student will be able to understand and apply basic electronics fundamentals, basic digital fundamentals, and basic networking fundamentals; configure, operate, troubleshoot, and maintain data communication routers, modems, multiplexers, and protocol converters; and configure and operate data encryption systems.

Instruction: Methods of instruction include laboratory, lecture, and practical exercises. General course topics include direct and alternating current electronics fundamentals, digital fundamentals, data communications fundamentals and applications, encryption systems, and integrated data systems.

Methods of Assessment: Methods of assessment include performance rubrics (checklists) and examinations.

Related Competencies: *Basic electricity and electronics* topics include AC/DC theory, basic electronic theory and laws, circuitry diagnostics and components, power supplies, schematics, test equipment, and troubleshooting. *Network fundamentals* topics include cryptography, media types, network hardware, network troubleshooting, open system interconnect models (OSI), router basics, and switching devices. *Data communications systems* topics include bitstream, data communications, encryption, multiplexing, and telecommunications.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity and electronics, 3 in network fundamentals, and 3 in data communications systems (2/14)(2/14).

Training Matching Civilian Occupations

Supervision topics include coaching, decision-making, mentoring, problem solving, resource management, scheduling, supervisory reports, time management, and training.

Communications topics include briefing, oral communication techniques, presentation skills, research, technical writing, and written communication skills.

Quality assurance topics include assessments, inspections, inventory control, performance monitoring, policy and procedures, quality control, and trend analysis.

Networking fundamentals topics include cabling, fiber, IP addressing, local area network (LAN), terminators, troubleshooting, and Variable Length Subnetting (VLSM).

Routing and routing protocols topics include Border Gateway Protocol (BGP), dynamic host configuration protocol (DHCP), firewalls, IP configurations, Open Shortest Path First (OSPF), OSPF authentication, and routing tables.

Switching and switching protocols topics include IP configuration, mac address tables, port security, port sticky, spanning tree protocol (STP), troubleshooting, and upgrade IOS.

Server administration topics include active directory, group policy, imaging, infrastructure, permissions, troubleshooting, and user management.

Security management topics include access control list, auditing, firewalls, intrusion detection systems, permissions, and report validation.

Radio frequency electronic systems troubleshooting and maintenance topics include antennas, block diagram analysis, computer control concepts, computer interface, connectivity, microwave concepts, modulation techniques, propagation concepts, safety, schematics, signal flow, spectrum analysis, test equipment, and troubleshooting techniques.

Management topics include controlling, developing, inventory management, leading, organizing, personnel management, and planning.

ACE credit recommendations

ACE's Military Guide presents college credit recommendations for formal courses and occupations offered by all branches of the military.

All recommendations are based on ACE reviews conducted by college and university faculty members who are actively teaching in the areas they review.

Below are credit recommendations for the INFORMATION TECHNOLOGY SPECIALIST training, at the 3 levels listed.

Military Course	Recommended Semester Hours	Credit Level Recommendation V-Vocational L-Lower division baccalaureate/associates U- Upper division baccalaureate	Training included in each skill level	
			25P30	25P40
Supervision	3 SH	L	X	X
Communications	3 SH	L	X	X
Quality Assurance	3 SH	L	X	X
Networking Fundamentals	3 SH	L	X	X
Routing and Routing Protocols	3 SH	L	X	X
Switching and Switching Protocols	3 SH	L	X	X
Server Administration	3 SH	L	X	X
Security Management	3 SH	L	X	X

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Radio Frequency Electronic Systems Troubleshooting and Maintenance	3 SH	L		X	X
Management	3 SH	U			X
Total semester hours recommended				27 SH	30 SH
Quarter hours recommended				40.5* QH	45 QH

- Common semester hour/quarter hour conversion rate is: Semester hrs X 1.5= Quarter hours

Onet Military crosswalk results

Onet is a civilian occupational crosswalk created and maintained by the Department of Labor. It includes a military crosswalk, but the Onet crosswalk does not include military occupation or training information. The military crosswalk provides civilian occupations that align with military training. The Onet tool can be used to provide only general occupational crosswalking for military to civilian career paths.

Onet results for **Military Occupation:** MICROWAVE SYSTEMS OPERATOR-MAINTAINER

Military Code: 25P- http://www.onetonline.org/crosswalk/MOC?b=A&s=25p&g=Go

Similar Matching Civilian Occupation Profile via Onet http://www.onetonline.org/link/summary/49-2022.00

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