Department of the Army
Pamphlet 621–80

EDUCATION

THE US ARMY TRANSPORTATION SCHOOL APPRENTICESHIP PROGRAM FOR THE TRADE OF AIRPLANE MECHANIC

Headquarters
Department of the Army
Washington, DC
15 October 1984

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SUMMARY of CHANGE

DA PAM 621-80
THE US ARMY TRANSPORTATION SCHOOL APPRENTICESHIP PROGRAM FOR THE TRADE OF AIRPLANE MECHANIC

This change 3--

- DA Pam 621, 15 July 1981, is changed as follows
- Throughout. Change "US Army Transportation School" to "US Army Transportation and Aviation Logistics Schools."
- Throughout. Change "ATTN: ATSP-ET-IAP" to "ATTN: ATSPQ-SEF-IAP."
- Throughout. Change "USATS" to "USATALS."
- In Appendix B, (formerly Appendix A) Item A. Change "1000" hours to "1100" hours.
- In Appendix C, (formerly Appendix B) Item A. Add: (Course Number 600-67H10/20, Course Title OV-1 Airplane Mechanic, School USATALS, Res X, NonRes, Credit Hours 411c
- In Appendix C, (formerly Appendix B) Notes. Add "c Persons who successfully complete the 67H Airplane Mechanics Course at the USATALS after 19 May 1977 will be considered to have met 432 hours of related training requirements. Soldiers who have completed the 67H Course prior to 19 May 1977 will be considered to have met 411 hours of the related instruction requirement. Graduates prior to 19 May 1977 will be required to take an additional 20 hours of related instruction."

- This change 2--
- This change adds MOS 67H to the Airplane Mechanic Apprenticeship Program.
- DA Pamphlet 621-80, 15 July 1981, is changed as follows:
- This change adds hours to Category A, and deletes 2 in Appendix B. DA Pamphlet 621-80, 15 July 1981, is changed as follows:
- 1. Page A-1, paragraph A, General Maintenance, add 100 hours for a total of 1100 hours.
- 2. Page B-2, note b, delete course letter Z.

- This change 1--

- This change adds MOS 67H to the Airplane Mechanic Apprenticeship Program.
- DA Pamphlet 621-80, 15 July 1981, is changed as follows:
- New or changed material is indicated by a star.
- Remove old pages and insert new pages as indicated below:

--Remove pages	*Insert pages*
--1 and 2	1 and 2
--B-1 and B-2	B-1 and B-2

Headquarters
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15 October 1984

*Department of the Army
Pamphlet 621–80

EDUCATION

THE US ARMY TRANSPORTATION SCHOOL APPRENTICESHIP PROGRAM FOR THE TRADE OF AIRPLANE MECHANIC

By Order of the Secretary of the Army:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

Official:

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

History. This publication was originally printed on 15 July 1981. It was authenticated by E. C. Meyer, General, Chief of Staff and Robert M. Joyce, Brigadier General. This electronic edition publishes the basic 1981 edition and incorporates Changes 1, 2 and 3. Change 1 to this regulation was printed on 15 May 1982 and was authenticated by E. C. Meyer, General, Chief of Staff and Robert M. Joyce, Brigadier General. Change 2 was printed on 15 June 1984 and was authenticated by John A. Wickham, Jr., General, chief of Staff and Robert M. Joyce, Brigadier General. Change 3 was printed on 15 October 1984 and was authenticated by John A. Wickham, Jr., General, chief of Staff and Robert M. Joyce, Brigadier General.

Summary. The purpose of this pamphlet is to announce the US Army Transportation and Aviation Logistics Schools Apprenticeship Program for the Trade of Airplane Mechanic (DOT Code: 621.281–014).

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 regulation is The Adjutant General Center.

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) direct to: USATALS, ATTN: ATSPQ–SEF–IAP, Fort Eustis, VA 23604.

Distribution. Active ARMY: To be distributed in accordance with DA Form 12–9A requirements for Education—B
ARNG, USAR—NONE

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*This pamphlet supersedes DA Pam 621–80, 29 April 1977.

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1. Purpose.

The purpose of this pamphlet is to announce the US Army Transportation and Aviation Logistics Schools Apprenticeship Program for the Trade of Airplane Mechanic (DOT Code: 621.281–014).

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.

An apprenticeship program number and occupational skill code are used to identify the Army Apprenticeship Program for the Trade of Airplane Mechanic. The apprenticeship program number and occupational skill code for the trade of Airplane Mechanic are:

a. Apprenticeship Program Number: 99903.

b. Occupational Skill Code: 05.

5. Eligibility for Participation in the Program.

Soldiers holding as primary or secondary the MOS of 67G or 67H (Airplane Mechanic) and serving in the MOS may participate in the program.

6. Airplane Mechanic Apprenticeship Program.

This is a 6,000 hour program which leads to certification as journeyworker in the trade of Airplane Mechanic. The work process schedule and schedule of related instruction for the trade are provided in appendixes B and C. The work process schedule reflects categories and numbers of hours of work experience required by soldier–apprentices to qualify for certification or as journeyworker Airplane Mechanics. The schedule of related instruction identifies courses which may be taken by soldier–apprentices to assist in satisfying the 432 hours of related instruction requirement for completion of this program. The requirement for related instruction is in addition to the 6,000 hour work process requirement.

7. Enrollment in the Program.

Soldiers may enroll in the program by contacting their installation education services officers (ESOs) who will explain requirements of the program and assist in the preparation of the Apprenticeship Application form (DA Form 4409–R).

8. Apprentice Log Forms.

Apprentice Log Forms and instructions on use of 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. Soldier–apprentices who have participated in an approved Federal or State registered civilian apprenticeship in the trade of Airplane 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 3000 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 Transportation School, ATTN: ATSPQ–SEF–IAP, Fort Eustis, VA 23604, for final determination.

10. Related instruction Credit for Previous Military and Civilian Schooling.

Credit for previous military and civilian schooling 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 appropriate Service schools, as required, in order to determine the appropriate amount of credit for each course.

11. Completion of the Program.

Upon successful completion of the program, a Certificate of Completion of Apprenticeship will be awarded by the 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 Airplane 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 AIRPLANE MECHANIC (DOT CODE 621.281–014)

B–1. Work Process Schedule Airplane Mechanic

Note. Where applicable, all tasks in this work process schedule include removal, replacement, inspection, adjusting, cleaning, testing, rigging, and assembly.

Table B–1
WORK PROCESS SCHEDULE AIRPLANE MECHANIC

		Hours
A.	General Maintenance	1100
	1. Use of DC and AC Electrical Instruments, Voltmeters, Ohmmeters, and Ampmeters.	
	2. Batteries and Compartment Maintenance.	
	3. Use Diagrams, Schematics, Drawings, Charts, Graphs, and Manuals.	
	4. Preparation of Forms, Records, Condition Reports, and Supply Requisitions.	
	5. Rigid and Flexible Aircraft Plumbing and Fittings.	
	6. Aircraft Associated Hardware.	
	7. Ground Operations and Servicing.	
	8. Aircraft Finishes and Costings.	
	9. Sheetmetal Rivets and Fasteners.	
	10. Aircraft and Component Inspections and Nondestructive Testing.	
B.	Weight and Balance Procedures and Computations and Cargo Loading and Securing	100
C.	Flight Control Systems and Components	500
D.	Propeller and Governor Systems	600
E.	Powerplant Removal, Replacement, Inspection, and Testing	1,000
F.	Powerplant Systems and Components	1,500
	1. Engine Instruments Systems.	
	2. Engine Fire Protection Systems.	
	3. Engine Electrical Systems.	
	4. Engine Lubrication Systems.	
	5. Engine Ignition Systems.	
	6. Engine Fuel Systems.	
	7. Engine Induction Systems.	
	8. Engine Cooling Systems.	
	9. Engine Exhaust Systems.	
	10. Engine Control Systems.	
G.	Airframe Systems and Components	1,200
	1. Landing Gear and Brake Systems.	
	2. Hydraulic and pneumatic Power Systems.	
	3. Cabin Atmosphere Control Systems.	
	4. Fuel Systems.	
	5. Electrical Systems	
	6. Fire Protection Systems.	
	7. Auxiliary Power Systems.	
	TOTAL	6,000

Legend for Table B-1:
Special Instructions.

a. Credit for work processes will not be awarded to individuals who have completed work processes relating to the trade of Airplane Mechanic that were completed while they were students in high schools/vocational schools or colleges prior to entry into the Army.

b. Work processes completed in a state or federally recognized apprenticeship program will be accepted upon presentation of proper documentation to the appropriate service school.

B–2. Title not used.

Paragraph not used.

Appendix C
SCHEDULE OF RELATED INSTRUCTION FOR TRADE OF AIRPLANE MECHANIC (DOT CODE 621.281–014)

C–1. Schedule of Related Instruction for Trade of Airplane Mechanic

A total of 432 hours of related instruction is required to complete this program. 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 Commandant, US Army Transportation and Aviation Logistics Schools, ATTN: ATSPQ–SEF–IAP, Fort Eustis, Virginia 23604, for final determination.

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

Course Number		Course Title	School	Resident	Non–resident	Hours Credit
A	600–67G20	U–8/U–21 Airplane Mechanic	USATALS		X	432[a, b] (414)[a, b]
	600–67H10/20	OV–1 Airplane Mechanic	USATALS	X		411[c]
B	TRO 821	Avn Maintenance Inspection Systems	USATALS		X	6
C	TRO 822	Avn Maintenance and supply, Forms and Publications	USATALS		X	9
D	TRO 824	Avn Ground Support Equipment	USATALS		X	2
E	TRO 833	Aircraft International Loading	USATALS		X	4
F	TRO 902	DA Pubs Applicable to Avn Maintenance	USATALS		X	5
G	TRO 904	Safety Procedures	USATALS		X	3
H	TRO 907	Basic Hydraulics Hydraulic Plumbing	USATALS		X	4
I	TRO 909	Army Aircraft Weight and Balance	USATALS		X	3
J	TRO 917	Non–Destructive Testing	USATALS		X	2
K	TRO 920	Aircraft propellers	USATALS		X	5
L	TRO 925	Aircraft Reciprocating Engineers	USATALS		X	8
M	TRO 926	Hydraulic Systems & Components	USATALS		X	4
N	TRO 929	Aircraft Instruments	USATALS		X	8
O	TRO 966	Basic Aerodynamics	USATALS		X	2
P	TRO 967	Corrosion Control	USATALS		X	3
Q	TRO 968	Aircraft Technical Drawings	USATALS		X	7
R	TRO 970	Aircraft Common Hardware	USATALS		X	3
S	TRO 973	Aircraft Forms and Records	USATALS		X	7
T	TRO 981	Army Fixed Wing Aircraft	USATALS		X	10
U	TRO 992	Airframe Repair	USATALS		X	7
V	TRO 993	Army Aircraft Gas Turbine Engines	USATALS		X	19
W	TRO 996	Aircraft Electrical/Power Supply Systems	USATALS		X	9
X	AVO 570	Aviation Shop and Flight Line Safety	USAAVNS		X	2
Y	AVO 573	Aircraft Structures	USAAVNS		X	4
AA	AVO 650	Army Aircraft Characteristics	SAAVNS		X	3
BB	AVO 802	Introduction to Army Aviation and the Army Maintenance Systems	USAAVNS		X	4
CC	AVO 823	Forms and Records	USAAVNS		X	6
DD	AVO 850	Basic Electricity and Electrical Components	USAAVNS		X	18
EE	AVO 851	Army Aircraft Systems	USAAVNS		X	9
FF	AVO 852	Aircraft Instruments and Landing Gear	USAAVNS		X	7
GG	AVO 853	Ground Handling, Aux Ground Handling Equip and Mechanics Handtools	USAAVNS		X	6
HH	AVO 854	FOD and Gears and Bearings	USAAVNS		X	4
II	AVO 855	Fuel and Oil Service	USAAVNS		X	3
JJ	ODO 98	Fundamental of Electricity	USAOC&S		X	24
KK	CDC 42153	Aerospace Ground Equipment Mech	USAF		X	108
LL	CDC 42350	Aircraft Electrical Systems Specialist	USAF		X	81
MM	CDC 42354	Aircraft Pneudraulics Systems Mechanic	USAF		X	111
NN	CDC 42651	Reciprocating Engine Mechanic	USAF		X	87
OO	CDC 43250	Jet Engine Mechanic	USAF		X	108
PP	CDC 53153	Airframe Repair Specialist	USAF		X	177
QQ	CDC 53154	Corrosion Control Specialist	USAF		X	63
RR	CDC 53155	Nondestructive Inspection Specialist	USAF		X	105
SS	SS NAVEDTRA 10323 RTM/NRCC	Aviation Mechanists Mate 3 & 2	USN		X	84

Table C–1
SCHEDULE OF RELATED INSTRUCTION FOR TRADE OF AIRPLANE MECHANIC—Continued

Course Number		Course Title	School	Resident	Non–resident	Hours Credit
TT	TT NAVPERS 91368–B	Aviation Mechanists Mate R 3 & 2	USN		X	72

Notes:

[A] Persons who successfully complete the 67G or 67H Aircraft Mechanic course presented at the US Army Transportation and Aviation Logistics Schools after 28 June 1977 shall be considered to have met the 432 hour related training requirement and given credit for such. Soldiers who have completed the 67G or 67H Aircraft Mechanic course presented at the US Army Transportation and Aviation Logistics Schools prior to 28 June 1977 will be considered to have met 414 of the 432 hours of related instruction necessary for this program. Graduates of these courses will be required take an additional 18 hours of related instruction. This requirement can be met by completing the Army Correspondence (Non–residence) Courses lettered I, N, and U.

[B] Persons who have not completed one of the resident courses listed above may meet the related instruction requirement necessary for completion of this program by taking courses lettered I, K, L, M, N, Q, V, W, DD, FF, and any combination of the remaining correspondence courses listed that will total 432 hours.

[C] Persons who successfully complete the 67H Airplane Mechanics Course at the USATALS after 19 May 1977 will be considered to have met 432 hours of related training requirements. Soldiers who have completed the 67H Course prior to 19 May 1977 will be considered to have met 411 hours of the related instruction requirement. Graduates prior to 19 May 1977 will be required to take an additional 20 hours of related instruction.

Special Instructions.

a. Credit for related instruction will not be awarded to individuals who have completed course subjects relating to the trade of Airplane Mechanic that were completed while they were students in high schools/vocational schools or colleges prior to entry into the Army.

b. Related instruction completed in a state or federally recognized apprenticeship program will be accepted upon presentation of proper documentation.

c. Related instruction credit may be awarded individuals registered in the trade of Airplane Mechanic taken from an accredited institution providing the courses are similar to the courses noted in appendix C.

C–2. Title not used.

Paragraph not used.

Appendix D
EXAMPLE OF A PARTIAL COMPLETION LETTER

D–1. Example of a Partial Completion Letter

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:

Work Process	*Hours*
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

D–2. Title not used.

Paragraph not used.

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