

Department of the Army
Pamphlet 621-101

EDUCATION

**THE US ARMY
SIGNAL SCHOOL
APPRENTICESHIP
PROGRAM FOR
THE TRADE OF
RADIO
MECHANIC**

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SUMMARY of CHANGE

DA PAM 621-101

THE US ARMY SIGNAL SCHOOL APPRENTICESHIP PROGRAM FOR THE TRADE OF RADIO MECHANIC

Not applicable

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EDUCATION

THE US ARMY SIGNAL SCHOOL APPRENTICESHIP PROGRAM FOR THE TRADE OF RADIO MECHANIC

By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Brigadier General, United States Army
The Adjutant General

Summary. Not applicable.

Applicability. This pamphlet applies to all elements of the active Army. This pamphlet does not apply to Army National Guard and Army Reserve.

Proponent and exception authority. The proponent agency of this pamphlet is The Adjutant General's Office.

Interim changes. Interim changes are not official unless they are authenticated by The Adjutant General. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, US Army

Signal Center and Fort Gordon, ATTN: ATZHPA-E, Fort Gordon, GA 30905.

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*This pamphlet supersedes DA Pam 621-101, 1 May 1979.

RESERVED

1. Purpose.

The purpose of this pamphlet is to announce the US Army Signal School Apprenticeship Program for the trade of Radio Mechanic (DOT Code 823.261-018).

2. Applicability.

This pamphlet applies to all elements of the active Army. This pamphlet does not apply to Army National Guard and Army Reserve.

3. General.

Policies and procedures for participation in the program are contained in AR 621-5. This pamphlet is designed to be used in conjunction with that regulation.

4. Apprenticeship Program Number and Occupational Skill Code.

a. The following apprenticeship program number and occupational skill code are used to identify the US Army Signal School apprenticeship program for the trade of Radio Mechanic.

(1) Apprenticeship Program Number: 99904.

(2) Occupational Skill Code: 15.

b. The apprenticeship program number and occupational skill code must be entered on DA Form 4409-R (Apprenticeship Application) to identify the program for which the soldier is making application.

5. Eligibility for Participation in the Program.

Soldiers holding as primary or secondary the MOS of 31V, Tactical Communications Systems Operator/Mechanic and serving the MOS may participate in the program.

6. The Radio Mechanic Apprenticeship Program.

This is a 6,000 hour program which leads to certification as journeyworker in the trade of Radio Mechanic. Participation in the program is voluntary, and no membership in labor unions or professional associations is required. The work process schedule and schedule of related instruction for the trade are attached (app B and C). The purposes of the work process schedule and the schedule of related instruction are indicated below:

a. The work process schedule reflects categories of work experience required by the soldier-apprentices to qualify as journeyworker and hours of work experience required in each category.

b. The schedule of related instruction identifies courses which may be taken by soldier-apprentices to satisfy the 432 hours of related instruction required for completion of the program.

7. Enrollment in the Program.

Soldiers may enroll in the program by contacting their installation education services officer (ESOs) who will explain requirements of the program and assist in the preparation of the apprenticeship application form (DA Form 4409-R).

8. Apprenticeship Log Forms.

Apprenticeship log forms and instructions on use of the forms will be issued to soldiers by installation ESOs at the time of registration in the program. Log instruction sheets will be maintained by soldiers in a three ring binder. Soldier-apprentices will be required to annotate their work experience on log sheets on a daily basis. The standard for the amount of work experience logged will be 132 hours per month. Hours logged above this standard amount must be justified in the remarks section of the daily work experience record and attested to by the signature and rank of the shop craft supervisor or an individual holding a comparable position. Log entries must be verified by the soldier-apprentice's immediate supervisor on a weekly basis.

9. Credit for Previous Experience.

a. Newly enrolled soldier-apprentices who have partially completed an approved Federal or State registered civilian apprenticeship in the trade of Radio mechanic or a related trade will, upon presentation of documentation, be awarded credit for all experience related to categories of work contained in the work process schedule at appendix B.

b. Up to 3,000 hours of credit for previous military work experience may be awarded upon presentation of authenticated documentation of satisfactory performance. Such experience must be directly related to the occupation in which the apprenticeship is being performed. Statements from previous supervisors or other such documentation which certify category of work, number of hours by category, and quality of performance will be submitted by soldier-apprentices to their installation ESOs for consideration. ESOs will forward these documents to the Commander, US Army Signal Center and Fort Gordon, ATTN: ATZHPA-E, Fort Gordon, GA 30905, for final determination.

10. Related Instruction Credit for Previous Military and Civilian Education.

Credit for previous military and civilian education may be awarded to satisfy related instruction requirements by presenting certificates of course completion or other such documentation from official military records or other sources.

The installation ESO will determine the amount of credit to be awarded. The ESO will consult sponsor Service schools, as required, to determine the appropriate amount of credit for each course not listed in appendix C of this pamphlet.

11. Completion of the Program.

Upon successful completion of the program, a Certificate of Completion of Apprenticeship will be awarded by the US Department of Labor. While the award of a Certificate of Completion of Apprenticeship will not guarantee a job, it will certify that journeyworker status has been attained, and should enable completers of the program to be more competitive with civilians in the trade.

12. Partial Completers.

Soldiers leaving the service prior to completion of the program will receive documented credit for that portion of the program which they did complete. This documentation may be presented for satisfaction of requirements of civilian apprenticeship programs in the trade of Radio Mechanic or a related trade. (See app D.)

Appendix A REFERENCES

Section I Required Publications

This section contains no entries.

Section II Related Publications

This section contains no entries.

Section III Prescribed Forms

This section contains no entries.

Section IV Referenced Forms

This section contains no entries.

Appendix B
WORK PROCESS SCHEDULE FOR THE TRADE OF RADIO MECHANIC (DOT CODE
823.261-018)

Table B-1
WORK PROCESS SCHEDULE FOR THE TRADE OF RADIO MECHANIC

<i>Work Processes</i>	<i>Hours</i>
A. Proper use of Tools, Test Instruments and Schematics Develop skills in the use, care and storage of handtools and specialized trade tools. Perform checks on radio equipment using measuring instruments and test devices. Utilize technical manuals and catalogs.	300
B. Operation of Communication Equipment AM, FM, SSB Radio Teletypewriter receivers and transmitters. Power supplies.	300
C. Inspection and Troubleshooting of Communication Equipment Use basic circuit analysis and theory of operation on AM, FM, SSB and radio teletypewriter receivers and transmitters. Localize problem to assembly, sub-assembly and/or component. Isolate defective part or component visually and/or with test equipment. Utilize schematic wiring diagram and troubleshooting checklists or charts. Remove equipment from cabinet, cases or steel boxes as required to complete troubleshooting procedure of major component.	1,800
D. Repair of Communication Equipment Replace defective part or major component. Repair or replace hocks, cords or cables as required. Clean and visually check AM, FM, SSB and Radio Teletypewriter receivers and transmitters after repair. Perform soldering and unsoldering on major components. Disassemble receivers and transmitters for repair of major components. Reassemble receivers and transmitters after completed repairs. Perform final test and alignment of radio systems components.	1,200
E. Installation of Communication Equipment Radio receivers. Radio transmitters. Power supplies. Public address sets. Cables and antennas. Test and align equipment for operational readiness as part of the system.	900
F. Preventive Maintenance on Communication Equipment Apply clean up and preventive maintenance procedures on AM, FM, SSB and teletypewriter equipment. Maintain equipment maintenance records	900
G. Miscellaneous and Safety Employ safety practices related to each operation being performed. Apply first aid as required on the job.	600
TOTAL	6,000

This paragraph contains no entries.

Appendix C

SCHEDULE OF RELATED INSTRUCTION FOR THE TRADE OF RADIO MECHANIC (DOT CODE 823.261-018)

A total of 432 hours of related instruction is required to complete this program. Completion of any one or a combination of the below listed courses which equals 432 hours of related instruction or more may be taken to satisfy this requirement. Credit for courses not listed below may be awarded upon presentation of authenticated documentation of satisfactory completion. A synopsis of the course must be submitted with documentation. Documentation and synopsis for courses not listed below will be forwarded by ESOs to the Commander, US Army Signal Center and Fort Gordon, ATTN: ATZHPA-E, Fort Gordon, GA 30905, for final determination.

Table C-1
SCHEDULE OF RELATED INSTRUCTION FOR TRADE OF AIRPLANE MECHANIC

Course Number	Course Title	School	Resident	Non-resident	Credit Hours
A. 101-31V10	Tactical Communications Systems Operator/Mechanic	USAFAC	X		416
B. 101-31V30	Tactical Communications Chief	USAFAC	X		638
C. 101-31V40	Tactical Communications Chief-Advanced	USAFAC	X		272
D. 5-10	Tactical Communications Chief (31V30/40)	USASC		X	305
E. 6-17	Field Radio Mechanic (31V10)	USASC		X	81
F. SSO 320	Communications Fundamentals	USASC		X	5
G. SSO 308	Introduction to Electricity	USASC		X	6
H. SSO 651	Shop Practice and Safety	USASC		X	3
I. SS9 448	Operations of Multimeter TS-352()/U (SOJT)	USASC		X	3
J. SS9 449	Operations of Multimeter ME-26/U(SOJT)	USASC		X	2
K. SSO 734	Tactical FM Radio Sets	USASC		X	5
L. SSO 712	Organizational Maintenance of Radio Set AN/VRC-12	USASC		X	9
M. SSO 730	Radio Set AN/GRC-106 Operation	USASC		X	4
N. SS9 740	Radio Set AN/GRC-106(SOJT)	USASC		X	12
O. SSO 733	Radio Teletypewriter Sets AN/GRC-142/122	USASC		X	4
P. SSO 660	Maintenance Concepts and Supply Procedures	USASC		X	7
Q. SS9 735	Operations of Radio Set AN/PRC-77 (SQJT)	USASC		X	6
R. SS9 736	Organizational Troubleshooting of Radio Set AN/PRC-77(SOJT)	USASC		X	3
S. SSO 652	Operating Through Radio Jamming and Interception	USASC		X	2
T. SSO 003	Introduction to Wire Communications	USASC		X	10
U. SSO 093	Tactical Wire and Cable Communications Systems	USASC		X	8
V. SSO 096	Manual Telephone Switchboard Systems	USASC		X	5
W. SSO 430	Field Wire and Field Cable Lines-Construction and Maintenance	USASC		X	
X. SS9 430	Filed Wire and Field Cable Lines-Construction and Maintenance	USASC		X	8
Y. SSO 004	Introduction to Tactical Telephone Teletypewriter Equipment	USASC		X	7
Z. SSO 411	Local-Battery Telephone Switchboard	USASC		X	12
AA. SSO 438	Installation Operation and Maintenance of Telephone and Local-Battery Switchboards	USASC		X	14
BB. SS9 438	Installation Operation and Maintenance of Telephone and Local-Battery Switchboards (SOJT)	USASC		X	10
CC. SSO 002	Introduction to Tactical Radio Communications	USASC		X	12
DD. SSO 014	Tactical Radio Systems	USASC		X	11
EE. SSO 059	Tactical Radio Communications	USASC		X	15
FF. SSO 757	Single-Sideband Radio Transmission	USASC		X	6
GG. SSO 759	Single-Sideband Radio Reception	USASC		X	3
HH. SSO 469	Power for Tactical Communications Equipment	USASC		X	12
II. SS9 469	Power for Tactical Communications Equipment (SOJT)	USASC		X	14
JJ. SSO 401	Tactical Teletypewriter Equipment	USASC		X	12
KK. SSO 451	Manual Teletypewriter Procedures and Operations	USASC		X	8

This paragraph contains no entries.

**Appendix D
EXAMPLE OF A PARTIAL COMPLETION LETTER**

(Enter Office Symbol)

(Enter Date)

TO WHOM IT MAY CONCERN:

This is to certify that _____ was enrolled in the Army
(Name)

Apprenticeship Program for _____
(Name of Occupational Skill Area)

_____ During this period _____ to _____. During that period
(Registration Number) (Date) (Date)

he successfully completed the following hours:

<i>Work Process</i>	<i>Hours</i>
A	_____
B	_____
_____	_____
_____	_____

Army Apprentice Programs are registered with the US Department of Labor and the fact that this individual did participate can be verified with the Bureau of Apprenticeship and Training, Patrick Henry Building, Washington, DC 20213, or by contacting Headquarters, TRADOC, ATTN: ATPL-AGE, Fort Monroe, VA, 23651.

Sincerely,

ESO's SIGNATURE BLOCK

Figure D. EXAMPLE OF A PARTIAL COMPLETION LETTER

This paragraph contains no entries.

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