Hudson Valley Community College Aeronautical Technical Institute (HVCC ATI)

Aviation Maintenance Training and Operations Manual

ATI Required Documents Binder

FAA Certificate Number: HVCT649K

01 SEP 2026

Revision: Change 5

In Accordance with 14 CFR Part 147

Hudson Valley Community College
Office of Workforce Development
80 Vandenburgh Avenue
Troy, New York 12180

ATI Required Documents: List of Revisions and Changes

1. Revision and Record of Changes. The information in these documents will be kept current by revisions. Revision material will consist of information necessary to update the contents of this document and/or to add or remove information to cover any additional requirements to maintain compliance required by Title 14 of the Code of Federal Regulations as needed.

2. Specific revisions will be highlighted in **RED BOLD** wherever changes were made. Previous changes will revert to non-bolded black text. Further, the label "C# (# indicating the change number)" will be placed adjacent to the change to allow for quick identification of the location of changes. A change bar located in the margin will only mark the most current changes. The left margin features an example of what this change label and change bar will look like.

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a. The HVCC ATI Director is responsible for identifying when changes are necessary and making changes to both the Training and Operations Manual and ATI Required Documents Binder.

1) Instructors/staff will be notified of an impending change though their official email and will be invited to review all changes for accuracy and applicability prior for submission to the FAA for acceptance.

2) The ATI Director will notify the FAA within 30 days of an impending change to one or both of the documents and have a final copy submitted through SAS and/or by email (depending on SAS system requirements) within 60 days of notification.

b. HVCC ATI will not incorporate any changes to the curriculum or use updates to the curriculum until the FAA Lead Airworthiness Inspector has reviewed the changes, ensured that the curriculum meet the requirements of 14 CFR Part 147.17 (a) (1), (2), & (3), aligns with the Mechanic ACS in accordance with 14 CFR Part 147.17 (b), and has provided written acceptance of the curriculum's capacity to meet 14 CFR Part 147.17 requirements.

a. Record of Revisions. Revisions to the ATI Required Documents are listed below.

Section	Revision #	Revision Date	Revision POC	Revision Notes	FAA Reviewed Date	FAA Reviewed POC
List of Personnel	Change 1	19 AUG 24	CRS	Addition of New Instructor	20 AUG 24	GS
Master Equipment List	Change 2	20 SEP 24	CRS	Addition of Powerplant Rating Changes	8 Nov 24	MA
Master Material List	Change 2	20 SEP 24	CRS	Addition of Powerplant Rating Changes	8 Nov 24	MA
Part 147 Curriculum	Change 2	20 SEP 24	CRS	Addition of Powerplant Rating Changes	8 Nov 24	MA
Description and Diagram of Facilities	Change 2	20 SEP 24	CRS	Addition of Powerplant Rating Changes	8 NOV 24	MA
List of Personnel	Change 3	09 APR 25	CRS	Update to the List of Approved Instructors	24 APR 25	GDS
Description and Diagram of Facilities	Change 3	20 JUN 26	CRS	Update to Facilities	24 JUL 26	MA
Part 147 Curriculum	Change 4	20 JUN 26	CRS	Update to Curriculum	24 Jul 26	MA
List of Personnel	Change 4	20 JUN 26	CRS	Update of Instructors	24 JUL 26	MA

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Section	Revision #	Revision Date	Revision POC	Revision Notes	FAA Reviewed Date	FAA Reviewed POC
List of Personnel	**Change 5**	**01SEP 26**	**WAC**	**Appointment of new Director**		

HVCC ATI Required Documents: Description and Diagram of Facilities

1. HVCC ATI's facility is primarily located at Albany International Airport in Hangar 1. The physical address of the hangar is 6 Jetway Drive, Albany, New York 12211. Figure 1 contains a map which illustrates the location of the HVCC ATI in relation to the HVCC Main Campus. Figure 2 shows the location of the ATI's facilities at the Albany International Airport (ALB).

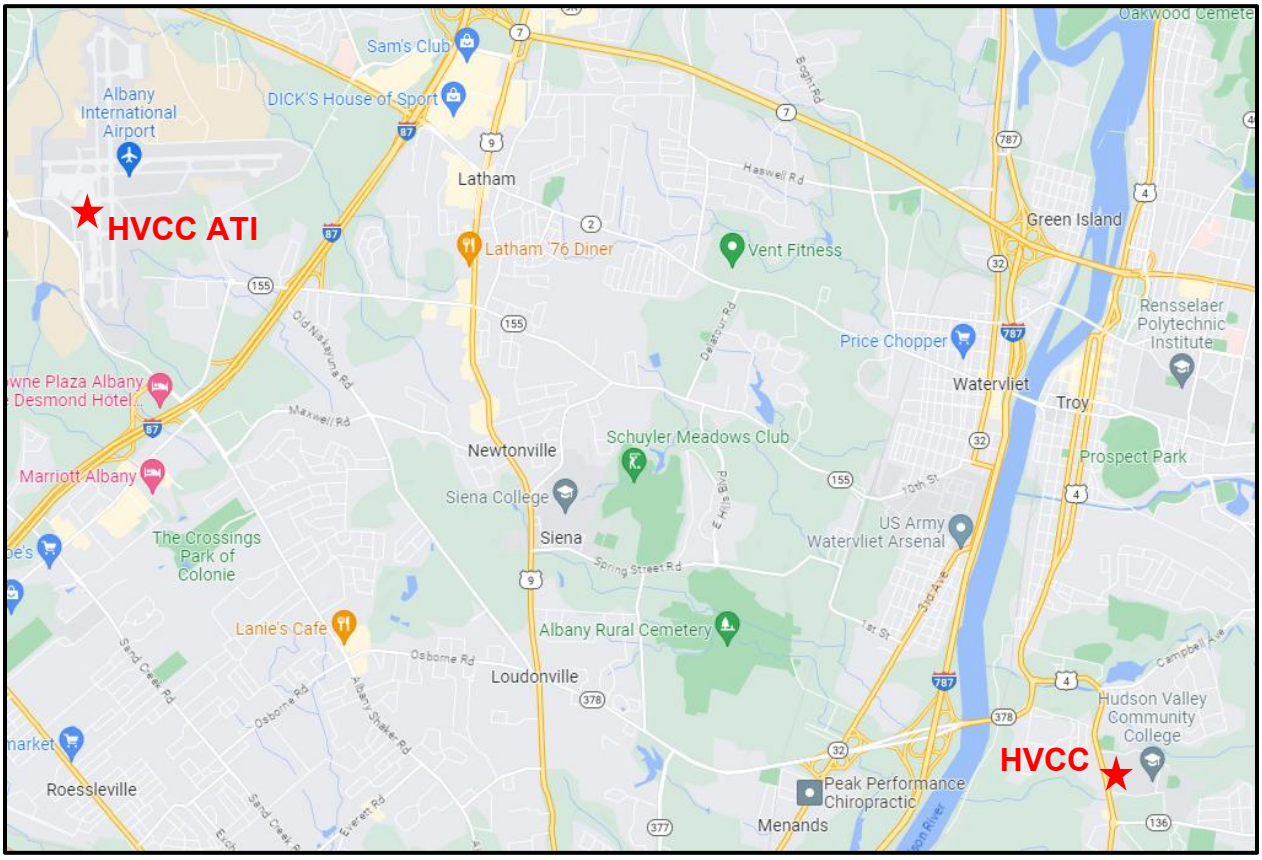

Figure 1 to Appendix I: New York Capital District Map
Source: Google Maps

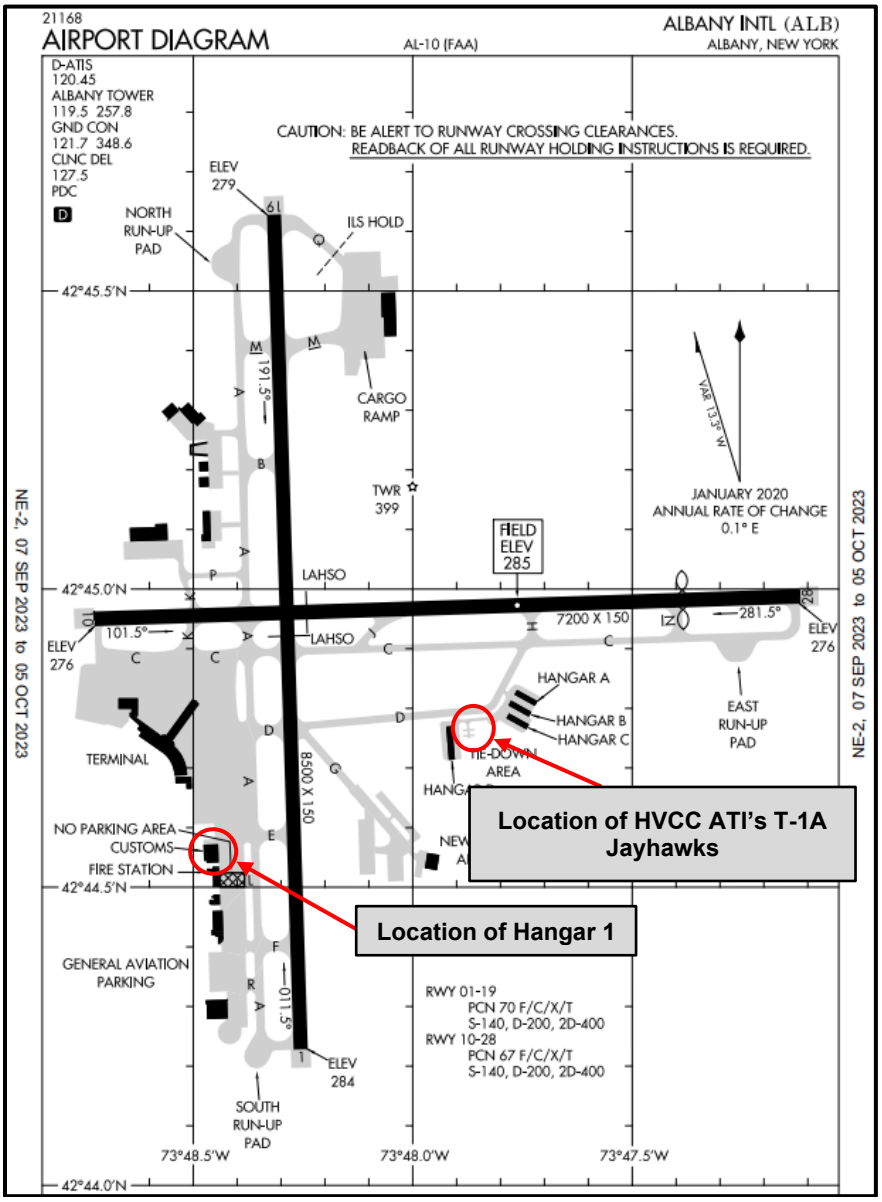

Figure 2 to Appendix I: Albany International Airport (ALB) Overview
Source: FAA Digital – Terminal Procedures Publication – Airport Diagram

2. The administrative space in Hangar 1 consists of administrative office space with a lobby reception area, three dedicated multi-media capable classrooms with enough space for 12 to 18 students each, **Director's office**, and a break room/food preparation area with dedicated storage and refrigeration space for instructors and students. This is approximately **1200** square feet of usable space. Further, handicap accessible and gender-neutral restrooms are also located in this area. All space on the first floor is ADA compliant. The second-floor space includes approx. 1000 square feet of useable space consisting of **two** additional multi-media capable classrooms with enough space for an additional 18 and 12 students, the **instructors' office** and conference room, a

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C3 restroom, a storage closet, ~~and a student break area~~. Illustrations of the administrative space are contained in Figures 3 and 4.

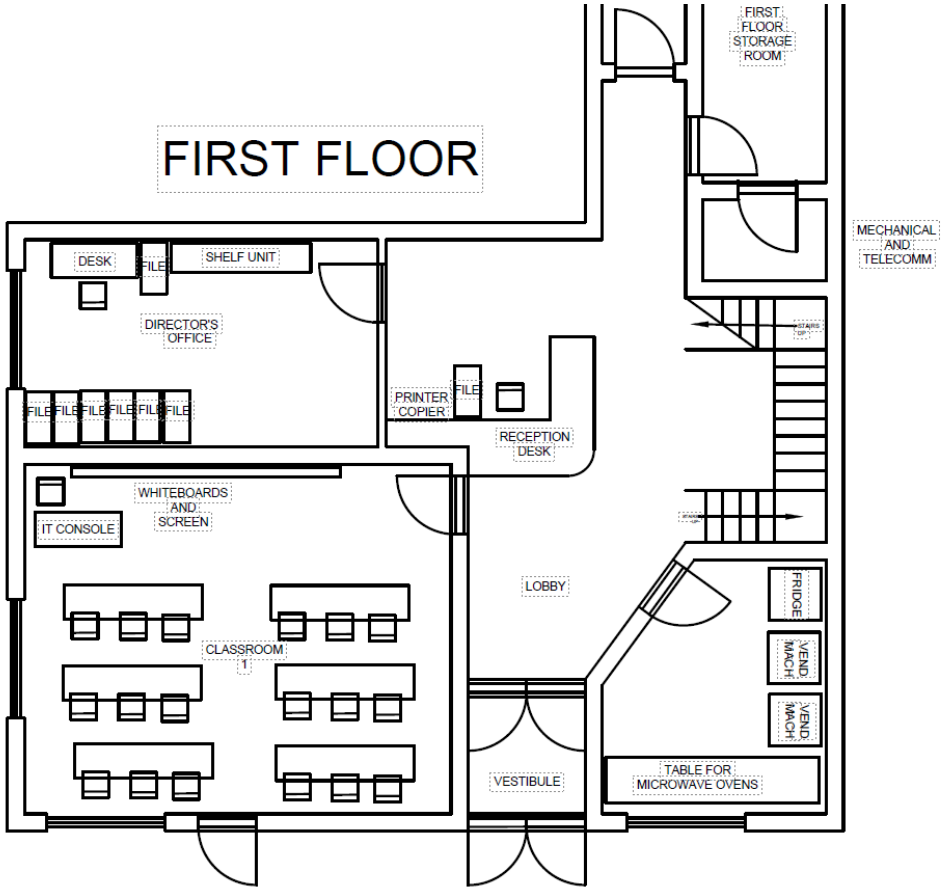

Figure 3 to Appendix I: HVCC ATI Administrative Space – Floor 1
Source: HVCC ATI CAD Drawing

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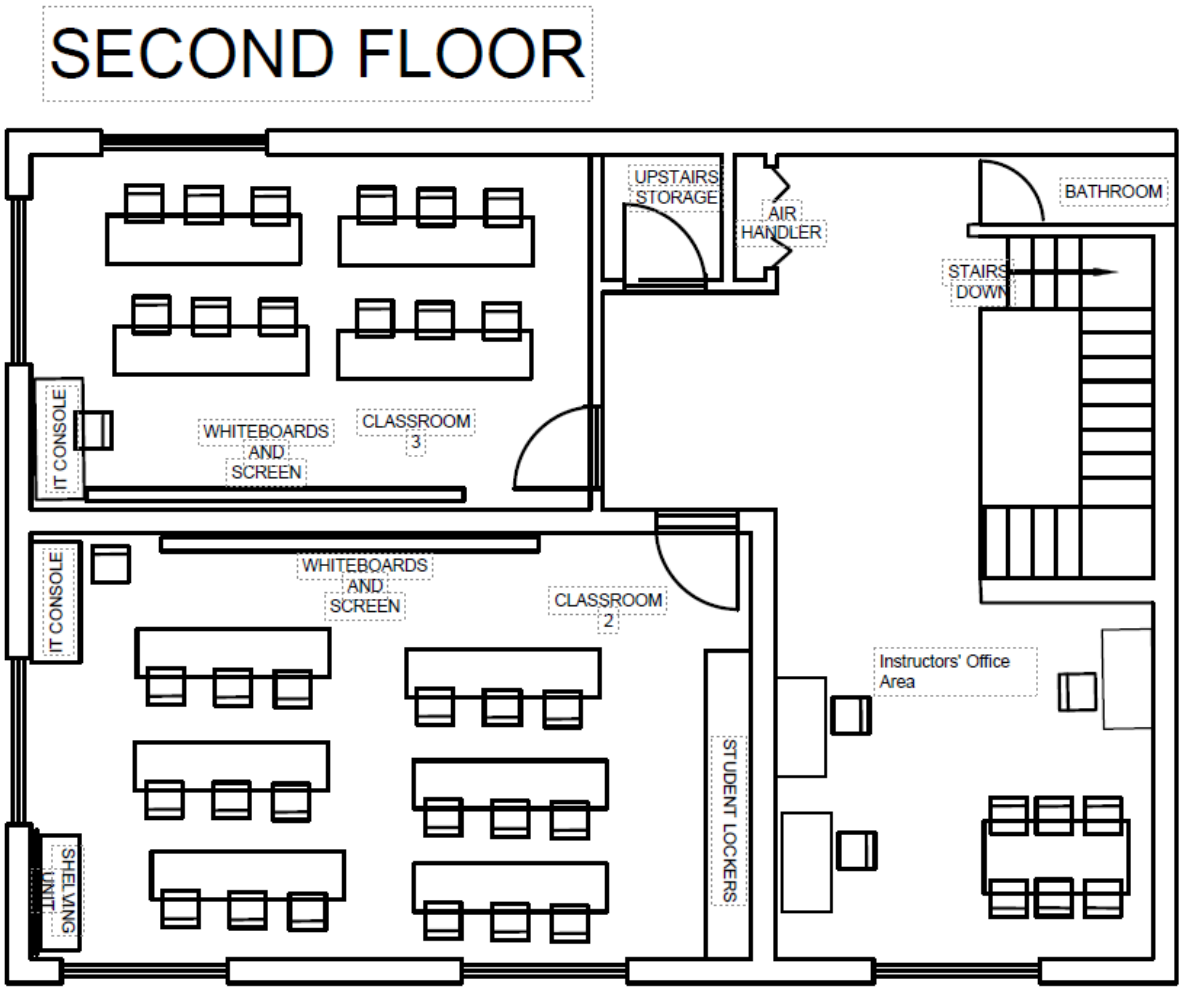

Figure 4 to Appendix I: HVCC ATI Administrative Space – Floor 2
Source: HVCC ATI CAD Drawing

3. The hangar space in Hangar 1 consists of approximately 5,500 square feet of hangar and shop space and approximately 3,200 square feet of laboratory and tool room/storage space. The hangar and shop space are sufficient for the training and storage of four fixed wing aircraft (2x single engine, 2x twin engine), one helicopter, and ground support equipment. The laboratory space is configured with 32 work stations outfitted with independent power and pressurized air connections to allow students to operate electrical and air powered tools and sufficient space to complete projects required by the curriculum. Figure 5 illustrates the layout of HVCC ATI's hangar and laboratory spaces in Hangar 1.

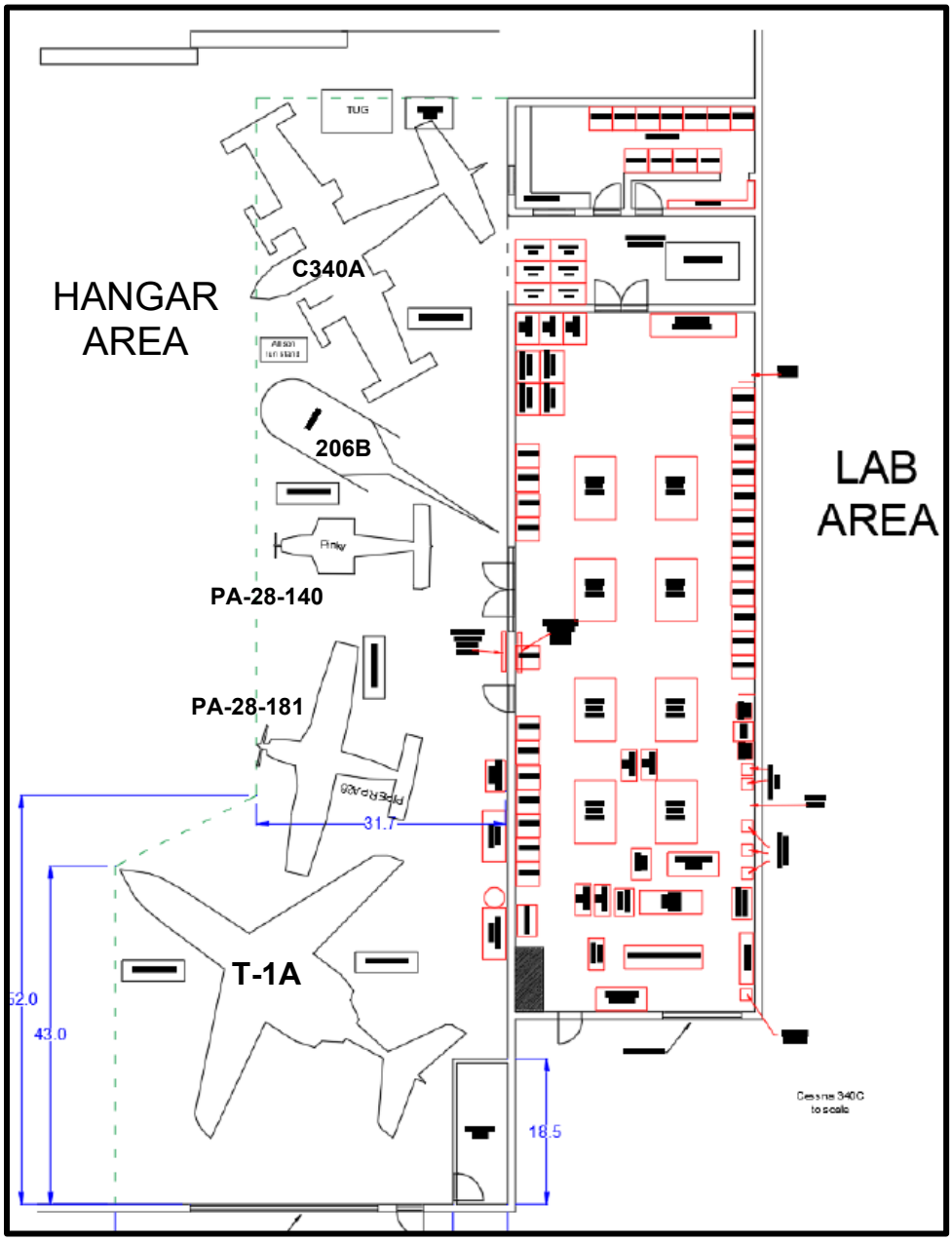

Figure 5 to Appendix I: HVCC ATI Hangar and Laboratory Space
Source: HVCC ATI CAD Drawing

C2 4. HVCC ATI has an agreement with Albany International Airport (ALB) for the lease of parking and storage space located at and adjacent to the T-hangars. The physical address is 350 Old Niskayuna Road, Latham, New York 12110. Classes will be scheduled at the location as weather permits as the training site is located outside. Travel from the main HVCC ATI facilities to this location will only be by public roads and will not be along internal airport roads within the security area. Figure 6 illustrates the layout of HVCC ATI's allocated space and layout on the ramp.

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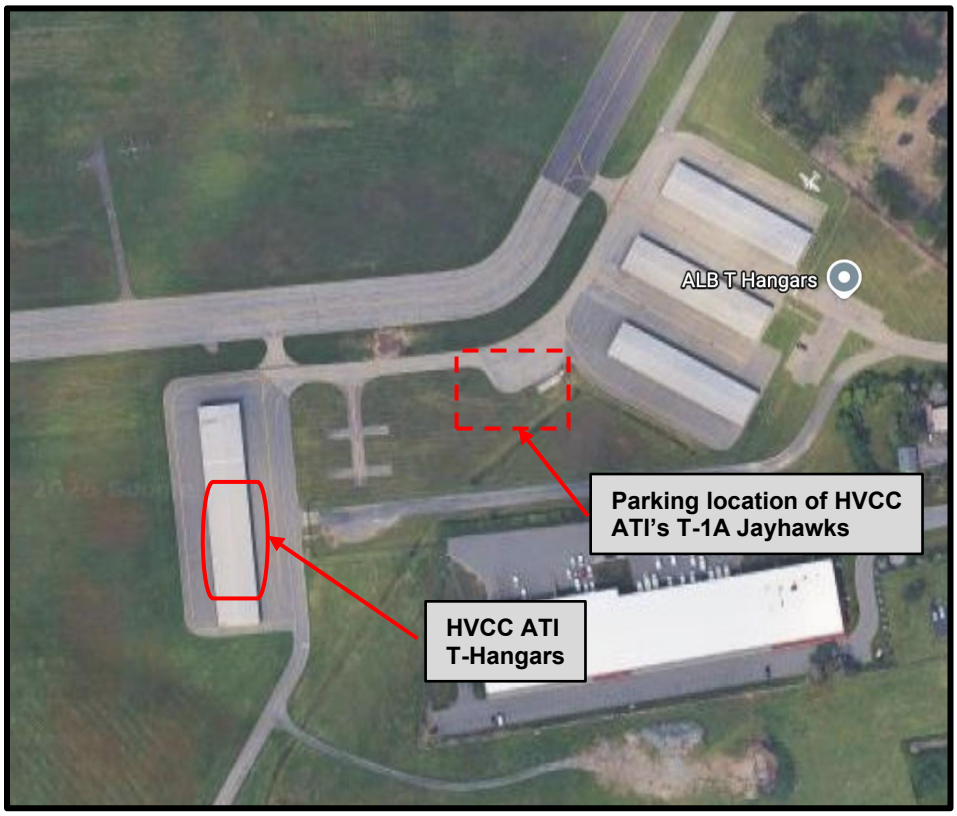

Figure 6 to Appendix I: HVCC ATI Air Cargo Ramp Aircraft Parking and T-Hangar Layout
Source: Google Maps

HVCC General Section Master Equipment List

Project #	Equipment Nomenclature	Location	Number Required	Number ON Hand
G1/2/3/5/6	Multimeter		20	20
G2/6	Nida Console		5	5
G5/6	Nida Manual		5	5
G8	Ruler		20	20
G14	PA-28 Service manual		DIGITAL	
G15/48/49	Calculator		20	20
G16	PA-28 Service manual/TCDS		DIGITAL	
G17	PA-28 Service manual/PA-28 IPC		DIGITAL	
G18	Tubing Bender		20	20
G18	Flare Tool		20	20
G19	Saw		20	20
G19	Hose Fitting Tool		20	20
G22	Torque Wrench(assorted sizing)		10	10
G22/26	10X Magnifying Glass		20	20
G22/31/43/44/50			DIGITAL	
G23	Weld Examples		20	20
G26/27/68/69	Vernier Calipers(assorted sizing)			
G26/27/68/69	Micrometer			
G29	Swaging kit		2	2
G34	Calibration Blocks		20	20
G35	FOD Cans		20	20
G36	Ground Power Unit		1	1
G37/38	Tow Bars(assorted)		1	1
G39	Fuel Sample Containers		12	12
G40	Aircraft checklist(per ACFT)		1	1
G40	Headsets		2	2
G40	ACFT Service manuals(per ACFT)		DIGITAL	
G44	Pressure Washer		1	1
G45	Respirator		20	20
G53/54	IPAD/FAA.GOV		EACH	10
G56			DIGITAL	
G58/60	Illustrated Parts Catalog(Per ACFT)		DIGITAL	
G59	TSO Seatbelts		5	5
ALL	ACFT Grounding Cables		EACH ACFT	
G65	Tape Measures		20	20
ALL	Chaulk Blocks		EACH ACFT	
ALL	Nitrogen cart		EACH ACFT	

HVCC Airframe Section Master Equipment List

Project #	Equipment Nomenclature	Serial #	Number Required	Number ON Hand
	Bucking bars		1	26
	Pop Rivet guns		1	20
	Drill bits		1	145
	Spring clamps		1	1
	Vise grips		1	8
	C clamps		1	19
	Air hammers		1	27
	Air drills		1	24
	Aluminum sheet rolls		1	10
	Durodyne Pinspotter		1	1
	Hard Metal Files		1	60
	Rasps		1	17
	Buck Calibrator		1	2
	Metal Thickness Gauge		1	8
	Punches		1	62
	Rulers		1	10
	Combo Squares		1	13
	Speed Squares		1	12
	Aluminum Files		1	16
	Nibbler		1	1
	Compass		1	32
	Magniyfying holders		1	36
	Angle grinder(air)		1	1
	Angle grinder(electric)		1	1
	Tube Cutter		1	14
	Tuber bead roller		1	2
	Aircraft flaring tool		1	21
	Flange tool		1	1
	Tube benders		1	23
	Taps(HDWR)		1	50
	Dies(HDWR)		1	50
	Sheet Bender, Jet		1	1
	Shear, Jet		1	1
	Rockwell Bandsaw		1	1
	Jet Bandsaw,		1	1
	Portable Bandsaw		1	1
	Hydraulic System Trainer		1	1
	Antiskid Trainer		1	1
	Electrical Trainer		1	1
	Anti-Ice/ blade de-ice trainer		1	1
	fuel system trainer		1	1
	Piper PA-28-181	8760F	1	1
	Piper Cherokee 140	H95311	1	1
	Cessna 182	4946D	1	1
	Cessna 340A	6264X	1	1
	Bell 206	H2387	1	1
	Boeing 727-200	479FE	1	1
	Aircraf tug		1	1
	Aircraft GPU		1	1
	Hydraulic Serivce Cart		1	1
	Hydraulic start cart		1	1
	Wilton Dress press			
	Bench grinder			
	Rotary Punch			
	sheet metal nibbler			

HVCC Powerplant Section Master Equipment List

Project #	Equipment Nomenclature	Serial Number	# Required	Quantity
	Service/Overhaul manuals (per aircraft/engine/propellor)		DIGITAL	
	IPC (per aircraft/engine/propellor)		DIGITAL	
	TCDS (per aircraft/engine/propellor)		DIGITAL	
	Illustrated Parts Catalog (per		DIGITAL	
	Operation checklists (per Aircraft/Engine)		DIGITAL	
	Piper PA-28-181	8760F	1	1
	Piper Cherokee 140	H95311	1	1
	Cessna 182	4946D	1	1
	Cessna 340A	6264X	1	1
	Bell 206	H2387	1	1
	Boeing 727-200	479FE	1	1
	T-1A Jayhawk		1	3
	Lycoming O-320		4	6
	Pratt and Whitney JT15D		2	6
	Pratt and Whitney PT6A		2	3
	Pratt and Whitney R985		1	1
	Continental O-520 with and without turbo		1	3
	Turbine fuel system trainer		1	1
	Fuel system trainer		1	1
	Anti-Ice/ blade de-ice trainer		1	1
	EGT systems trainer		1	1
	Fire Detction/suppression systems trainer		1	1
	Electrical systems trainer		1	1
	Augmentor exhaust system trainer		1	1
	Piston Ring Pliers		2	3
	Cylinder Bolt Wrenches (assorted sizes)		As req	
	Cylinder Compression Tester		1	1
	Magneto Testing Kit		2	2
	Engine Mounts		4	8
	Oil filter wrenches		1	1
	Oil filter cutters		1	1
	Magneto timing pin		4	10
	Magneto timing buzz box		2	4
	Propellor timing clock		1	2
	Spark plug gap tool		1	1
	Spark plug holding tray		1	1
	Feeler gage		1	6
	Spark plug cleaner/tester		1	1
	Igniton lead test box		1	1
	Fuel pressure gage and associated hardware		1	1
	Float type carburetor		3	3
	Pressure carburetor		3	3
	Fuel servo		3	3
	Turbine engine fuel nozzles		3	3
	Fuel injection system trainer		1	1
	Air pressure reducer/regulator		1	1
	PB blaster		1	1
	5 gallon bucket		3	3
	Propeller ring tool		1	1
	Propellor bolt tool		1	1
	Micrometer		1	1
	Torque Wrench(assorted sizing)		As req	
	Files		1	1
	Rulers		1	10

	Emery cloth		3	3
	Aircraf tug		1	1
	Aircraft GPU		1	1
	Hydraulic Serivce Cart		1	1
	Aircraft/Engine start cart		1	1
	nitrogen cart		1	1
	dewalt drills		2	2
	FOD cans		2	2
	boroscope		1	1
	snap on student box		6	6
	snap on ins box		3	3
	snap on AF box		1	1
	snap on Elec box		1	1
	Tow bars (assorted)		2	2
	step ladder		4	4
	Calculator		3	3
	ultrasonic cleaner, vevor		1	1
	ACFT Grounding Cables		Each aircraft	
	workbench vice, wilton		16	16
	workbench vice, bessey		16	16
	Multimeter		3	3
	grease guns		4	4
	fire supp trainer		1	1
	Chaulk Blocks		Each aircraft	
	Ground Power Unit		1	1
	10X Magnifying Glass		20	20
	IPAD/FAA.GOV		Each	10
	Multimeter		3	3
	shop vac		1	1
	Tape measure		10	10
	Aviation Radio-ICOM-IC-A16		3	3

Material List
HVCC ATI General

Highlight items to reorder?

For Reorder	Inventory ID	Nomenclature	Description	Quantity in Stock	Reorder Level	Reorder Time in Days	Quantity in Reorder
	G1	Fuses	fuses, assorted	40	10	0	50
⚑	G1	Battery, 9V	9V	10	10	0	25
	G2	Switch, ACFT	ACFT assorted switches	5	0	0	25
	G2	Relay	Relay	25	0	0	25
	G3	Circuit Breaker	circuit breaker	15	0	0	25
	G6	Resistor	resistor	168	20	0	100
	G7	Lead Acid Battery	SLAB	4	1	0	5
⚑	G18	ACFT Hyd Line (ridgid)	Hydraulic Line	20	10ft	0	50ft
⚑	G19	ACFT Hyd Line(Flexible)	Hydraulic Line	20	10ft	0	50ft
	G21	Safey Wire(Lockwire)	.32/.41/.25 Dia	35lb	0	0	15lb
	G29	7x19 ACFT Cable	Cable	75ft	10ft		50ft
⚑	G29	Ends, Cable 7x19	Terminal ends	15	15	0	50
⚑	G35	FOD Cans	Disposal	1	1	0	20
	G39	Fuel, Sampling	Bottles	12	2	0	12
⚑	G41	Pitot Static Covering	RBF	2	2	0	10
⚑	G42	CPC	Corrosion X	1	2	0	5
	G43	Masking tape	Tape Roll	32	10	0	20
	G43	Butcher Paper	paper	200ft	10ft	0	100ft
	G44/42	Acid Brushes	CPC	288	20	0	150
	G44/45	Scotts Brite pads	Green/Red	25	15	0	50
⚑	G44/45	Alumiprep	Alodine-1201	1	1	0	2
⚑	G44/45	PTS-202	Paint Remover	1	1	0	2
	G44/45	PT402	Etch Primer	4	2	0	4
	G44/45	3M Body filler	Auto	1	0	0	1

Material List
HVCC ATI General

Highlight items to reorder?

For Reorder	Inventory ID	Nomenclature	Description	Quantity in Stock	Reorder Level	Reorder Time in Days	Quantity in Reorder
	G45	Sand Paper	100-400 grit	150	20	0	100
	G45	Respirator	Safety	30	10	0	20
⚑	G60	Bulb, Electric	PN/753431-piper/107	10	10		20
	G69	Penetrate/dye	Kit	2	1		3
⚑	G8	Graphing Paper	Paper ream	10	10		30
		Embry cloth	embry cloth	15	0		10

Material List
HVCC ATI Airframe

Highlight items to reorder?

For Reorder	Inventory ID	Nomenclature	Description	Quantity in Stock	Reorder Level	Quantity in Reorder
		Aluminum Stock	4x8 A2024 .32/.25	12	10	15
		Steel Stock	20 gauge, 4x8 sheet	2	1	2
		Countersunk Rivets	Various sizes	5000		1000
		Universal Rivets	Various sizes	5000		1000
		Pop Rivets	Various sizes	500		1000
		Cherry Rivets	Various sizes	700		1000
		Masking Tape	Tape Roll	32	5	15
		Masking Paper	Roll	60yd		50yd
		Hardener, Fiber		5		5
		Fiberglass Cloth		5		50ft
		Thinner, Fiber		5		5
		Sand Paper	3M sand Paper bundle	500		100
		Rubber Gloves	3M gloves	30bx		5
		Squeegees		5		5
		Paper Towels	Tough Guy dry wipes	10		10
		Eye Protection	3M	14	10	20
		Ear Protection	3M	25	5	20
		Batteries	Various sizes			50
		Paint Remover	PTS-202			3
		Respirator	3M	80	20	20
		Shop Rags	Tough Guy dry wipes	50	10	100
		5606 Hyd Fluid		7gal	5gal	15gal
		Nitrogen	Airgas			1bt
		Flux		2		5
		Electrical Wiring	Various sizes	150ft		50ft
		Terminal ends	Various sizes	2028		500
		Wire connectors	Various sizes	150		100

Material List
HVCC ATI Airframe

Highlight items to reorder?

For Reorder	Inventory ID	Nomenclature	Description	Quantity in Stock	Reorder Level	Quantity in Reorder
		CRC Cleaner	Deice Cleaner	4		5
		Combo Square	Measuring device	12	2	10
		Clecos	Various sizes	550	100	150
		Regulator, gas	CGA-580	1		1
		Aviation, Radio	ICOM-IC-A16	3		3

Material List
HVCC ATI Powerplant

Highlight items to reorder? Yes

Inventory ID	Nomenclature	Description	Quantity in Stock	Reorder Level	Quantity in Reorder
	Aeroshell Engine oil		50 Gal		
	Degreaser		4 Bot		
	Shop towels		25 box		
	Cleaning solvent		4 bot		
	Dry sweep		multiple		
	Emergency spill kit		multiple		
	Fire extinguisher		5		
	Safey Wire(Lockwire)	.32/.41/.25 Dia	35		
	Battery 9V	9V			
	Masking tape-various width	Roll	32		
	Acid Brushes	CPC	288		
	Scotch Brite pads	Gree/Red			
	PTS-202	Paint remover	1		
	PT402	Primer	4		
	Sand Paper	100-400 grit	150		
	Sand Paper	3M	500		
	Penetrate/dye	kit	2		
	Emory cloth	Emory cloth	15		
	Respirator	Safety	30		
	Rubber Gloves	Safety	30 Box		
	Squeegees		5		
	Paper Towels	Tough guy Dry Wipes	10		
	Eye Protection	3M	14		
	Ear Protection	3m	25		
	Batteries-various sizes				
	Nitrogen	Airgas	2 cyl.		
	Electrical wiring-varous sizes		150ft		
	Terminal ends- varouis sizes		2028		

Material List
HVCC ATI Powerplant

Highlight items to reorder? Yes

Inventory ID	Nomenclature	Description	Quantity in Stock	Reorder Level	Quantity in Reorder
	Wire connectors-various sizes		150		
	CRC cleaner	De-ice cleaner	4		
	Aviation grease-various	Grease			
	Lycoming Piston Ring-Compression	74241	1		
	Lycoming Piston Ring-oil	14H21950	1		
	Lycoming Piston Pin	LW-14078	1		
	Lycoming Wrist Pin Plug	72198	10		
	Gasket-Lycoming Rocker Box Cover	75906	10		
	Gasket-Lycoming Carb	66224	10		
	Gasket-Lycoming Mag	62224	10		
	Gasket-Lycoming Fuel Pump	60096	10		
	Gasket-Lycoming Exhaust Flange	71973	10		
	Thrust Buttton Rocker Shaft-Lycoming	LW-12892	10		
	Ring-Oil Seal- Lycoming - Cylinder	71481	10		
	Gasket-Lycoming Oil Sump	LW13353	10		
	Screen-Lycoming Oil Suction	70484	10		
	Gasket-Lycoming-Oil Screen	06E19769-1.00	10		
	Plug-Lycoming Oil Screen	LW-12545	10		
	Gasket-Lycoming Oil Pressure Housing	61173	10		
	Gasket-Lycoming Oil Filter Adaptor	06B23862	10		
	Oil Filter Lycoming	LW-13215	10		

HVCC ATI Required Documents: P147 Curriculum

Revision: Change 2
Revision Date: 20 Sep 24

GENERAL

Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
BASIC ELECTRICITY	AM.I.A.K1	Electron theory (conventional flow vs. electron flow).	1	A	K	1		Part 1 - A.1 + Review Part 1 - J.1 & J.4.5		0.5	1		
	AM.I.A.K2	Magnetism.	1	A	K	2		Part 3 - A.11		0.5	2		
	AM.I.A.K6	Direct Current (DC) electrical circuits.	1	A	K	6		Part 2 - A.7		1.5	3		
	AM.I.A.K9	Voltage.	1	A	K	15		Part 1 - A.2.3 Part 2 - A.7.3, A.7.6, A.10.1, A.10.4		0.5	4		
	AM.I.A.K10	Current.	1	A	K	17		Part 1 - A.2.4 Part 2 - A.10.5 Part 5 - A.25.2		0.5	5		
	AM.I.A.K11	Resistance.	1	A	K	18		Part 1 - A.2.5 Part 2 - A.8		0.5	6		
	AM.I.A.K20	Resistor types and color coding.	1	A	K	31		Part 2 - A.8		0.5	7		
	AM.I.A.R1	Taking voltage, current, resistance, and capacitance measurements.	1	A	R	1		Part 5 - A25.1, A.25.2, A.25.3, A.25.5		0.25	7.1		
	AM.I.A.R3	High-voltage circuits (e.g., strobe lighting).	1	A	R	3		Part 5 - A.25.12		0.25	7.2		
	AM.I.A.K8	Electrical measurement tools, principles, and procedures.	1	A	K	14		Part 5 - A.23, A.24, A.25		1	8		
	AM.I.A.S4	Measure resistance.	1	A	S	4		Part 5 - A.25.3	G1	0.5	9		
	AM.I.A.S2	Measure voltage.	1	A	S	2		Part 5 - A.25.1, A.25.3	G1	0.5	10		
	AM.I.A.S3	Measure current.	1	A	S	3		Part 5 - A.25.2, A.25.3	G1	0.5	11		
	AM.I.A.S12	Determine or measure for open electrical circuits.	1	A	S	12		Part 5 - A.25.7, A.25.9	G5	0.5	12		
	AM.I.A.K17	Circuit continuity.	1	A	K	28		Part 5 - A.25.4		0.25	13		
	AM.I.A.S1	Perform circuit continuity test.	1	A	S	1		Part 5 - A.25.4	G1	0.5	14		
	AM.I.A.S10	Demonstrate how to test for short-circuit and open-circuit conditions.	1	A	S	10		Part 5 - A.25.7.1, A.25.7.2, A.25.8.1, A.25.8.2, A.25.9.1, A.25.9.2, A.25.11.1, A.25.11.2	G5	0.5	15		
	AM.I.A.S5	Test a switch or relay.	1	A	S	5		Part 5 - A.22.1.2	G2	0.5	16		
	AM.I.A.K25	Electrical circuit drawings.	1	A	K	36		Part 2 - A.6		1	17		
	AM.I.A.K7	Electrical laws and theory.	1	A	K	7		Part 1 - A.2, A.3 Part 2 - A.5.3, A.7.1, A.7.7, A.9.2 Part 3 - A.12 Part 4 - A.17.1		1	18		
	AM.I.A.K7a	Ohm's law	1	A	K	8	a.	Part 2 - A.7.1		0.5	19		
	AM.I.A.K7b	Kirchhoff's laws	1	A	K	9	b.	Part 2 - A.7.7		0.25	20		
	AM.I.A.K11b	Resistance in series	1	A	K	20	b.	Part 2 - A.7.2		0.5	21		
	AM.I.A.K11c	Resistance in parallel	1	A	K	21	c.	Part 2 - A.7.4		1	22		
	AM.I.A.K13	Series circuits.	1	A	K	24		Part 3 - A.14		0.5	23		
	AM.I.A.K14	Parallel circuits.	1	A	K	25		Part 3 - A.15		1.5	24		
	AM.I.A.K11d	Total resistance	1	A	K	22	d.	Part 2 - A.7.2, A.7.4, A.7.5		0.25	25		
	AM.I.A.S11	Measure voltage drop across a resistor.	1	A	S	11		Part 2 - A.7.2. A.7.3, A.7.4, A.7.5	G6	0.5	26		
	AM.I.A.K7c	Watt's Law	1	A	K	10	c.	Part 2 - A.9.2		0.25	27		
	AM.I.A.K12	Power.	1	A	K	23		Part 2 - A.9.2		0.5	28		
	AM.I.A.K18	Controlling devices including switches and relays.	1	A	K	29		Part 5 - A.22		0.5	29		
	AM.I.A.R4	Working around batteries.	1	A	R	4		Part 1 - A.4.11		0.25	29.1		
	AM.I.A.R2	Handling, storage, and inspection of different types of batteries (i.e., lead acid, NiCad, lithium ion, gel cell).	1	A	R	2		Part 1 - A.4.3		0.25	29.2		
	AM.I.A.K19	Protective devices including fuses, circuit breakers, and current limiters.	1	A	K	30		Part 5 - A.21		0.5	30		
	AM.I.A.S6	Test a fuse or circuit breaker.	1	A	S	6		Part 5 - A.21.1	G3	0.5	31		
	AM.I.A.K15	Aircraft batteries.	1	A	K	26		Part 1 - A.4		1	32		
	AM.I.A.S13	Inspect an aircraft battery.	1	A	S	13		Part 1 - A.4.12	G7	0.5	33		
	AM.I.A.S14	Service an aircraft battery.	1	A	S	14		Part 1 - A.4.11	G7	1.5	34		
	AM.I.A.K21	Semiconductors including diodes, transistors and integrated circuits.	1	A	K	32		Part 5 - A.26 Part 6 - A.27, A.29		2	35		
	AM.I.A.K24	Electrostatic discharge.	1	A	K	35		Part 2 - A.5.5.2		0.25	36		
	AM.I.A.K22	Digital logic, including RAM, ROM, NVRAM, logic gates, inverter, rectifier, and flip flop.	1	A	K	33		Part 6 - A.31, A.32, A.33		2	37		
	AM.I.A.K23	Binary numbers.	1	A	K	34		Part 6 - A.30.1, A.30.2, and A.30.3		1	38		
	AM.I.A.K5	Alternate Current (AC) electrical circuits.	1	A	K	5		Part 3 - A.14, A.15		1.5	39		
	AM.I.A.K4	Inductance in a circuit.	1	A	K	4		Part 3 - A.13		0.25	40		
	AM.I.A.K7d	Faraday's Law	1	A	K	11	d.	Part 3 - A.12.1		0.25	41		
	AM.I.A.K7e	Lenz's Law	1	A	K	12	e.	Part 3 - A.13.2		0.25	42		
	AM.I.A.K3	Capacitance in a circuit.	1	A	K	3		Part 2 - A.10		0.25	43		
	AM.I.A.K11a	Impedence	1	A	K	19	a.	Part 3 - A.14.4.1		0.25	44		
	AM.I.A.K27	AC and DC motors.	1	A	K	38		Part 4 - A.18, A.20		2	45		
	AM.I.A.K16	Transformers.	1	A	K	27		Part 4 - A.16		1	46		
	AM.I.A.K9a	Regulation	1	A	K	16	a.	Part 4 - A.19.5		0.25	47		
	AM.I.A.K26	Complex/combined circuits.	1	A	K	37		Part 2 - A.7.5		2	48		
	AM.I.A.S9	Identify symbols used in electrical and electronic schematic diagrams (e.g., grounds, shields, resistors, capacitors, fuses, circuit breakers, batteries, diodes, transistors, and integrated circuits).	1	A	S	9		Part 2 - A.6.1, A.6.4	G4	1	49		
	AM.I.A.S7	Read and interpret aircraft electrical circuit diagrams, and symbols, including solid state devices and logic functions.	1	A	S	7		Part 2 - A.6	G4	0.5	50		
	AM.I.A.S8	Troubleshoot a circuit.	1	A	S	8		Part 5 - A.25.7, A.25.8, A.25.9, A.25.10, A.25.11	G5	3	51		
	AM.I.A.K7f	Right-hand motor rule	1	A	K	13	f.	Part 4 - A.17.1		0.25			
	AM.I.B.K4	Terms used in conjunction with aircraft drawings, blueprints, or system schematics.	1	B	K	4		Part 1 - B.1, B.6		0.5	1		
	AM.I.B.K1	Drawings, blueprints, sketches, charts, graphs, and system schematics, including commonly used lines, symbols, and terminology.	1	B	K	1		Part 1 - B.2, B.5, B.12, B.13, B.7, B.8, B.6		0.5	2		
	AM.I.B.S2	Identify the meaning of lines and symbols used in an aircraft drawing.	1	B	S	2		Part 1 - B.7, B.8, B.8.1, B.8.2, B.8.3, B.8.4	G9	1	3		

HVCC ATI Required Documents: P147 Curriculum

Revision: Change 2
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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
AIRCRAFT DRAWINGS	AM.I.B.R1	Interpretation of plus or minus tolerances as depicted on aircraft drawings.	1	B	R	1		Part 1 - B.10.1		0.25	4		
	AM.I.B.S6	Interpret graphs and charts.	1	B	S	6		Part 1 - B.13, B.13.1	G13	2	5		
	AM.I.B.R4	Identification of the current version and applicability of drawing being used.	1	B	R	4		Part 1 - B.10.3		0.25	6		
	AM.I.B.K3	Inspection of an aircraft system or component(s) using drawings, blueprints, or schematics.	1	B	K	3		Part 1 - B.11		0.5	7		
	AM.I.B.R3	Applicability of the drawing or schematic to the particular aircraft by model and serial number.	1	B	R	3		Part 1 - B.11		0.25	8		
	AM.I.B.S5	Determine material requirements from an aircraft drawing.	1	B	S	5		Part 1 - B.6	G12	1	9		
	AM.I.B.S3	Interpret dimensions used in an aircraft drawing.	1	B	S	3		Part 1 - B.9	G10	1	10		
	AM.I.B.K2	Repair or alteration of an aircraft system or component(s) using drawings/blueprints or system schematics to determine whether it conforms to its type design.	1	B	K	2		Part 1 - B.11		0.5	11		
	AM.I.B.R2	Specifications for design of alterations and repairs.	1	B	R	2		Part 1 - B.10.4		0.25	12		
	AM.I.B.S4	Identify changes on an aircraft drawing.	1	B	S	4		Part 1 - B.10.2	G11	1	13		
	AM.I.B.S1	Draw a sketch of a repair or alteration.	1	B	S	1		Part 1 - B.12.1, B.12.2, B.12.3	G8	2	14		
WEIGHT & BALANCE	AM.I.C.K2	Purpose for weighing an aircraft.	1	C	K	2		Part 1 - C.1, C.1.2		2	1		
	AM.I.C.R5	Aerodynamic and performance effects of weight in excess of limits.	1	C	R	5		Part 1 - C.1, C.3		0.5	2		
	AM.I.C.K5	Purpose and application of weight and CG limits.	1	C	K	5		Part 1 - C.1, C.4		0.5	3		
	AM.I.C.K3	Weighing procedures, including the general preparations for weighing, with emphasis on aircraft weighing area considerations.	1	C	K	3		Part 1 - C.1.1, C.5, C.6 and, C.8		0.5	4		
	AM.I.C.S17	Calculate a weight change and complete required records.	1	C	S	17		Part 1 - C.13, C.16, C.8.4.1	G17	1.5	5		
	AM.I.C.K7	Adverse loading considerations and how to calculate if adverse loading causes an out-of-limit condition.	1	C	K	7		Part 1 - C.13.1		0.5	6		
	AM.I.C.S15	Calculate the change needed to correct an out of balance condition.	1	C	S	15		Part 1 - C.13.1	G15	1.5	7		
	AM.I.C.K9	Proper ballast placement.	1	C	K	9		Part 1 - C.14, C.14.1 and, C.14.2		0.5	8		
	AM.I.C.S3	Calculate ballast weight shift and required weight location.	1	C	S	3		Part 1 - C.14, C.14.1, C.14.2	G15	1	9		
	AM.I.C.S7	Create a maintenance record for a weight and balance change.	1	C	S	7		Part 1 - C.16	G17	1	10		
	AM.I.C.K1	Weight and balance terminology.	1	C	K	1		Part 1 - C.2, C.2.1, C.2.2, C.2.3, C.2.4		0.5	11		
	AM.I.C.S12	Locate datum.	1	C	S	12		Part 1 - C.2.1	G16	0.25	12		
	AM.I.C.K4	Procedures for calculation of the following: arm, positive or negative moment, center of gravity (CG) or moment index.	1	C	K	4		Part 1 - C.2.2, C.2.3, C.8, C.8.1,C.8.3, C.8.4		0.25	13		
	AM.I.C.S9	Calculate the moment of an item of equipment.	1	C	S	9		Part 1 - C.2.3	G15	0.5	14		
	AM.I.C.S10	Identify tare items.	1	C	S	10		Part 1 - C.2.4, C.8.4.1	G16	0.5	15		
	AM.I.C.K6	Purpose of determining CG.	1	C	K	6		Part 1 - C.3		0.5	16		
	AM.I.C.R4	Aerodynamic effect of CG that is forward or aft of CG limits.	1	C	R	4		Part 1 - C.3		0.25	17		
	AM.I.C.S16	Determine an aircraft's CG range using aircraft specifications, Type Certificate Data Sheets (TCDSs), and aircraft listings.	1	C	S	16		Part 1 - C.4, C.8.1	G16	1	18		
	AM.I.C.K10	Jacking an aircraft.	1	C	K	10		Part 1 - C.6 (H)		0.5	19		
	AM.I.C.R1	Situations and conditions when jacking an aircraft.	1	C	R	1		Part 1 - C.6 (H)		0.25	20		
	AM.I.C.S1	Research and explain the procedures for weighing an aircraft.	1	C	S	1		Part 1 - C.6, C.8	G14	1	21		
	AM.I.C.R3	Use of scales.	1	C	R	3		Part 1 - C.7.1		0.25	22		
	AM.I.C.S4	Check aircraft weighing scales for calibration.	1	C	S	4		Part 1 - C.7.1.1	G14	0.5	23		
	AM.I.C.R2	Aircraft weighing procedures.	1	C	R	2		Part 1 - C.8		0.25	24		
	AM.I.C.S11	Locate weight and balance information.	1	C	S	11		Part 1 - C.8.1	G16	0.5	25		
	AM.I.C.S14	Revise an aircraft equipment list after equipment change.	1	C	S	14		Part 1 - C.8.1, C.16	G17	1	26		
	AM.I.C.S13	Locate weight and balance placarding and limitation requirements for an aircraft.	1	C	S	13		Part 1 - C.8.2	G16	0.5	27		
	AM.I.C.K8	Determine proper empty weight configuration.	1	C	K	8		Part 1 - C.8.3, C.8.3.1		0.5	28		
	AM.I.C.S8	Compute the empty weight and empty weight CG of an aircraft.	1	C	S	8		Part 1 - C.8.3, C.8.3.1	G15	1	29		
	AM.I.C.S6	Compute forward and aft loaded CG limit.	1	C	S	6		Part 1 - C.8.4, C.13	G15	1	30		
	AM.I.C.S2	Perform weight and balance calculations.	1	C	S	2		Part 1 - C.8.4, C.13, C.13.1, C.17, C.18, C.18.1	G15	1	31		
	AM.I.C.S5	Calculate weight and balance for an aircraft after an equipment change.	1	C	S	5		Part 1 - C.8.4.1	G15	1	32		
FLUID LINES & FITTINGS	AM.I.D.R3	Hazardous fluids.	1	D	R	3		Part 1 - D.3.8.1		0.5	1		
	AM.I.D.R6	A loosened fitting or a hose that has moved out of position.	1	D	R	6		Part 1 - D.3.8.1		0.25	2		
	AM.I.D.R2	Use of required safety equipment.	1	D	R	2		Part 1 - D.3.8.2		0.25	3		
	AM.I.D.R1	System configuration prior to and during maintenance.	1	D	R	1		Part 1 - D.3.9		0.25	4		
	AM.I.D.K1	Tubing and hose materials, applications, sizes, and fittings.	1	D	K	1		Part 1 - D.2.1, D.3.1, D.3.3, D.3.4		0.5	5		
	AM.I.D.K2	Rigid line or flexible hose material identification.	1	D	K	2		Part 1 - D.2.1.2, D.3.1.1		0.5	6		
	AM.I.D.K3	Rigid line fabrication, installation, and inspection techniques/practices.	1	D	K	3		Part 1 - D.2.2, D.2.7, D.2.8		0.5	7		
	AM.I.D.S1	Fabricate a rigid line with a flare and a bend.	1	D	S	1		Part 1 - D.2.2.4, D.2.7.1	G18	4	8		
	AM.I.D.S8	Fabricate a flareless-fitting-tube connection.	1	D	S	8		Part 1 - D.2.2.5,D.2.7.2	G18	2	9		
	AM.I.D.S6	Identify fluid lines, pneumatic lines, and fittings.	1	D	S	6		Part 1 - D.2.3, D.2.4, D.3.1.1	G20	2	10		
	AM.I.D.S5	Identify installation and security requirements for rigid lines and flexible hoses.	1	D	S	5		Part 1 - D.2.3,D.3.1.1	G20	2	11		
	AM.I.D.K5	Importance of using a torque wrench when securing fluid hose and line fittings.	1	D	K	5		Part 1 - D.2.5		0.25	12		
	AM.I.D.R7	Use of tools while applying torque to a fluid line.	1	D	R	7		Part 1 - D.2.5,D.2.6		0.25	13		
	AM.I.D.K6	Use of torque seal or similar witness techniques after installing critical fluid hose and line fittings.	1	D	K	6		Part 1 - D.2.6		0.25	14		
	AM.I.D.S2	Install an aircraft rigid line.	1	D	S	2		Part 1 - D.2.7	G18	1	15		
	AM.I.D.S4	Perform a rigid line or flexible hose inspection.	1	D	S	4		Part 1 - D.2.8,D.3.8	G18	0.5	16		
	AM.I.D.K4	Flexible hose fabrication, installation, and inspection techniques/practices.	1	D	K	4		Part 1 - D.3.2, D.3.5, D.3.6, D.3.6.1, D.3.8		0.5	17		
	AM.I.D.R4	High-pressure fluid systems.	1	D	R	4		Part 1 - D.3.3.3		0.25	18		
	AM.I.D.R5	A twisted hose.	1	D	R	5		Part 1 - D.3.6		0.25	19		
	AM.I.D.S3	Install an aircraft flexible hose.	1	D	S	3		Part 1 - D.3.6	G19	2	20		
	AM.I.D.S7	Fabricate a flexible hose.	1	D	S	7		Part 1 - D.3.6	G19	3	21		
	AM.I.E.K3	Forces placed on aircraft materials (e.g., tension, compression, torsion, bending, strain, and shear).	1	E	K	3		Part 1 - E.1.1		0.5	1		
	AM.I.E.K1	Materials commonly used in aircraft and their general application.	1	E	K	1		Part 1 - E.1.2, E.1.3, E.1.4		0.5	2		
	AM.I.E.S10	Select the correct aluminum alloy for a structural repair.	1	E	S	10		Part 1 - E.1.4.2	G30	1	3		
	AM.I.E.S13	Distinguish between heat-treated and non-heat-treated aluminum alloys.	1	E	S	13		Part 1 - E.1.4.2.2	G33	1	4		

HVCC ATI Required Documents: P147 Curriculum

Revision: Change 2
Revision Date: 20 Sep 24

Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
AIRCRAFT MATERIALS, HARDWARE, & PROCESSES	AM.I.E.K9	Suitability and compatibility of materials and hardware used for maintenance.	1	E	K	9		Part 1 - E.1.5		0.5	5		
	AM.I.E.S12	Determine suitability of materials for aircraft repairs.	1	E	S	12		Part 1 - E.1.5	G30	1	6		
	AM.I.E.K2	Heat treatment and metal working processes.	1	E	K	2		Part 1 - E.1.6, Part 2 - E.1.8		0.5	7		
	AM.I.E.K12	Characteristics of acceptable welds.	1	E	K	12		Part 2 - E.1.9.1.3		0.5	8		
	AM.I.E.S3	Inspect and check welds.	1	E	S	3		Part 2 - E.1.9.1.3	G23	1	9		
	AM.I.E.K13	Characteristics of unacceptable welds.	1	E	K	13		Part 2 - E.1.9.1.3, E.1.9.1.4		0.5	10		
	AM.I.E.K14	Procedures for weld repairs.	1	E	K	14		Part 2 - E.1.9.1.5		0.5	11		
	AM.I.E.K7	Soldering preparation, types of solder, and flux usage.	1	E	K	7		Part 2 - E.1.9.2		0.5	12		
	AM.I.E.S4	Identify aircraft materials and hardware based on manufacturer's markings.	1	E	S	4		Part 3 - E.2.2	G22	1	13		
	AM.I.E.K11	Identification markings on materials and hardware.	1	E	K	11		Part 3 - E.2.2.1.1.1, E.2.3.1.1, Part 4 - E.2.4.4,E.2.5.3		0.5	14		
	AM.I.E.K4	Hardware commonly used in aircraft (e.g., bolts, nuts, screws, pins, washers, turnlock fasteners, cables, cable fittings, and rigid line couplings).	1	E	K	4		Part 3 - E.2.3, Part 4 - E.2.5		0.5	15		
	AM.I.E.S5	Select and install aircraft bolts.	1	E	S	5		Part 3 - E.2.3.1	G22	1	16		
	AM.I.E.K5	Safety wire and safety clip requirements and techniques.	1	E	K	5		Part 3 - E.2.3.5.9, E.2.3.5.10		0.5	17		
	AM.I.E.S1	Install safety wire on nuts, bolts, and turnbuckles.	1	E	S	1		Part 3 - E.2.3.5.9, E.2.3.5.13	G21	2	18		
	AM.I.E.S11	Identify rivets by physical characteristics.	1	E	S	11		Part 4 - E.2.4	G31	0.5	19		
	AM.I.E.S8	Identify aircraft control cable components.	1	E	S	8		Part 4 - E.2.5	G28	1	20		
	AM.I.E.S9	Fabricate a cable assembly using a swaged-end fitting.	1	E	S	9		Part 4 - E.2.5.4.3	G29	2	21		
	AM.I.E.R3	Used hardware or suspected unapproved parts (SUPS).	1	E	R	3		Part 4 - E.2.6		0.25	22		
	AM.I.E.K8	Torqueing tools, principles, and procedures.	1	E	K	8		Part 4 - E.3.1.5		0.5	23		
	AM.I.E.S2	Determine and properly torque aircraft hardware.	1	E	S	2		Part 4 - E.3.1.5, E.3.1.5.1.2	G22	1	24		
	AM.I.E.K10	Relationship between torque and fastener preload.	1	E	K	10		Part 4 - E.3.1.5.1.2, E.3.1.5.1.3		0.25	25		
	AM.I.E.R2	Improper torque.	1	E	R	2		Part 4 - E.3.1.5.1.4		0.25	26		
	AM.I.E.R4	Torqueing techniques on critical, highly-stressed fasteners.	1	E	R	4		Part 4 - E.3.1.5.1.4		0.25	27		
	AM.I.E.K6	Precision measurement tools, principles, and procedures.	1	E	K	6		Part 5 - E.3.4		1	28		
	AM.I.E.S14	Check for proper calibration of a micrometer.	1	E	S	14		Part 5 - E.3.4	G34	1	29		
	AM.I.E.S6	Make precision measurements with an instrument that has a Vernier scale.	1	E	S	6		Part 5 - E.3.4 has cross reference to Subject "K-Inspection concepts and techniques" where the skill is covered.	G26	1.5	30		
	AM.I.E.S7	Check the concentricity of a shaft.	1	E	S	7		Part 5 - E.3.4.13	G27	1	31		
	AM.I.E.R1	Use of personal protective equipment (PPE).	1	E	R	1		Part 5 - E.4		0.25	32		
GROUND OPERATIONS & SERVICING	AM.I.F.K14	Parts protections.	1	F	K	14		Part 1 - F.2.1.6		0.5	1		
	AM.I.F.K16	Foreign object damage effects.	1	F	K	16		Part 1 - F.2.1.6		0.5	2		
	AM.I.F.S1	Perform a foreign object damage control procedure.	1	F	S	1		Part 1 - F.2.1.6	G35	1	3		
	AM.I.F.K15	Hazardous materials, Safety Data Sheets (SDS), and PPE.	1	F	K	15		Part 1 - F.2.2, F.2.2.5, F.2.2.7		0.5	4		
	AM.I.F.K2	Aircraft securing procedures.	1	F	K	2		Part 1 - F.4		0.5	5		
	AM.I.F.S11	Secure an aircraft.	1	F	S	11		Part 1 - F.4	G40	1	6		
	AM.I.F.S12	Locate and explain procedures for securing a turbine-powered aircraft after engine shutdown.	1	F	S	12		Part 1 - F.4.1	G41	1	7		
	AM.I.F.K12	Tool and hardware use and accountability.	1	F	K	12		Part 1. F.2, F.2.1.3		0.5	8		
	AM.I.F.K13	Material handling.	1	F	K	13		Part 1. F.2, F.2.1.4		0.5	9		
	AM.I.F.K7	Aircraft oil, hydraulic and pneumatic, and deicing servicing procedures.	1	F	K	7		Part 2 - F.10		0.5	10		
	AM.I.F.R5	Oxygen system servicing.	1	F	R	5		Part 2 - F.11, F.11.3		0.5	11		
	AM.I.F.K8	Oxygen system servicing procedures.	1	F	K	8		Part 2 - F.11.1		0.5	12		
	AM.I.F.S4	Use appropriate hand signals for the movement of aircraft.	1	F	S	4		Part 2 - F.6, F.6.1	G38	1	13		
	AM.I.F.K1	Aircraft towing procedures.	1	F	K	1		Part 2 - F.7, F.7.1, F.7.2		0.5	14		
	AM.I.F.R1	Preparing to tow and aircraft.	1	F	R	1		Part 2 - F.7, F.7.2		0.5	15		
	AM.I.F.S3	Prepare an aircraft for towing.	1	F	S	3		Part 2 - F.7, F.7.2	G37	1	16		
	AM.I.F.R7	Engine starting and ground operations.	1	F	R	7		Part 2 - F.8		0.5	17		
	AM.I.F.K5	Engine starting, ground operation, and aircraft taxiing procedures.	1	F	K	5		Part 2 - F.8, F.6.2		0.25	18		
	AM.I.F.R8	Engine starting and operation while troubleshooting or adjusting engine controls.	1	F	R	8		Part 2 - F.8, F.8.1, F.8.1.2		0.25	19		
	AM.I.F.R6	Engine start/run-up without using a checklist.	1	F	R	6		Part 2 - F.8, F.8.6		0.25	20		
	AM.I.F.R9	Ground operation of an aircraft engine with cowling removed contrary to manufacturer instructions.	1	F	R	9		Part 2 - F.8.1.1		0.25	21		
	AM.I.F.S9	Follow a checklist to start up or shut down an aircraft reciprocating or turbine engine.	1	F	S	9		Part 2 - F.8.6	G40	1	22		
	AM.I.F.S10	Identify procedures for extinguishing fires in an engine induction system.	1	F	S	10		Part 2 - F.8.7	G40	0.5	23		
	AM.I.F.K6	Types/classes of fire extinguishers and procedures.	1	F	K	6		Part 2 - F.8.7 Part 1 - F.3.3.1, F.3.3.2		0.5	24		
	AM.I.F.R2	Connecting external power equipment to an aircraft.	1	F	R	2		Part 2 - F.9, F.9.1.1, F.9.2.1, F.9.2.3, F.9,3		0.25	25		
	AM.I.F.S2	Connect external power to an aircraft.	1	F	S	2		Part 2 - F.9, F.9.2.2	G36	0.5	26		
	AM.I.F.K11	Use of approved grades/types of fuel in aircraft engines.	1	F	K	11		Part 3 - F.12, F.12.1		0.25	27		
	AM.I.F.S6	Identify different grades of aviation fuel.	1	F	S	6		Part 3 - F.12, F.12.1	G39	1	28		
	AM.I.F.K9	Characteristics of aviation gasoline and/or turbine fuels, including basic types and means of identification.	1	F	K	9		Part 3 - F.12, F.12.1, F.12.2, F.12.3		0.25	29		
	AM.I.F.K3	Aviation fueling/defueling procedures.	1	F	K	3		Part 3 - F.12, F.12.6.1, F.12.6.2		0.25	30		
	AM.I.F.S5	Inspect an aircraft fuel system for water and foreign object debris (FOD) contamination.	1	F	S	5		Part 3 - F.12, F.12.8	G39	0.5	31		
	AM.I.F.S7	Select an approved fuel for an aircraft.	1	F	S	7		Part 3 - F.12.1	G39	0.5	32		
	AM.I.F.K10	Fuel additives commonly used in the field.	1	F	K	10		Part 3 - F.12.4		0.5	33		
	AM.I.F.R3	Fueling/defueling ungrounded aircraft or using improper equipment.	1	F	R	3		Part 3 - F.12.6, F.12.6.3, F.12.7		0.25	34		
	AM.I.F.S8	Prepare an aircraft for fueling.	1	F	S	8		Part 3 - F.12.6.1.2	G39	0.5	35		
	AM.I.F.R4	Misfueling and using incorrect or contaminated fule.	1	F	R	4		Part 3 - F.12.7, F.12.7.4		0.5	36		
	AM.I.F.K4	Airport operation area procedures and ATC communications, including runway incursion prevention.	1	F	K	4		Part 3 - F.13		0.25	37		
	AM.I.F.R10	Ground operation of aircraft in the vicinity of other aircraft or ground support equipment.	1	F	R	10		Part 3 - F.13.6, F.13.6.1, F.13.6.2		0.5	38		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
CLEANING & CORROSION CONTROL	AM.I.G.K9	Selection of optimal CPC and frequency of treatment.	1	G	K	9		Part 1 - G.11		0.25	1		
	AM.I.G.K2	Corrosion theory and causation.	1	G	K	2		Part 1 - G.1, G.2, G.3		0.25	2		
	AM.I.G.K5	Corrosion preventive maintenance procedures.	1	G	K	5		Part 1 - G.10		0.25	3		
	AM.I.G.K6	Corrosion identification and inspection.	1	G	K	6		Part 1 - G.11		0.25	4		
	AM.I.G.S1	Perform a portion of an aircraft corrosion inspection.	1	G	S	1		Part 1 - G.11	G42	4	5		
	AM.I.G.S5	Inspect an aircraft compartment for corrosion.	1	G	S	5		Part 1 - G.11	G42	1	6		
	AM.I.G.K7	Corrosion removal and treatment procedures.	1	G	K	7		Part 1 - G.12		1	7		
	AM.I.G.S2	Identify, select, and use aircraft corrosion prevention/cleaning materials.	1	G	S	2		Part 1 - G.12.2	G42	1	8		
	AM.I.G.K11	Improper use of cleaners on aluminum or composite materials.	1	G	K	11		Part 1 - G.12.3		0.5	9		
	AM.I.G.S8	Prepare composite surface for painting.	1	G	S	8		Part 1 - G.12.3, Part 2 - G.17.8.3	G45	2	10		
	AM.I.G.R4	SDS PPE instructions for products during removal and treatment of corrosion.	1	G	R	4		Part 1 - G.12.7		0.25	11		
	AM.I.G.R5	Working with flammable chemicals.	1	G	R	5		Part 1 - G.12.7		0.25	12		
	AM.I.G.R6	Disposal of chemicals and waste materials.	1	G	R	6		Part 1 - G.12.7		0.25	13		
	AM.I.G.R7	Use of PPE when working with paints and solvents.	1	G	R	7		Part 1 - G.12.7		0.25	14		
	AM.I.G.R1	Health concerns when using paints, solvents, finishing materials, and processes.	1	G	R	1		Part 1 - G.12.7 (and Covered under respective topics)		0.25	15		
	AM.I.G.K22	Safety practices/precautions when using finishing materials (e.g., PPE, fire prevention).	1	G	K	22		Part 1 - G.12.7, Part 2 - G.17.10		0.5	16		
	AM.I.G.R2	Ventilation.	1	G	R	2		Part 1 - G.12.7, Part 2 - G.27.2.4		0.25	17		
	AM.I.G.K13	Conversion coatings.	1	G	K	13		Part 1 - G.14		0.25	18		
	AM.I.G.S13	Apply etch solution and conversion coating.	1	G	S	13		Part 1 - G.14	G44	1.5	19		
	AM.I.G.K8	Corrosion Preventive Compounds (CPC) (e.g., waxy sealants, thin-film dielectrics).	1	G	K	8		Part 1 - G.14, G.15, G.16, G.26		0.25	20		
	AM.I.G.K10	Use of high-pressure application equipment.	1	G	K	10		Part 1 - G.15		0.25	21		
	AM.I.G.K3	Types and effects of corrosion.	1	G	K	3		Part 1 - G.5, G.7		0.25	22		
	AM.I.G.K4	Corrosion-prone areas in aircraft.	1	G	K	4		Part 1 - G.8		0.25	23		
	AM.I.G.K15	Primer materials.	1	G	K	15		Part 2 - G.17.1		0.25	24		
	AM.I.G.K18	Effects of ambient conditions on finishing materials.	1	G	K	18		Part 2 - G.17.10		0.25	25		
	AM.I.G.K24	Control surface balance considerations after refinishing.	1	G	K	24		Part 2 - G.17.10		0.25	26		
	AM.I.G.K20	Regulatory requirements for replacing identification, registration markings, and placards.	1	G	K	20		Part 2 - G.17.11		0.25	27		
	AM.I.G.S7	Determine location and size requirements for aircraft registration numbers.	1	G	S	7		Part 2 - G.17.11, G.12	G43	1	28		
	AM.I.G.K16	Topcoat materials.	1	G	K	16		Part 2 - G.17.2		0.25	29		
	AM.I.G.S9	Identify finishing materials and appropriate thinners.	1	G	S	9		Part 2 - G.17.2	G46	1	30		
	AM.I.G.S14	Identify types of protective finishes.	1	G	S	14		Part 2 - G.17.2	G46	1	31		
	AM.I.G.S12	Determine what paint system can be used on a given aircraft.	1	G	S	12		Part 2 - G.17.2, G17.6	G46	1	32		
	AM.I.G.K17	Surface preparation for a desired finishing material.	1	G	K	17		Part 2 - G.17.8		0.25	33		
	AM.I.G.K21	Inspection of aircraft finishes.	1	G	K	21		Part 2 - G.17.8		0.25	34		
	AM.I.G.K23	Finishing materials application techniques and practices.	1	G	K	23		Part 2 - G.17.8		0.25	35		
	AM.I.G.R8	Application of finishing materials.	1	G	R	8		Part 2 - G.17.8		0.5	36		
	AM.I.G.S10	Layout and mask a surface in preparation for painting.	1	G	S	10		Part 2 - G.17.8	G43	1	37		
	AM.I.G.S11	Prepare metal surface for painting.	1	G	S	11		Part 2 - G.17.8	G44	1	38		
	AM.I.G.K19	Effects of improper surface preparation on finishing materials.	1	G	K	19		Part 2 - G.17.9		0.5	39		
	AM.I.G.S4	Inspect finishes and identify defects.	1	G	S	4		Part 2 - G.17.9	G42	1	40		
	AM.I.G.K14	Materials used for protection of airframe structures.	1	G	K	14		Part 2 - G.18.1, G.18.2, G.20.2, G.21, G.22		0.25	41		
	AM.I.G.K12	Dissimilar metals causing accelerated corrosion, and role of protective barriers to mitigate this risk.	1	G	K	12		Part 2 - G.24		0.25	42		
	AM.I.G.R3	Identification of materials and processes to be used for cleaning or corrosion treatment on a given part or structure to prevent further damage.	1	G	R	3		Part 2 - G.26		0.5	43		
	AM.I.G.S3	Apply corrosion prevention/coating materials.	1	G	S	3		Part 2 - G.26	G42	1	44		
	AM.I.G.K1	Aircraft cleaning procedures.	1	G	K	1		Part 2 - G.27		0.25	45		
	AM.I.G.S6	Identify procedures to clean and protect plastics.	1	G	S	6		Part 2 - G.27.1 ,G.27.6	G42	1	46		
	AM.I.H.K13	Basic mathematical functions (addition, subtraction, multiplication, division).	1	H	K	13		Part 1 - H.1.3		0.25	1		
	AM.I.H.K12	Use of positive and negative integers in mathematical operations.	1	H	K	12		Part 1 - H.1.3		0.25	2		
	AM.I.H.R2	Use of both positive and negative integers in mathematical operations.	1	H	R	2		Part 1 - H.1.3		0.25	3		
	AM.I.H.K9	Rounding numbers.	1	H	K	9		Part 1 - H.1.5.5		0.25	4		

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MATHEMATICS	AM.I.H.R3	Rounding off calculations.	1	H	R	3		Part 1 - H.1.5.5		0.25	5		
	AM.I.H.K6	Algebraic operations, including examples of where or how they may be used in relation to aircraft maintenance.	1	H	K	6		Part 1 - H.2		1	6		
	AM.I.H.R1	Precedence operators when solving an algebraic equation.	1	H	R	1		Part 1 - H.2.1		0.25	7		
	AM.I.H.K10	Powers and special powers.	1	H	K	10		Part 1 - H.2.6		0.5	8		
	AM.I.H.K5	Proportion and percentage problems, including examples of where or how they may be used in relation to aircraft maintenance or system(s) operation.	1	H	K	5		Part 1 - H.1.9		1	9		
	AM.I.H.K4	Ratio problems, including examples of where or how they may be used in relation to aircraft maintenance or system(s) operation.	1	H	K	4		Part 1 - H.1.8		1	10		
	AM.I.H.S6	Compare two numerical values using ratios.	1	H	S	6		Part 1 - H.1.8	G49	1	11		
	AM.I.H.S7	Compute compression ratio.	1	H	S	7		Part 1 - H.1.8.1	G49	1	12		
	AM.I.H.K8	Scientific (exponential) notation, decimal notation, fractional notation, binary notation, and conversion between these various forms of numeric notation.	1	H	K	8		Part 1 - H.2.6.3, H.2.7		2	13		
	AM.I.H.S5	Convert between fractional and decimal numbers.	1	H	S	5		Part 1 - H.1.5.6, H.1.5.7	G49	1	14		
	AM.I.H.S8	Compute the torque value when converting from inch-pounds to foot-pounds or from foot-pounds to inch-pounds.	1	H	S	8		Part 1 - H.1.6.2	G49	0.5	15		
	AM.I.H.K3	Definitions/descriptions of geometrical terms, including but not limited to any of the following: polygon, pi, diameter, radius, and hypotenuse.	1	H	K	3		Part 1 - H.1.16,		2	16		
	AM.I.H.K1	Areas of various geometrical shapes.	1	H	K	1		Part 1 - H.1.12		1	17		
	AM.I.H.K2	Volumes of various geometrical shapes.	1	H	K	2		Part 1 - H.1.12		1	18		
	AM.I.H.S1	Determine the square root of given numbers.	1	H	S	1		Part 1 - H.1.17	G48	0.5	19		
	AM.I.H.S2	Compute the volume of a cylinder.	1	H	S	2		Part 1 - H.1.12.4	G48	0.5	20		
	AM.I.H.S3	Compute the area of a wing.	1	H	S	3		Part 1, H.1.12.2	G48	1	21		
	AM.I.H.S4	Calculate the volume of a shape; such as a baggage compartment or fuel tank.	1	H	S	4		Part 1, H.1.12.3	G48	1	22		
	AM.I.H.K11	Measurement systems.	1	H	K	11		Part 1 - H.1.6		1.5	23		
	AM.I.H.K7	Conditions or areas where metric conversion may be necessary.	1	H	K	7		Part 1 - H.1.6		1	24		
REGULATIONS, MAINTENANCE FORMS, RECORDS, & PUBLICATIONS	AM.I.I.K8	The regulatory framework including general subject matter of the parts of 14 CFR relevant to aircraft maintenance and mechanics.	1	I	K	8		Part 1 - I.1.1		0.5	1		
	AM.I.I.K6	Maintenance terminology as defined in 14 CFR part 1 (e.g., time in service, maintenance, preventive maintenance, major alteration, major repair, minor alteration, minor repair).	1	I	K	6		Part 1 - I.2, I.2.1.1, I.2.3.1		0.5	2		
	AM.I.I.K7	Criteria and responsibility for determining whether a repair or alteration is major or minor.	1	I	K	7		Part 1 - I.2.1.1		0.5	3		
	AM.I.I.S15	Determine whether a given repair or alteration is major or minor.	1	I	S	15		Part 1 - I.2.1.1, I.2.3.1	G54	1	4		
	AM.I.I.K13	Compliance requirements for manufacturer-specified methods, techniques, and practices.	1	I	K	13		Part 1 - I.2.3.1		0.5	5		
	AM.I.I.K15	FAA-approved maintenance data including maintenance manuals and other methods, techniques and practices acceptable by the administrator.	1	I	K	15		Part 1 - I.2.3.1		0.5	6		
	AM.I.I.K16	Difference between approved data and acceptable data, and when each is required.	1	I	K	16		Part 1 - I.2.3.1		0.5	7		
	AM.I.I.S16	Determine applicability of approved data for a major repair.	1	I	S	16		Part 1 - I.2.3.1	G54	0.5	8		
	AM.I.I.S17	Explain the difference between “approved data” (required for major repair/alteration) and “acceptable data” (required for minor repair/alteration).	1	I	S	17		Part 1 - I.2.3.1	G54	1	9		
	AM.I.I.R1	Completeness or accuracy of documentation.	1	I	R	1		Part 1 - I.2.3.1 , I.2.5.1		0.25	10		
	AM.I.I.K14	Compliance requirements for manufacturer-specified maintenance and inspection intervals.	1	I	K	14		Part 1 - I.2.3.2		0.25	11		
	AM.I.I.K1	Privileges and limitations of a mechanic certificate.	1	I	K	1		Part 1 - I.2.5		0.25	12		
	AM.I.I.K2	Recent experience requirements and how to re-establish once lost.	1	I	K	2		Part 1 - I.2.5.1		0.25	13		
	AM.I.I.K23	Mechanic address change notification procedures.	1	I	K	23		Part 1 - I.2.5.1		0.25	14		
	AM.I.I.K9	Agency publications and guidance materials including aircraft specifications, TCDSs, advisory circulars (AC), and Airworthiness Directives (ADs).	1	I	K	9		Part 1 - I.3		0.5	15		
	AM.I.I.K12	FAA databases and resources available including TCDSs and supplemental type certificates.	1	I	K	12		Part 1 - I.3		0.5	16		
	AM.I.I.K18	Alert, caution, and warning indications; and the basic definition of warnings, cautions, and notes that are used in maintenance and operating manuals.	1	I	K	18		Part 1 - I.3		0.5	17		
	AM.I.I.R4	Adherence to warnings, cautions, or notes in maintenance and operational manuals.	1	I	R	4		Part 1 - I.3		0.25	18		
	AM.I.I.S8	Determine applicability of an AD.	1	I	S	8		Part 1 - I.3.2.1	G60	1	19		
	AM.I.I.K10	Alternative Method of Compliance (AMOC) for an AD.	1	I	K	10		Part 1 - I.3.2.2		0.25	20		
	AM.I.I.S6	Locate applicable FAA aircraft specifications and FAA TCDS for an aircraft or component.	1	I	S	6		Part 1 - I.3.4, I.3.6	G53	1	21		
	AM.I.I.S11	Locate supplemental type certificates applicable to a specific aircraft.	1	I	S	11		Part 1 - I.3.5	G54	1	22		
	AM.I.I.K22	Methods used to establish the serial number effectivity of an item.	1	I	K	22		Part 1 - I.3.5, I.3.8.3		0.25	23		
	AM.I.I.S5	Compare an equipment list for an aircraft to equipment installed.	1	I	S	5		Part 1 - I.3.6	G55	1	24		
	AM.I.I.S14	Determine maximum allowable weight of a specific aircraft.	1	I	S	14		Part 1 - I.3.6	G53	1	25		
	AM.I.I.K21	Usable on (effectivity) codes in parts manuals.	1	I	K	21		Part 1 - I.3.8.1		0.5	26		
	AM.I.I.K11	Manufacturer publications including maintenance manuals, service bulletins, maintenance alerts, and master minimum equipment lists.	1	I	K	11		Part 1 - I.3.8.2		0.5	27		
	AM.I.I.R5	Determination of component applicability to a given aircraft.	1	I	R	5		Part 1 - I.3.8.2.2		0.25	28		
	AM.I.I.S10	Use a manufacturer’s illustrated parts catalog to locate a specific part number and applicability.	1	I	S	10		Part 1 - I.3.8.2.6	G58	1	29		
	AM.I.I.K17	FAA-approved airworthiness limitations.	1	I	K	17		Part 1 - I.3.8.3		0.25	30		
	AM.I.I.R2	Use of SDS.	1	I	R	2		Part 1 - I.3.8.6		0.25	31		
	AM.I.I.K19	Inoperative equipment.	1	I	K	19		Part 1 - I.3.8.7		0.25	32		
	AM.I.I.K5	The purpose and use of FAA forms (e.g., FAA Forms 337, 8010-4, 8100-2, 8130-3).	1	I	K	5		Part 1 - I.4 (I.4.2, I.4.3) I.6.2		0.5	33		
	AM.I.I.S1	Complete an FAA Form 337 for a major repair or alteration.	1	I	S	1		Part 1 - I.4.3	G50	2	34		
	AM.I.I.S2	Examine an FAA Form 337 for accuracy.	1	I	S	2		Part 1 - I.4.3	G50	1	35		
	AM.I.I.K3	Maintenance record entry for approval for return to service after maintenance and alterations.	1	I	K	3		Part 1 - I.5.1		1	36		
	AM.I.I.K4	Maintenance record entry for approval for return to service after inspection.	1	I	K	4		Part 1 - I.5.1		1	37		
	AM.I.I.S3	Determine an aircraft’s inspection status by reviewing the aircraft’s maintenance records.	1	I	S	3		Part 1 - I.5.1	G51	1.5	38		
	AM.I.I.S4	Complete an aircraft maintenance record entry for the compliance of a reoccurring AD for a specific airframe, aircraft engine, appliance, or propeller.	1	I	S	4		Part 1 - I.5.1	G51	1.5	39		
	AM.I.I.S7	Complete an aircraft maintenance record entry for return to service.	1	I	S	7		Part 1 - I.5.1	G56	1	40		
	AM.I.I.S18	Complete a 100-hour inspection aircraft maintenance record entry.	1	I	S	18		Part 1 - I.5.1	G56	1	41		
	AM.I.I.K20	Discrepancy records or placards.	1	I	K	20		Part 1 - I.5.3, I.3.8.7, I.7		0.25	42		
	AM.I.I.R3	Complacency during documentation phase of maintenance procedures.	1	I	R	3		Part 1 - I.5.4		0.25	43		

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	AM.I.I.S13	Determine approved replacement parts for installation on a given aircraft.	1	I	S	13		Part 1 - I.6.1.2	G60	1	44		
	AM.I.I.S9	Check a Technical Standard Order (TSO) or part manufacturing authorization for the proper markings.	1	I	S	9		Part 1 - I.6.2	G59	1	45		
	AM.I.I.S12	Determine the conformity of aircraft instrument range markings and placarding.	1	I	S	12		Part 1 - I.7	G57	1	46		
PHYSICS FOR AVIATION	AM.I.J.K1	Matter and energy.	1	J	K	1		Part 1 - J.1 & J.4.5		2	1		
	AM.I.J.K12	Relationship between temperature, density, weight, and volume.	1	J	K	12		Part 1 - J.1.3.4		1	2		
	AM.I.J.K2	Work, power, force, and motion.	1	J	K	2		Part 1 - J.2.1, J.3, J.4.3 & J.4.2		3	3		
	AM.I.J.K6	Newton's Law of Motion.	1	J	K	6		Part 1 - J.3.1.6		1	4		
	AM.I.J.S8	Calculate horsepower.	1	J	S	8		Part 1 - J.4.3	G67	1	5		
	AM.I.J.K3	Simple machines and mechanics.	1	J	K	3		Part 1 - J.4.4		2	6		
	AM.I.J.S5	Demonstrate the mechanical advantage of various types of levers.	1	J	S	5		Part 1 - J.4.4.1	G64	2	7		
	AM.I.J.S6	Design an inclined plane on paper, indicating the mechanical advantage.	1	J	S	6		Part 1 - J.4.4.4	G65	0.5	8		
	AM.I.J.K4	Heat and pressure.	1	J	K	4		Part 2 - J.5.1, J.6.4, J.6.9, J.6.11		2	9		
	AM.I.J.K13	Force, area, or pressure in a specific application.	1	J	K	13		Part 2 - J.5.1.1		2	10		
	AM.I.J.S4	Calculate force, area, or pressure in a specific application.	1	J	S	4		Part 2 - J.5.1.1	G63	1	11		
	AM.I.J.K5	Bernoulli's Principle.	1	J	K	5		Part 2 - J.5.7 & Part 3 - J.9.1		0.5	12		
	AM.I.J.S1	Convert temperature units (e.g., from Celsius to Fahrenheit).	1	J	S	1		Part 2 - J.6.3	G61	0.5	13		
	AM.I.J.R4	Use of related units of measure (e.g., Celsius vs. Fahrenheit).	1	J	R	4		Part 2 - J.6.3.1		0.25	14		
	AM.I.J.K7	Gas law and fluid mechanics.	1	J	K	7		Part 2 - J.6.9 & J.5		2	15		
	AM.I.J.K9	Standard atmosphere and factors affecting atmospheric conditions.	1	J	K	9		Part 3 - J.8.1		1	16		
	AM.I.J.S3	Determine pressure altitude.	1	J	S	3		Part 3 - J.8.6.1, J.8.6.4	G62	0.5	17		
	AM.I.J.R1	Changes in aircraft and engine performance due to density altitude.	1	J	R	1		Part 3 - J.8.6.2, J.8.6.3		0.25	18		
	AM.I.J.R3	Use of performance/testing data.	1	J	R	3		Part 3 - J.8.6.3		0.25	19		
	AM.I.J.S2	Determine density altitude.	1	J	S	2		Part 3 - J.8.6.4	G62	0.5	20		
	AM.I.J.S7	Identify changes in pressure and velocity as a fluid passes through a venturi.	1	J	S	7		Part 3 - J.9.1.1 & J.9.2.1	G66	1	21		
	AM.I.J.K11	Additional aerodynamic devices including vortex generators, wing fences, and stall strips.	1	J	K	11		Part 3 - J.9.3.1.3, J.9.2.5 & Part 4 - J.11.7.6, J		1	22		
	AM.I.J.K8	Theory of flight (aerodynamics).	1	J	K	8		Part 4 - J.10 & J.9		2	23		
	AM.I.J.K10	Primary and secondary aircraft flight controls.	1	J	K	10		Part 4 - J.11.1 & J.11.2		3	24		
	AM.I.J.R2	Effect a repair can have on a flight surface.	1	J	R	2		Part 4 - J.11.6		0.25	25		
INSPECTION CONCEPTS & TECHNIQUES	AM.I.K.K5	Aircraft inspection methods and tools for materials, hardware, and processes.	1	K	K	5		Part 1 - K.1 & K.3 Part 2 - K.4		0.5	1		
	AM.I.K.R4	Selection of inspection techniques.	1	K	R	4		Part 1 - K.1.1.3, K.1.5		0.5	2		
	AM.I.K.S6	Inspect aircraft for compliance with an AD.	1	K	S	6		Part 1 - K.1.4.4	G51	1	3		
	AM.I.K.K4	Aircraft inspection programs (e.g., progressive, 100-hour, annual, and other FAA-approved inspections).	1	K	K	4		Part 1 - K.1.5		0.5	4		
	AM.I.K.K3	Nondestructive Testing (NDT) procedures and methods.	1	K	K	3		Part 1 - K.3		0.5	5		
	AM.I.K.S7	Identify NDT methods for composite, surface metal, and subsurface metal defects.	1	K	S	7		Part 1 - K.3	G69	1	6		
	AM.I.K.R5	Damage prevention to aircraft components and test equipment when using an ohmmeter.	1	K	R	5		Part 1 - K.3.14.1		0.25	7		
	AM.I.K.S4	Perform a visual inspection.	1	K	S	4		Part 1 - K.3.3.1.2, K.3.3.1.1	G69	1	8		
	AM.I.K.S8	Perform a tap test on a composite component.	1	K	S	8		Part 1 - K.3.3.3	G69	1	9		
	AM.I.K.S5	Perform a dye penetrant inspection.	1	K	S	5		Part 1 - K.3.5.1	G69	1.5	10		
	AM.I.K.R1	Demagnitizing a component following a magnetic particle inspection.	1	K	R	1		Part 1 - K.3.6.9		0.25	11		
	AM.I.K.K1	Measuring tools including calipers, micrometers, and gauges.	1	K	K	1		Part 2 - K.4		0.5	12		
	AM.I.K.S2	Use micrometers.	1	K	S	2		Part 2 - K.4.1.1.2, K.4.1.2, K.1.4.3.1,	G68	2	13		
	AM.I.K.K2	Calibration and tool accuracy requirements.	1	K	K	2		Part 2 - K.4.15		0.5	14		
	AM.I.K.R3	Calibration of precision measuring instruments.	1	K	R	3		Part 2 - K.4.15		0.25	15		
	AM.I.K.R2	Using precision measuring instruments.	1	K	R	2		Part 2 - K.4.15.1		0.25	16		
	AM.I.K.S1	Use Vernier calipers.	1	K	S	1		Part 2 - K.4.2.2.3	G68	2	17		
	AM.I.K.S3	Use measurement gauges.	1	K	S	3		Part 2 - K.4.7, K.4.6, K.4.8, K.4.9, K.4.11	G68	2	18		
HUMAN FACTORS	AM.I.L.K1	Safety culture and organizational factors.	1	L	K	1		Part 2 - L.6.4		0.5	1		
	AM.I.L.K4	Human performance and limitations.	1	L	K	4		Part 1 - L.3		0.5	2		
	AM.I.L.R2	Fatigue management and fitness for duty.	1	L	R	2		Part 1 - L.4.1		0.25	2.1		
	AM.I.L.R3	Non-invasive, condition-monitoring technologies.	1	L	R	3		Part 1 - L.4.3.2.1		0.25	2.2		
	AM.I.L.K5	Physical and social environment.	1	L	K	5		Part 1 - L.5		0.5	3		
	AM.I.L.K11	Types of human errors.	1	L	K	11		Part 2 - L.8		0.5	4		
	AM.I.L.S3	Locate information regarding human factors errors.	1	L	S	3		Part 2 - L.8.3	G72	1	5		
	AM.I.L.K2	Human error principles.	1	L	K	2		Part 2 - L.8.1		0.5	6		
	AM.I.L.K10	Conditions/preconditions for unsafe acts.	1	L	K	10		Part 2 - L.6.8		0.5	7		
	AM.I.L.K7	Teamwork and leadership.	1	L	K	7		Part 2 - L.6.5, L.6.6		0.5	8		
	AM.I.L.K8	Professionalism and integrity.	1	L	K	8		Part 2 - L.6.1		0.5	9		
	AM.I.L.K6	Communication/reporting of hazards.	1	L	K	6		Part 2 - L.7, L.9.1.3		0.5	10		
	AM.I.L.R1	Selective reporting of hazards.	1	L	R	1		Part 2 - L.8.3		0.5	10.1		
	AM.I.L.K9	Shift and task turnover.	1	L	K	9		Part 2 - L.7.2.3		0.5	11		
	AM.I.L.S2	Brief a shift turnover for continuity of work.	1	L	S	2		Part 2 - L.7.2.3	G42	2	12		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
	AM.I.L.K3	Event investigation.	1	L	K	3		Part 2 - L.8.3.3		0.25	13		
	AM.I.L.S1	File a Malfunction or Defect Report.	1	L	S	1		Part 2 - L.8.3.4.1	G71	1	14		
AIRFRAME													
Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	iculum Reference				
METALLIC STRUCTURES	AM.II.A.K17	Types of structures and their characteristics.	2	A	K	17		Part 1 - A.2		1	1		
	AM.II.A.K5	Selection of rivets, hardware, and fasterners for sheet metal repair.	2	A	K	5		Part 1 - A.3, A.3.1, A.3.1.2,		0.5	2		
	AM.II.A.K7	Rivet layout.	2	A	K	7		Part 1 - A.3.1.3		2	3		
	AM.II.A.S11	Determine a rivet pattern for a specific repair.	2	A	S	11		Part 1 - A.3.1.3	AF1	1	4		
	AM.II.A.K8	Rivet removal and installation methods.	2	A	K	8		Part 1 - A.3.1.3 & A.3.1.6		1	5		
	AM.II.A.S1	Install and remove solid rivets.	2	A	S	1		Part 1 - A.3.1.4 & A.3.1.6	AF1	2	6		
	AM.II.A.S8	Remove a repair that was installed with rivets.	2	A	S	8		Part 1 - A.3.1.6	AF1	0.75	7		
	AM.II.A.S2	Install and remove a blind rivet.	2	A	S	2		Part 1 - A.3.2.1	AF2	1	8		
	AM.II.A.S4	Select and install special purpose fasteners.	2	A	S	4		Part 1 - A.3.2.3.1, A.3.2.3	AF2	1	9		
	AM.II.A.S12	Countersink rivet holes in sheet metal.	2	A	S	12		Part 1 -A.3.1.1.1.4	AF1	1	10		
	AM.II.A.K4	Layout, forming, and drilling of sheet metal components.	2	A	K	4		Part 2 - A.4.5 & Part 4 - A.7.2		1	11		
	AM.II.A.K6	Heat treatment processes for aluminum.	2	A	K	6		Part 3 - A.5.1.1		1	12		
	AM.II.A.K1	Inspection/testing of metal structures.	2	A	K	1		Part 3 - A.6.2		1	13		
	AM.II.A.S9	Trim and form a piece of sheet metal to fit a prepared area.	2	A	S	9		Part 4 - A.7.5.4 & Part 5 A.10.2.3	AF1	4	14		
	AM.II.A.S5	Design a repair using a Manufacturer's Structural Repair Manual.	2	A	S	5		Part 5 - A.10	AF3	3	15		
	AM.II.A.S13	Perform a repair on a damaged aluminum sheet.	2	A	S	13		Part 5 - A.10.1	AF1	4	16		
	AM.II.A.S6	Prepare and install a patch to repair an aircraft or component.	2	A	S	6		Part 5 - A.10.1.1	AF1	6	17		
	AM.II.A.K3	Selection of sheet metal repair materials.	2	A	K	3		Part 5 - A.8.1		1	18		
	AM.II.A.R1	Selection of repair materials.	2	A	R	1		Part 5 - A.8.1		1	19		
	AM.II.A.K2	Types of sheet metal defects.	2	A	K	2		Part 5 - A.8.3		1	20		
	AM.II.A.S14	Determine extent of damage and decide if metallic structure is repairable.	2	A	S	14		Part 5 - A.8.4	AF4	4	21		
	AM.II.A.S3	Determine applicability of sheet metal for a repair in a specific application.	2	A	S	3		Part 5 - A.9.3	AF1	2	22		
	AM.II.A.S7	Make a drawing of a repair including the number of rivets and size of sheet metal required.	2	A	S	7		Part 5 - A.9.3	AF1	2	23		
	AM.II.A.S10	Fabricate an aluminum part in accordance with a drawing.	2	A	S	10		Part 5 - A.9.3	AF3	4	24		
	AM.II.A.K9	Maintenance safety practices/precautions for sheet metal repairs or fabrications.	2	A	K	9		Part 5 - A.9.4		1	25		
	AM.II.A.R2	Utilizing maintenance safety practices/precautions for sheet metal structures.	2	A	R	2		Part 5 - A.9.4		1	26		
	AM.II.A.R3	Use of PPE when working with sheet metal structures.	2	A	R	3		Part 5 - A.9.4.1		0.5	27		
	AM.II.A.K16	Procedures for weld repairs.	2	A	K	16		Part 6 - A.12.10		1	28		
	AM.II.A.K15	Types of steel tubing welding repairs.	2	A	K	15		Part 6 - A.12.10.1		1	29		
	AM.II.A.K10	Flame welding gasses.	2	A	K	10		Part 6 - A.12.2.1.1		1	30		
	AM.II.A.K11	Storage/handling of welding gasses.	2	A	K	11		Part 6 - A.12.2.1.1		1	31		
	AM.II.A.R4	Handling, storage, and use of compressed gas bottles.	2	A	R	4		Part 6 - A.12.2.1.1		1	32		
	AM.II.A.K12	Flame welding practices and techniques.	2	A	K	12		Part 6 - A.12.2.2		1	33		
	AM.II.A.K13	Inert-gas welding practices and techniques.	2	A	K	13		Part 6 - A.12.3.4.3		1	34		
	AM.II.A.K14	Purpose and types of shielding gasses.	2	A	K	14		Part 6 - A.12.3.4.3		1	35		
	AM.II.A.R5	Use of electric welding equipment.	2	A	R	5		Part 6 - A.12.4		1	36		
NON-METALLIC STRUCTURES	AM.II.B.K10	Covering textile terms.	2	B	K	10		Part 1 - B.2.1		1	1		
	AM.II.B.K17	Covering repair techniques and practices.	2	B	K	17		Part 1 - B.2.12		1	2		
	AM.II.B.K15	Aircraft covering preservation/restoration.	2	B	K	15		Part 1 - B.2.12, B.2.12.1		1	3		
	AM.II.B.K16	Inspection of aircraft covering.	2	B	K	16		Part 1 - B.2.12, B.2.13, B.2.14.4		1	4		
	AM.II.B.S11	Determine extent of damage and decide if nonmetallic structure is repairable.	2	B	S	11		Part 1 - B.2.12.1 Part 2 - B.3.8, B.3.8.3	AF6	1.5	5		
	AM.II.B.K2	Effects of moisture/humidity on wood and fabric coverings.	2	B	K	2		Part 1 - B.2.14.8, Part 2 - B.3.6.4		0.75	6		
	AM.II.B.K7	Factors used in determining the proper type covering material.	2	B	K	7		Part 1 - B.2.2 , B.2.3.1		1	7		
	AM.II.B.K8	Types of approved aircraft covering material.	2	B	K	8		Part 1 - B.2.3		1	8		
	AM.II.B.R6	Use of materials that are not part of an approved repair system.	2	B	R	6		Part 1 - B.2.3.1, Part 2 - B.3.4		0.5	9		
	AM.II.B.K14	Areas on aircraft covering most susceptible to deterioration.	2	B	K	14		Part 1 - B.2.4		1	10		
	AM.II.B.K11	Structure surface preparation.	2	B	K	11		Part 1 - B.2.6		1	11		
	AM.II.B.K13	Covering means of attachment.	2	B	K	13		Part 1 - B.2.7, B.2.8		0.5	12		
	AM.II.B.K9	Seams commonly used with aircraft covering.	2	B	K	9		Part 1 - B.2.8.1		0.5	13		
	AM.II.B.S6	Locate and explain the procedures for tying a modified seine knot.	2	B	S	6		Part 1 - B.2.8.5	AF10	0.5	14		
	AM.II.B.K12	Covering methods commonly used.	2	B	K	12		Part 1 - B.2.9, B.2.9.1, B.2.9.2, B.2.9.3		1	15		
	AM.II.B.K1	Wood structures inspection techniques, tools, and practices for wood structures.	2	B	K	1		Part 2 - B.3.5, B.3.6, B.3.8		0.5	16		
	AM.II.B.K5	Acceptable and unacceptable wood defects.	2	B	K	5		Part 2 - B.3.7		0.5	17		
	AM.II.B.K3	Types and general characteristics of wood used in aircraft structures.	2	B	K	3		Part 2 - B.3.8.1		0.75	18		
	AM.II.B.K4	Permissible substitutes and other materials used in the construction and repair of wood structures.	2	B	K	4		Part 2 - B.3.8.1		0.5	19		
	AM.II.B.K6	Wood repair techniques and practices.	2	B	K	6		Part 2 - B.3.8.3		0.5	20		
	AM.II.B.S9	Locate and explain repair standard dimensions.	2	B	S	9		Part 2 - B.3.8.3.1, B.3.8.3.2	AF13	0.5	21		
	AM.II.B.S10	Locate and explain repair procedures for elongated bolt holes.	2	B	S	10		Part 2 - B.3.8.3.3	AF14	0.5	22		
	AM.II.B.K25	Thermoplastic material installation procedures.	2	B	K	25		Part 2 - B.4.10.1		1	23		
	AM.II.B.K23	Thermoplastic material inspection/types of defects.	2	B	K	23		Part 2 - B.4.11.1		1	24		
	AM.II.B.K26	Care and maintenance of windows.	2	B	K	26		Part 2 - B.4.11.1		1	25		
	AM.II.B.K27	Window temporary and permanent repairs.	2	B	K	27		Part 2 - B.4.11.1		1	26		
	AM.II.B.S4	Clean and inspect acrylic type windshields.	2	B	S	4		Part 2 - B.4.11.1	AF8	1	27		
	AM.II.B.S5	Locate and explain procedures for a temporary repair to a side window.	2	B	S	5		Part 2 - B.4.11.1	AF9	1	28		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
	AM.II.B.K28	Maintenance safety practices/precautions for composite materials/structures, and windows.	2	B	K	28		Part 2 - B.4.11.2,B.4.11.1,B.4.11.3		1	29		
	AM.II.B.K24	Thermoplastic material storage and handling.	2	B	K	24		Part 2 - B.4.4		0.5	30		
	AM.II.B.K29	Inspecting restraints and upholstery.	2	B	K	29		Part 2 - B.6		1	31		
	AM.II.B.K19	Types of composite structure defects.	2	B	K	19		Part 3 - B.12		1	32		
	AM.II.B.K18	Inspection/testing of composite structures.	2	B	K	18		Part 3 - B.13, B.14		1	33		
	AM.II.B.S3	Inspect composite, plastic, or glass-laminated structures.	2	B	S	3		Part 3 - B.14	AF7	4	34		
	AM.II.B.S8	Perform a tap test on composite material.	2	B	S	8		Part 3 - B.14.2.1	AF6	2	35		
	AM.II.B.K22	Composite repair methods, techniques, fasteners, and practices.	2	B	K	22		Part 3 - B.15, Part 4 - B.24, B.25, B.26		1	36		
	AM.II.B.S1	Identify appropriate fasteners on composite structures.	2	B	S	1		Part 3 - B.15.5.3	AF5	0.75	37		
	AM.II.B.K20	Composite structure fiber, core, and matrix materials.	2	B	K	20		Part 3 - B.9.4, B.9.5, B.9.6, B.10, B.7		1	38		
	AM.II.B.R5	Measuring and mixing of materials associated with composite construction.	2	B	R	5		Part 3 - B.9.6, B.9.6.3		0.5	39		
	AM.II.B.R1	Selection of glue (adhesive) or fasteners for aircraft structure.	2	B	R	1		Part 3 - B.9.7, B.15, Part 2 -B3.4		0.75	40		
	AM.II.B.K21	Composite materials storage practices and shelf life.	2	B	K	21		Part 4 - B.20.2		0.5	41		
	AM.II.B.R4	Storage of composite materials.	2	B	R	4		Part 4 - B.20.2		0.5	42		
	AM.II.B.R7	Material shelf-life.	2	B	R	7		Part 4 - B.20.2		0.5	43		
	AM.II.B.S2	Inspect and repair fiberglass.	2	B	S	2		Part 4 - B.24.1, B.24.2, B.25	AF6	6	44		
	AM.II.B.S12	Perform lay up for a repair to a composite panel, including preparation for vacuum bagging, using a Manufacturer's Repair Manual.	2	B	S	12		Part 4 - B.25.1	AF6	3.5	45		
	AM.II.B.S7	Prepare composite surface for painting.	2	B	S	7		Part 4 - B.27	AF11	2.54	46		
	AM.II.B.R2	Composite structure repairs.	2	B	R	2		Part 4 - B.28		0.5	47		
	AM.II.B.R3	Exposure to materials used in composite repair.	2	B	R	3		Part 4 - B.28		0.5	48		
FLIGHT CONTROLS	AM.II.C.K11	Aircraft flight controls and stabilizer systems.	2	C	K	11		Part 1 - C.1, C.1.2 C.1.3, C.1.4, C.1.5		2.5	1		
	AM.II.C.S2	Identify control surfaces that provide movement about an aircraft's axes.	2	C	S	2		Part 1 - C.1.1	AF17	1.25	2		
	AM.II.C.K13	Secondary and auxiliary control surfaces.	2	C	K	13		Part 1 - C.1.2, C.1.3		1.75	3		
	AM.II.C.K12	Other aerodynamic wing features.	2	C	K	12		Part 1 - C.1.2.3		1.5	4		
	AM.II.C.S3	Inspect a primary and secondary flight control surface.	2	C	S	3		Part 1 - C.1.6	AF19	3.25	5		
	AM.II.C.K9	Flutter and flight control balance.	2	C	K	9		Part 1 - C.3		1.5	6		
	AM.II.C.S8	Check the balance of a flight control surface.	2	C	S	8		Part 1 - C.3.3, C.3.3.1, C.3.3.2, C.3.3.3	AF20	5.5	7		
	AM.II.C.S11	Balance a control surface.	2	C	S	11		Part 1 - C.3.4	AF20	1.5	8		
	AM.II.C.K1	Control cables.	2	C	K	1		Part 1 - C.4.1		2	9		
	AM.II.C.S12	Fabricate a primary flight control cable.	2	C	S	12		Part 1 - C.4.1.2	AF20	2	10		
	AM.II.C.S5	Inspect primary control cables.	2	C	S	5		Part 1 - C.4.1.3	AF19	1.75	11		
	AM.II.C.K2	Control cable maintenance.	2	C	K	2		Part 1 - C.4.1.5		1	12		
	AM.II.C.K4	Cable guides.	2	C	K	4		Part 1 - C.4.2.1		0.75	13		
	AM.II.C.K3	Cable connectors.	2	C	K	3		Part 1 - C.4.2.3		0.75	14		
	AM.II.C.K6	Push-pull tubes.	2	C	K	6		Part 1 - C.4.3.1		0.75	15		
	AM.II.C.S7	Adjust push-pull flight control systems.	2	C	S	7		Part 1 - C.4.3.1	AF20	1.75	16		
	AM.II.C.K7	Torque tubes.	2	C	K	7		Part 1 - C.4.3.2		0.75	17		
	AM.II.C.K5	Control stops.	2	C	K	5		Part 1 - C.4.3.3		0.25	18		
	AM.II.C.K8	Bellcranks.	2	C	K	8		Part 1 - C.4.3.4		..25	19		
	AM.II.C.K10	Rigging of aircraft flight controls.	2	C	K	10		Part 2 - C.5, C.6		1.75	20		
	AM.II.C.S4	Remove and reinstall a primary flight control surface.	2	C	S	4		Part 2 - C.5.1.1	AF20	4.6	21		
	AM.II.C.R3	Selection and use of lifting equipment used to move aircraft components into place for assembly.	2	C	R	3		Part 2 - C.5.1.1, C.5.1.2		0.45	22		
	AM.II.C.S1	Identify fixed-wing aircraft rigging adjustment locations.	2	C	S	1		Part 2 - C.5.2	AF17	0.75	23		
	AM.II.C.R1	Use and interpretation of a cable tension chart.	2	C	R	1		Part 2 - C.5.2.2		0.75	24		
	AM.II.C.R5	Use and misinterpretation of cable tensiometers.	2	C	R	5		Part 2 - C.5.2.2		0.65	25		
	AM.II.C.R4	Maintaining a calibration schedule for cable tension meters and other rigging equipment.	2	C	R	4		Part 2 - C.5.2.2.2		0.25	26		
	AM.II.C.S6	Adjust and secure a primary flight control cable.	2	C	S	6		Part 2 - C.5.2.2.3	AF20	2.5	27		
	AM.II.C.S9	Determine allowable axial play limits for a flight control bearing.	2	C	S	9		Part 2 - C.5.2.3.1	AF20	0.75	28		
	AM.II.C.S10	Inspect a trim tab for freeplay, travel, and operation.	2	C	S	10		Part 2 - C.5.2.5.1	AF19	1.75	29		
	AM.II.C.S13	Locate aircraft flight control travel limits.	2	C	S	13		Part 2 - C.5.2.5.1	AF17	0.75	30		
	AM.II.C.R2	Rigging aircraft flight controls.	2	C	R	2		Part 2 - C.5.2.8		0.25	31		
AIRFRAME INSPECTION	AM.II.D.K8	CFRs applicable to inspection and airworthiness.	2	D	K	8		Part 1 - D.1.3, D.1.6.6		0.1	1		
	AM.II.D.K1	Inspection requirements under 14 CFR Part 91.	2	D	K	1		Part 1 - D.1.3.1		1.25	2		
	AM.II.D.K4	Identification of life-limited parts and their replacement interval.	2	D	K	4		Part 1 - D.1.3.1, D.1.6.6		0.8	3		
	AM.II.D.K2	Maintenance recordkeeping requirements under 14 CFR Part 43.	2	D	K	2		Part 1 - D.1.3.2		1.25	4		
	AM.II.D.K6	Use of FAA-approved data.	2	D	K	6		Part 1 - D.1.3.2		1	5		
	AM.II.D.K9	Corrosion types and identification.	2	D	K	9		Part 1 - D.1.4.1		1.5	6		
	AM.II.D.K3	Requirements for complying with ADs.	2	D	K	3		Part 1 - D.1.5		2.25	7		
	AM.II.D.S4	Determine compliance with a specific AD.	2	D	S	4		Part 1 - D.1.5	*******P	1.75	8		
	AM.II.D.K7	Compliance with service letters, service bulletins, instructions for continued airworthiness, or ADs.	2	D	K	7		Part 1 - D.1.5, D.1.6.2		1.75	9		
	AM.II.D.R4	Slection and use of checklists and other maintenance publications.	2	D	R	4		Part 1 - D.1.6.1, D.1.6.4		0.25	10		
	AM.II.D.S6	Determine if any additional inspections are required during a particular 100-hour inspection; i.e., 300-hour filter replacement.	2	D	S	6		Part 1 - D.1.6.2	*******P	1.75	11		
	AM.II.D.K5	Special inspections.	2	D	K	5		Part 1 - D.1.6.3		0.5	12		
	AM.II.D.S1	Perform an airframe inspection, including a records check.	2	D	S	1		Part 1 - D.1.6.4 , D.1.6.1	AF21	3.75	13		
	AM.II.D.S5	Provide a checklist for conducting a 100-hour inspection.	2	D	S	5		Part 1 - D.1.6.4, D.2.2	AF21	0.75	14		
	AM.II.D.R5	Maintenance record documentation.	2	D	R	5		Part 1 - D.1.7		0.25	15		
	AM.II.D.S3	Enter results of a 100-hour inspection in a maintenance record.	2	D	S	3		Part 1 - D.1.7.1	AF21	1.25	16		
	AM.II.D.S2	Perform a portion of a 100-hour inspection in accordance with part 43.	2	D	S	2		Part 1 - D.2	AF21	4.5	17		
	AM.II.D.S7	Inspect seat and seatbelt, including TSO markings.	2	D	S	7		Part 1 - D.2.2.1	AF22	0.75	18		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
	AM.II.D.R2	Visual inspection and where to apply it.	2	D	R	2		Part 1 - D.3.1		0.25	19		
	AM.II.D.R3	Performing radiographic inspections.	2	D	R	3		Part 1 - D.3.2		0.25	20		
	AM.II.D.R1	Interpretation of inspection instructions, which can lead to over or under maintenance being performed.	2	D	R	1		Part 1 - D.4		0.25	21		
LANDING GEAR SYSTEMS	AM.II.E.K13	Alternative landing gear systems (e.g., skis, floats).	2	E	K	13		Part 1 - E.2		1.75	1		
	AM.II.E.K1	Fixed and retractable landing gear systems.	2	E	K	1		Part 1 - E.2.2		3	2		
	AM.II.E.K2	Fixed and retractable landing gear components.	2	E	K	2		Part 1 - E.2.2		1.5	3		
	AM.II.E.K4	Inspection of bungee and spring steel landing gear systems.	2	E	K	4		Part 1 - E.2.3		0.75	4		
	AM.II.E.S19	Locate and explain the process for checking landing gear adjustment.	2	E	S	19		Part 1 - E.4	P	0.75	5		
	AM.II.E.S22	Identify landing gear position and warning system components.	2	E	S	22		Part 1 - E.5.4	P	0.75	6		
	AM.II.E.S24	Inspect and repair landing gear position indicating system.	2	E	S	24		Part 1 - E.5.4.1	AF31	1.5	7		
	AM.II.E.S25	Adjust the operation of a landing gear warning system.	2	E	S	25		Part 1 - E.5.4.1	AF31	2.5	8		
	AM.II.E.K6	Landing gear position and warning system inspection, check, and servicing.	2	E	K	6		Part 1 - E.5.4.1, E.5.4.2		2	9		
	AM.II.E.S23	Troubleshoot landing gear position and warning systems.	2	E	S	23		Part 1 - E.5.4.2	AF31	2	10		
	AM.II.E.K5	Steering systems.	2	E	K	5		Part 1 - E.6		0.75	11		
	AM.II.E.S18	Inspect nose-wheel steering system for proper adjustment.	2	E	S	18		Part 1 - E.6.2	****	2.25	12		
	AM.II.E.S17	Service a nose-wheel shimmy damper.	2	E	S	17		Part 1 - E.7.2	AF26	2.25	13		
	AM.II.E.S21	Troubleshoot aircraft steering system.	2	E	S	21		Part 1 - E.7.3	***	2	14		
	AM.II.E.S28	Troubleshoot nose-wheel shimmy.	2	E	S	28		Part 1 - E.7.3	AF26	0.75	15		
	AM.II.E.S1	Inspect and service landing gear.	2	E	S	1		Part 1 - E.8	AF23	4.5	16		
	AM.II.E.R1	Landing gear and tire and wheel safety practices/precautions.	2	E	R	1		Part 1 - E.8, Part 2 - E.10.12, E.11.4		0.25	17		
	AM.II.E.S26	Remove, install, and adjust a landing gear down-lock switch.	2	E	S	26		Part 1 - E.8.1.2	AF31	1.75	18		
	AM.II.E.R6	Operation of retractable landing gear systems around personnel.	2	E	R	6		Part 1 - E.8.2		0.25	19		
	AM.II.E.S6	Troubleshoot a landing gear retraction check.	2	E	S	6		Part 1 - E.8.2	AF31	3.5	20		
	AM.II.E.R2	Use of aircraft jacks.	2	E	R	2		Part 1 - E.8.3		0.25	21		
	AM.II.E.S5	Jack aircraft.	2	E	S	5		Part 1 - E.8.3	AF23	1.25	22		
	AM.II.E.K9	Wheel, brake, and tire construction.	2	E	K	9		Part 2 - E.10, E.10.1 , E.11, E.12		1.75	23		
	AM.II.E.S13	Inspect a tire for defects.	2	E	S	13		Part 2 - E.10.11	AF27	0.75	24		
	AM.II.E.K11	Landing gear and tire and wheel safety and inspection.	2	E	K	11		Part 2 - E.10.11, E.10.12,E.10.13.2		2	25		
	AM.II.E.S7	Inspect wheels, brakes, bearings, and tires.	2	E	S	7		Part 2 - E.10.11, E.11.3, E.12.3.2.1, E.11.4 Part 3 - E.12.2.3,	AF27	4	26		
	AM.II.E.S29	Inspect tube landing gear for damage.	2	E	S	29		Part 2 - E.10.14.3	***	0.75	27		
	AM.II.E.K10	Tire storage, care, and servicing.	2	E	K	10		Part 2 - E.10.15		1	28		
	AM.II.E.S14	Locate tire storage practices.	2	E	S	14		Part 2 - E.10.15	AF27	1	29		
	AM.II.E.S16	Troubleshoot an air/oil shock strut.	2	E	S	16		Part 2 - E.9.2.3	AF23	1.5	30		
	AM.II.E.K3	Landing gear strut servicing/lubrication.	2	E	K	3		Part 2 - E.9.3.2.1		1	31		
	AM.II.E.R5	High-pressure strut or system disassembly.	2	E	R	5		Part 2 - E.9.3.2.1		0.25	32		
	AM.II.E.S9	Service landing gear and/oil shock strut.	2	E	S	9		Part 2 - E.9.3.2.1	AF23	2.25	33		
	AM.II.E.S15	Replace air/oil shock strut air valve.	2	E	S	15		Part 2 - E.9.3.2.1	AF23	1.25	34		
	AM.II.E.R3	High pressure fluids and gasses.	2	E	R	3		Part 2 - E.9.3.2.1, E.9.7, E.10.12		0.25	35		
	AM.II.E.R4	Storage and handling of hydraulic fluids.	2	E	R	4		Part 2 - E.9.7, E.9.7.1		0.25	36		
	AM.II.E.S12	Remove, inspect, and install a wheel brake assembly.	2	E	S	12		Part 3 - E.12.2.2, E.12.2.3	AF27	2.75	37		
	AM.II.E.S8	Remove and replace brake lining(s).	2	E	S	8		Part 3 - E.12.3.1.2	AF27	1.5	38		
	AM.II.E.K12	Brake actuating systems.	2	E	K	12		Part 3 - E.12.4		1.75	39		
	AM.II.E.K7	Brake assembly servicing and inspection.	2	E	K	7		Part 3 - E.12.5		1.25	40		
	AM.II.E.S27	Inspect a brake for serviceability.	2	E	S	27		Part 3 - E.12.5	AF27	0.5	41		
	AM.II.E.S10	Bleed air from a hydraulic brake system.	2	E	S	10		Part 3 - E.12.5.1.1	AF27	0.75	42		
	AM.II.E.S20	Replace master brake cylinder packing seals.	2	E	S	20		Part 3 - E.12.5.2.1	AF27	2	43		
	AM.II.E.S11	Troubleshoot hydraulic brake systems.	2	E	S	11		Part 3 - E.12.6	AF27	1.75	44		
	AM.II.E.K8	Anti-skid system components and operation.	2	E	K	8		Part 3 - E.13		1.75	45		
	AM.II.E.S2	Inspect, check, and service an anti-skid system.	2	E	S	2		Part 3 - E.13.1.2.2, E.13.4, E.13.5	***	1.75	46		
	AM.II.E.S3	Locate and explain procedures for checking operation of an anti-skid warning system.	2	E	S	3		Part 3 - E.13.4	***	0.75	47		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
	AM.II.E.S4	Locate and explain troubleshooting procedures for an anti-skid system.	2	E	S	4		Part 3 - E.13.5	***	0.75	48		
HYDRAULIC & PNEUMATIC	AM.II.F.R4	Cross-contamination of hydraulic fluids.	2	F	R	4		Part 1 - F.1.1.3, F.1.1.5, F.1.1.5.1,		0.25	1		
	AM.II.F.K1	Hydraulic system components and fluids.	2	F	K	1		Part 1 - F.1.1, F.1.1.2, F.1.3, F.1.3.1, F.1.3.2, F.1.3.3, F.1.3.4, F.1.3.5, Part 2 - F.1.3.6, F.1.3.7, F.1.3.8, F.1.3.9		4	2		
	AM.II.F.S1	Identify different types of hydraulic fluids.	2	F	S	1		Part 1 - F.1.1.2	AF32	0.75	3		
	AM.II.F.S15	Locate and explain hydraulic fluid servicing instructions and identify/select fluid for a given aircraft.	2	F	S	15		Part 1 - F.1.1.4	AF33	0.75	4		
	AM.II.F.R3	Storage and handling of hydraulic fluids.	2	F	R	3		Part 1 - F.1.1.6		0.25	5		
	AM.II.F.K2	Hydraulic system operation.	2	F	K	2		Part 1 - F.1.2.1, F.1.2.1.1, F.1.2.1.2, Part 2 - F.1.8.1.1, F.1.8.2, F.1.8.3.1, F.1.8.4, 1.7.3.1, 1.7.3.2, 1.7.3.3		4	6		
	AM.II.F.R1	Relieving system pressure prior to system servicing or disassembly.	2	F	R	1		Part 1 - F.1.3.1.2.1, F.1.3.4.4		0.25	7		
	AM.II.F.S8	Service a hydraulic system reservoir.	2	F	S	8		Part 1 - F.1.3.1.3	AF34	0.25	8		
	AM.II.F.K11	Filter maintenance procedures.	2	F	K	11		Part 1 - F.1.3.3.2		1	9		
	AM.II.F.S6	Remove, clean, inspect, and install a hydraulic system filter.	2	F	S	6		Part 1 - F.1.3.3.2	AF33	2.75	10		
	AM.II.F.K7	Servicing, function, and operation of accumulators.	2	F	K	7		Part 1 - F.1.3.4, F.1.3.4.1, F.1.3.4.2, F.1.3.4.3, F.1.3.4.4		2	11		
	AM.II.F.S7	Service a hydraulic system accumulator.	2	F	S	7		Part 1 - F.1.3.4.4	AF34	0.5	12		
	AM.II.F.S9	Remove, install, and perform an operational check of a hydraulic pump.	2	F	S	9		Part 1 - F.1.3.5.3.2	AF34	2.75	13		
	AM.II.F.K10	Pressure regulators, restrictors, and valves.	2	F	K	10		Part 2 - F.1.3.6, F.1.3.6.1, F.1.3.6.1.1, F.1.3.6.1.2, F.1.3.6.1.3, F.1.3.6.1.4, F.1.3.6.1.5, F.1.3.6.1.6, F.1.3.6.2, F.1.3.6.2.1, F.1.3.6.2.2, F.1.3.6.2.3, F.1.3.6.2.4, F.1.3.6.2.5, F.1.3.6.2.6, F.1.3.6.2.7, F.1.3.6.2.8		1	14		
	AM.II.F.S12	Remove and install a system pressure relief valve.	2	F	S	12		Part 2 - F.1.3.6.1.1	*****	1.5	15		
	AM.II.F.S5	Check a pressure regulator and adjust as necessary.	2	F	S	5		Part 2 - F.1.3.6.1.2, F.1.9.11	AF34	0.75	16		
	AM.II.F.S4	Remove and install a selector valve.	2	F	S	4		Part 2 - F.1.3.6.2.5	*****	2.75	17		
	AM.II.F.S2	Identify different packing seals.	2	F	S	2		Part 2 - F.1.3.8, F.1.3.8.1, F.1.3.8.2, F.1.3.8.3, F.1.3.8.4, F.1.3.8.5	AF33	0.5	18		
	AM.II.F.K8	Types of hydraulic/pneumatic seals and/or fluid/seal compatibility.	2	F	K	8		Part 2 - F.1.3.8, F.1.3.8.1, F.1.3.8.2, F.1.3.8.3, F.1.3.8.4, F.1.3.8.5, F.1.3.8.6		1.5	19		
	AM.II.F.S16	Locate installation procedures for a seal, backup ring, or gasket.	2	F	S	16		Part 2 - F.1.3.8, F.1.3.8.1, F.1.3.8.2, F.1.3.8.3, F.1.3.8.4, F.1.3.8.5, F.1.3.8.7	AF34	1	20		
	AM.II.F.R5	Incompatibility between hydraulic seals and hydraulic fluids.	2	F	R	5		Part 2 - F.1.3.8, F.1.3.8.3.1, F.1.3.8.6		0.25	21		
	AM.II.F.S3	Install seals and backup rings in a hydraulic component.	2	F	S	3		Part 2 - F.1.3.8.7, F.1.3.8.4	AF34	1.75	22		
	AM.II.F.K3	Hydraulic system servicing requirements.	2	F	K	3		Part 2 - F.1.9, F.1.9.1		1	23		
	AM.II.F.K4	Hydraulic system inspection, check, servicing, and troubleshooting.	2	F	K	4		Part 2 - F.1.9, F.1.9.1, F.1.9.2, F.1.9.3, F.1.9.4, F.1.9.5, F.1.9.6, F.1.9.7, F.1.9.7.1, F.1.9.7.2, F.1.9.8, F.1.9.9, F.1.9.10, F.1.9.11		1	24		
	AM.II.F.S13	Inspect a hydraulic or pneumatic system for leaks.	2	F	S	13		Part 2 - F.1.9.5, F.1.9.11 Part 3 - F.2.4.4.2	AF33	2.5	25		
	AM.II.F.S14	Troubleshoot a hydraulic or pneumatic system for leaks.	2	F	S	14		Part 2 - F.1.9.5, F.1.9.11 Part 3 - F.2.4.4.2	AF34	2	26		
	AM.II.F.S11	Purge air from a hydraulic system.	2	F	S	11		Part 2 - F.1.9.7, F.1.9.7.1	AF33	0.75	27		
	AM.II.F.K5	Pneumatic system types and components.	2	F	K	5		Part 3 - F.2.1,F.2.2.1, F.2.2.1.1, F.2.2.1.2, F.2.2.1.3, F.2.2.1.4, F.2.2.1.5, F.2.2.1.6, F.2.2.1.7, F.2.2.1.8, F.2.2.1.9, F.2.2.1.10, F.2.2.1.11, F.2.2.1.12, F.2.2.1.13, F.2.2.1.14		4	28		
	AM.II.F.S10	Locate procedures for checking pneumatic/bleed air overheat warning systems.	2	F	S	10		Part 3 - F.2.4.4.2	****	0.75	29		
	AM.II.F.K6	Pneumatic system servicing requirements.	2	F	K	6		Part 3 - F.2.6, F.2.6.1		0.75	30		
	AM.II.F.R2	High pressure gasses and fluids.	2	F	R	2		Part 3 - F.2.6.1, F.2.6.2 Part 2 - F.1.9.12		0.25	31		
	AM.II.F.K9	Hoses lines and fittings.	2	F	K	9		Part 3 - F.3, F.3.1, F.3.1.1, F.3.1.2, F.3.2, F.3.2.1, F.3.2.2		2.75	32		
ENVIRONMENTAL SYSTEMS	AM.II.G.K3	Aircraft instrument cooling.	2	G	K	3		Part 1 - G.2.1		1.5	1		
	AM.II.G.K4	Exhaust heat exchanger and system component(s) function, operation, and inspection procedures.	2	G	K	4		Part 1 - G.2.1.1		2	2		
	AM.II.G.S13	Inspect a cabin heater system equipped with an exhaust heat exchanger for cracks.	2	G	S	13		Part 1 - G.2.1.1		3	3		
	AM.II.G.K5	Combustion heater and system component(s) function, operation, and inspection procedures.	2	G	K	5		Part 1 - G.2.1.2		1.5	4		
	AM.II.G.R6	Maintenance of combustion heaters.	2	G	R	6		Part 1 - G.2.1.2		0.25	5		
	AM.II.G.S8	Locate the procedures to troubleshoot a combustion heater.	2	G	S	8		Part 1 - G.2.1.2	AF37	0.25	6		
	AM.II.G.S10	Inspect a combustion heater fuel system for leaks.	2	G	S	10		Part 1 - G.2.1.2	AF37	2.5	7		
	AM.II.G.K2	Bleed air heating.	2	G	K	2		Part 1 - G.2.2.1, G.2.2.1.1		1	8		
	AM.II.G.K6	Vapor-cycle system and system component(s) operation, servicing, and inspection procedures.	2	G	K	6		Part 1 - G.2.2.2.1		1.5	9		
	AM.II.G.R2	Recovery of vapor-cycle refrigerant.	2	G	R	2		Part 1 - G.2.2.2.1		0.25	10		
	AM.II.G.R5	Manufacturer's recommended servicing procedures, including refrigerant types.	2	G	R	5		Part 1 - G.2.2.2.1		0.25	11		
	AM.II.G.S9	Locate the procedures for servicing a refrigerant (vapor-cycle) system.	2	G	S	9		Part 1 - G.2.2.2.1	AF38	0.25	12		
	AM.II.G.K7	Air-cycle system and system component(s) operation and inspection procedures.	2	G	K	7		Part 1 - G.2.2.2.2,G.2.2.4, G.2.2.6, G.2.2.7, G.2.2.8		0.75	13		
	AM.II.G.S11	Locate the troubleshooting procedures for an air-cycle system.	2	G	S	11		Part 1 - G.2.2.4, G.3.4.2.2, G.3.5		0.25	14		
	AM.II.G.S12	Troubleshoot an air-cycle air conditioning system.	2	G	S	12		Part 1 - G.2.2.4, G.3.4.2.2, G.3.5		1.55	15		
	AM.II.G.K1	Pressurization systems.	2	G	K	1		Part 1 - G.3		1.75	16		
	AM.II.G.K8	Cabin pressurization and system component(s) operation and inspection procedures.	2	G	K	8		Part 1 - G.3		1	17		
	AM.II.G.S14	Clean and inspect an outflow valve for a pressurization system.	2	G	S	14		Part 1 - G.3.3.2.2	AF44	0.75	18		
	AM.II.G.S15	Locate troubleshooting procedures for a pressurization system.	2	G	S	15		Part 1 - G.3.4	AF44	0.25	19		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
	AM.II.G.K9	Types of oxygen systems and oxygen system component(s) operation (e.g., chemical generator, pressure cylinder).	2	G	K	9		Part 1 - G.4, G.4.1, G.4.1.2, G.4.2, G.4.2.1, G.4.2.2, G.4.2.3, G.4.2.4, G.4.3		1.75	20		
	AM.II.G.R4	Storage, handling, and use of compressed gas cylinder and high-pressure systems.	2	G	R	4		Part 1 - G.4.2, G.4.8.1		0.25	21		
	AM.II.G.S1	Inspect an oxygen system.	2	G	S	1		Part 1 - G.4.4	AF35	2.5	22		
	AM.II.G.S4	Clean and inspect a pilot emergency oxygen mask and supply hoses.	2	G	S	4		Part 1 - G.4.4	AF35	0.75	23		
	AM.II.G.K10	Oxygen system maintenance and inspection procedures.	2	G	K	10		Part 1 - G.4.4, G.4.8		1	24		
	AM.II.G.S5	Inspect an oxygen system pressure regulator.	2	G	S	5		Part 1 - G.4.7, G.4.7.1	AF35	1	25		
	AM.II.G.R1	Oxygen system maintenance.	2	G	R	1		Part 1 - G.4.8		0.25	26		
	AM.II.G.S3	Service an oxygen system.	2	G	S	3		Part 1 - G.4.8, G.4.8.1, G.4.8.2, G.4.8.3, G.4.8.4, G.4.8.5, G.4.8.6, G.4.8.7, G.4.8.8	AF35	0.75	27		
	AM.II.G.S6	Inspect an oxygen system cylinder for serviceability.	2	G	S	6		Part 1 - G.4.8.2, G.4.8.3, G.4.8.4, G.4.8.5, G.4.8.6	AF35	0.25	28		
	AM.II.G.S2	Purge an oxygen system prior to servicing.	2	G	S	2		Part 1 - G.4.8.6	AF35	1.5	29		
	AM.II.G.R3	Handling or performing maintenance on, chemical oxygen generating systems.	2	G	R	3		Part 1 - G.4.8.9		0.25	30		
	AM.II.G.S7	Inspect a chemical oxygen generator for serviceability and safe handling.	2	G	S	7		Part 1 - G.4.8.9		0.25	31		
AIRCRAFT INSTRUMENTS	AM.II.H.K1	Acnnunciator indicating systems and the meaning of warning, caution, and advisory lights.	2	H	K	1		Part 1 - H.1.1		0.75	1		
	AM.II.H.K14	Electrostatic sensitive devices.	2	H	K	14		Part 1 - H.1.1		0.25	2		
	AM.II.H.K22	Takeoff and landing gear configuration warning systems.	2	H	K	22		Part 1 - H.1.1		0.75	3		
	AM.II.H.R2	Actions in response to a reported intermittent warning or caution annunciator light illumination.	2	H	R	2		Part 1 - H.1.1		0.25	4		
	AM.II.H.R3	Performing maintenance on equipment identified as electrostatic sensitive.	2	H	R	3		Part 1 - H.1.1		0.25	5		
	AM.II.H.K23	Aircraft bonding and protection.	2	H	K	23		Part 1 - H.1.2		0.5	6		
	AM.II.H.K24	Instrument or instrument panel removal and installation.	2	H	K	24		Part 1 - H.1.2		0.5	7		
	AM.II.H.S2	Remove and install an instrument.	2	H	S	2		Part 1 - H.1.2	AF47	0.75	8		
	AM.II.H.K12	Instrument range markings.	2	H	K	12		Part 1 - H.1.3		0.5	9		
	AM.II.H.S3	Install range marks on an instrument glass.	2	H	S	3		Part 1 - H.1.3	AF47	0.5	10		
	AM.II.H.S5	Check for proper range markings on an instrument.	2	H	S	5		Part 1 - H.1.3	AF47	0.5	11		
	AM.II.H.K4	Pressure indicating instruments.	2	H	K	4		Part 1 - H.3.1		0.75	12		
	AM.II.H.S4	Determine barometric pressure using an altimeter.	2	H	S	4		Part 1 - H.3.2.3	AF49	0.25	13		
	AM.II.H.K20	Instrument limitations, conditions, and characteristics.	2	H	K	20		Part 1 - H.3.2.5		0.25	14		
	AM.II.H.S8	Select proper altimeter for installation on a given aircraft.	2	H	S	8		Part 1 - H.3.2.6	AF52	0.75	15		
	AM.II.H.K10	Pitot-static system.	2	H	K	10		Part 1 - H.3.6, H.3.6.1, H.3.6.2, H.3.6.3, H.3.6.4, H.3.7		2.5	16		
	AM.II.H.S12	Inspect an aircraft's alternate air (static) source.	2	H	S	12		Part 1 - H.3.8	AF46	0.25	17		
	AM.II.H.K19	14 CFR parts 43 and/or 91 requirements for static system leak checks.	2	H	K	19		Part 1 - H.3.8.1		0.5	18		
	AM.II.H.R5	Performing pitot/static systems test.	2	H	R	5		Part 1 - H.3.8.1, H.3.8.2		0.25	19		
	AM.II.H.S1	Perform a static system leak test.	2	H	S	1		Part 1 - H.3.8.2.3	AF46	1.5	20		
	AM.II.H.R1	Use of pressurized air and water during maintenance or cleaning of aircraft instrument systems.	2	H	R	1		Part 1 - H.3.8.3		0.25	21		
	AM.II.H.K21	Angle of attack and stall warning systems.	2	H	K	21		Part 2 - H.7		0.75	22		
	AM.II.H.S13	Locate and explain the adjustment procedures for a stall warning system.	2	H	S	13		Part 2 - H.7.1	AF57	0.5	23		
	AM.II.H.K15	Built-in test equipment.	2	H	K	15		Part 2 -H.7.1 Part 5 - H.10.2.2, H.11.1, H.11.6 Part 6 - H.15.1.9, H.15.4.6		1	24		
	AM.II.H.K7	Gyroscopic instruments.	2	H	K	7		Part 3 - H.8		1	25		
	AM.II.H.K9	Instrument vacuum and pneumatic systems.	2	H	K	9		Part 3 - H.8.20		1	26		
	AM.II.H.S10	Inspect a vacuum system filter for serviceability.	2	H	S	10		Part 3 - H.8.20.3	AF47	0.25	27		
	AM.II.H.S11	Adjust gyro/instrument air pressure/vacuum.	2	H	S	11		Part 3 - H.8.20.3	AF55	0.5	28		
	AM.II.H.R4	Handling of mechanical gyros or instruments containing mechanical gyros.	2	H	R	4		Part 3 - H.8.5.2		0.252	29		
	AM.II.H.S7	Locate the procedures for troubleshooting a vacuum-operated instrument system.	2	H	S	7		Part 3 - H.8.7.3	AF51	0.25	30		
	AM.II.H.K3	Magnetic compass swinging procedures.	2	H	K	3		Part 4 - H.9.10		0.5	31		
	AM.II.H.K2	Magnetic compass inspection and operation.	2	H	K	2		Part 4 - H.9.3, H.9.4, H.9.5, H.9.6, H.9.7, H.9.8		0.5	32		
	AM.II.H.K8	Direction indicating instruments.	2	H	K	8		Part 4 - H.9.3, H.9.4, H.9.5, H.9.6, H.9.7, H.9.8		0.5	33		
	AM.II.H.S6	Inspect a magnetic compass.	2	H	S	6		Part 4 - H.9.3.2	AF47	0.25	34		
	AM.II.H.K17	Engine indication and crew alerting system.	2	H	K	17		Part 5 - H.11.4, H.11.6 Part 6 - H.15.1		2	35		
	AM.II.H.K11	Fuel quantity indicating systems.	2	H	K	11		Part 6 - H.13		1	36		
	AM.II.H.S14	Inspect outside air temperature gauge for condition and operation.	2	H	S	14		Part 6 - H.14.1	AF47	0.25	37		
	AM.II.H.K5	Temperature indicating instruments.	2	H	K	5		Part 6 - H.14.1, H.14.2, H.14.3, H.14.4, H.14.5		0.254	38		
	AM.II.H.S9	Identify exhaust gas temperature system components.	2	H	S	9		Part 6 - H.14.5	AF53	0.25	39		
	AM.II.H.K13	Electronic displays.	2	H	K	13		Part 6 - H.15		1	40		
	AM.II.H.K16	Electronic flight instrument system.	2	H	K	16		Part 6 - H.15		1	41		
	AM.II.H.K6	Position indication sensors and instruments.	2	H	K	6		Part 6 - H.15.3		1	42		
	AM.II.H.K18	Heads-up displays (HUDs).	2	H	K	18		Part 6 - H.15.5		1	43		
	AM.II.I.K2	Radio components.	2	I	K	2		Part 1 - I.1.1		1	1		
	AM.II.I.K1	Radio operating principles.	2	I	K	1		Part 2 - I.2		1	2		
	AM.II.I.K3	Antenna, static discharge wicks, and avionics identification, inspection, and mounting requirements.	2	I	K	3		Part 2 - I.2.9, I.2.15, I.2.16, Part 3 - I.4.1		1	3		
	AM.II.I.R4	Mounting antennas.	2	I	R	4		Part 2 - I.2.9.14		0.25	4		
	AM.II.I.S4	Locate and identify navigation and communication antennas.	2	I	S	4		Part 2 - I.2.9.15	AF64	0.25	5		
	AM.II.I.S13	Locate and explain the installation procedures for antennas including mounting and coaxial connections.	2	I	S	13		Part 2 - I.2.9.15	p AF60	0.25	6		
	AM.II.I.R2	Performing maintenance on high power/high frequency systems (e.g., weather radar and SATCOM).	2	I	R	2		Part 2 - I.2.9.17		0.25	7		
	AM.II.I.R3	Wire harness routing.	2	I	R	3		Part 2 - I.2.9.18		0.25	8		
	AM.II.I.R6	Working around live electrical systems.	2	I	R	6		Part 2 - I.2.9.18		0.25	9		
	AM.II.I.S6	Inspect a coaxial cable installation for security.	2	I	S	6		Part 2 - I.2.9.19	AF64	0.75	10		

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		AM.II.I.K5	Very High Frequency (VHF), High Frequency (HF), and SATCOM systems.	2	I	K	5		Part 3 - I.11.1, I.11.2, Part 5 - I.23.2		0.75	11		

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COMMUNICATION & NAVIGATION	AM.II.I.S5	Check VHF communications for operation.	2	I	S	5		Part 3 - I.11.2.3	AF64	0.25	12		
	AM.II.I.K4	Interphone and intercom systems.	2	I	K	4		Part 3 - I.12		1	13		
	AM.II.I.R5	Electro-static discharge.	2	I	R	5		Part 3 - I.4		0.25	14		
	AM.II.I.S11	Inspect static discharge wicks for security and resistance.	2	I	S	11		Part 3 - I.4.2	AF64	0.75	15		
	AM.II.I.K8	Automatic Direction Finder (ADF).	2	I	K	8		Part 4 - I.14		0.25	16		
	AM.II.I.K9	VHF omnidirectional radio range (VOR) theory, components, and operation.	2	I	K	9		Part 4 - I.15		0.75	17		
	AM.II.I.K11	Instrument Landing System (ILS) theory, components, and operation.	2	I	K	11		Part 4 - I.16		0.75	18		
	AM.II.I.K6	Aircraft Communication Addressing and Reporting System (ACARS) theory, components, and operation.	2	I	K	6		Part 5 - I.20		0.75	19		
	AM.II.I.K12	Global Positioning System (GPS) theory, components, and operation.	2	I	K	12		Part 5 - I.28.1		1.5	20		
	AM.II.I.K19	Radio altimeter (RA) theory, components, and operation.	2	I	K	19		Part 6 - I.30.10		0.75	21		
	AM.II.I.K15	Ground Proximity Warning Systems (GPWS) theory, components, and operation.	2	I	K	15		Part 6 - I.30.12		0.75	22		
	AM.II.I.K14	Weather radar.	2	I	K	14		Part 6 - I.30.9		0.75	23		
	AM.II.I.K21	Transponder/encoder system.	2	I	K	21		Part 7 - I.33		1.5	24		
	AM.II.I.K20	Automatic Dependent Surveillance Broadcast (ADS-B) theory, components, and operation.	2	I	K	20		Part 7 - I.34		1.5	25		
	AM.II.I.K13	Traffic Collision Avoidance System (TCAS), theory, components, and operation.	2	I	K	13		Part 7 - I.35		1.5	26		
	AM.II.I.K10	Distance Measuring Equipment (DME) theory, components, and operation.	2	I	K	10		Part 7 - I.36		0.25	27		
	AM.II.I.S9	Inspect electronic equipment mounting base for security and condition.	2	I	S	9		Part 7 - I.39	AF64	0.75	28		
	AM.II.I.S10	Inspect electronic equipment shock mount bonding jumpers for resistance.	2	I	S	10		Part 7 - I.39	AF64	1.75	29		
	AM.II.I.S12	Inspect a radio installation for security.	2	I	S	12		Part 7 - I.39	AF64	0.25	30		
	AM.II.I.S1	Make a list of required placards for communication and navigation avionic equipment.	2	I	S	1		Part 7 - I.39.1	P AF64	0.75	31		
	AM.II.I.K16	Autopilot theory, components, and operation.	2	I	K	16		Part 7 - I.40.1		2.5	32		
	AM.II.I.S3	List autopilot major components.	2	I	S	3		Part 7 - I.40.1	AF64	0.5	33		
	AM.II.I.S2	Locate and explain autopilot inspection procedures.	2	I	S	2		Part 7 - I.40.1.2, I.40.1.2.1	P AF60	0.5	34		
	AM.II.I.K17	Auto-throttle theory, components, and operation.	2	I	K	17		Part 7 - I.40.2		0.5	35		
	AM.II.I.K18	Stability augmentation systems (SAS) (Rotorcraft).	2	I	K	18		Part 7 - I.40.4		0.5	36		
	AM.II.I.K7	Emergency Locator Transmitter (ELT).	2	I	K	7		Part 7 - I.41		1.5	37		
	AM.II.I.R1	ELT testing procedures.	2	I	R	1		Part 7 - I.41.1		0.25	38		
	AM.II.I.S7	Check an emergency locator transmitter for operation.	2	I	S	7		Part 7 - I.41.1	AF64	0.25	39		
	AM.II.I.S8	Inspect ELT batteries for expiration date and locate proper testing procedures.	2	I	S	8		Part 7 - I.41.1	AF64	0.25	40		
AIRCRAFT FUEL SYSTEMS	AM.II.J.R3	Fuel spills.	2	J	R	3		Part 1 - J.10, J.10.1		0.25	1		
	AM.II.J.K9	Fuel quantity indication.	2	J	K	9		Part 1 - J.13, J.13.1, J.13.1.1, J.13.1.2, J.13.1.3, J.13.1.4, J.13.1.5, J.13.1.6		1	2		
	AM.II.J.S18	Troubleshoot fuel quantity indicating system.	2	J	S	18		Part 1 - J.13.1.2.1	AF67	1.75	3		
	AM.II.J.S17	Remove and/or install a fuel quantity transmitter.	2	J	S	17		Part 1 - J.13.1.2.2	AF67	2	4		
	AM.II.J.S15	Troubleshoot fuel pressure warning system.	2	J	S	15		Part 1 - J.13.3.1	AF70	2	5		
	AM.II.J.S16	Locate troubleshooting procedures for fuel temperature systems.	2	J	S	16		Part 1 - J.13.4.1	AF66	0.25	6		
	AM.II.J.K7	Characteristics of fuel types.	2	J	K	7		Part 1 - J.2.1		1	7		
	AM.II.J.R2	Fuel system contamination.	2	J	R	2		Part 1 - J.2.3, J.2.4,		0.25	8		
	AM.II.J.K4	Fuel flow.	2	J	K	4		Part 1 - J.3		1	9		
	AM.II.J.S10	Locate fuel system operating instructions.	2	J	S	10		Part 1 - J.3.1	AF66	0.25	10		
	AM.II.J.K6	Fuel jettisoning/dump systems.	2	J	K	6		Part 1 - J.3.1 (D), J.11, J.11.1, J.11.2		1	11		
	AM.II.J.S11	Locate fuel system inspection procedures.	2	J	S	11		Part 1 - J.3.3	AF65	0.25	12		
	AM.II.J.S9	Inspect a fuel quantity indicating system.	2	J	S	9		Part 1 - J.3.3, J.13.1.2.1	AF67	0.75	13		
	AM.II.J.K8	Fuel system maintenance and inspection.	2	J	K	8		Part 1 - J.3.3, J.4.4, J.4.5		1	14		
	AM.II.J.R1	Fuel system maintenance.	2	J	R	1		Part 1 - J.3.3, J.4.4, J.4.5		0.25	15		
	AM.II.J.S1	Inspect, check, troubleshoot, or repair a fuel system.	2	J	S	1		Part 1 - J.3.3, J.4.4, J.4.5	AF65/AF67	3	16		
	AM.II.J.S3	Troubleshoot and repair aircraft fuel system.	2	J	S	3		Part 1 - J.3.3, J.4.5	AF67	2	17		
	AM.II.J.K3	Aircraft fuel tanks/cells.	2	J	K	3		Part 1 - J.4, J.4.1, J.4.2, J.4.3		2	18		
	AM.II.J.S2	Inspect a metal, bladder, or integral fuel tank.	2	J	S	2		Part 1 - J.4.1, J.4.2, J.4.3	AF67	2	19		
	AM.II.J.R4	Fuel system maintenance requiring fuel tank entry.	2	J	R	4		Part 1 - J.4.6		0.25	20		
	AM.II.J.K1	Fuel system types.	2	J	K	1		Part 1 - J.5, J.5.1, J.5.2		0.75	21		
	AM.II.J.K2	Fuel system components, including filters and selector valves.	2	J	K	2		Part 1 - J.5.1, J.5.5, J.5.5.1, J.5.5.2, J.5.5.3, J.5.5.4, J.5.6, J.5.7, J.5.8		1.5	22		
	AM.II.J.S12	Locate fuel system crossfeed procedures.	2	J	S	12		Part 1 - J.5.4	AF66	0.25	23		
	AM.II.J.S4	Inspect a fuel selector valve.	2	J	S	4		Part 1 - J.5.5	AF68	2.5	24		
	AM.II.J.S5	Inspect and check manually-operated fuel valves for proper operation and leaks.	2	J	S	5		Part 1 - J.5.5.2	AF68	1.25	25		
	AM.II.J.S6	Troubleshoot a fuel valve problem.	2	J	S	6		Part 1 - J.5.5.5	AF68	1.25	26		
	AM.II.J.S8	Service a fuel system strainer.	2	J	S	8		Part 1 - J.5.6	AF69	0.75	27		
	AM.II.J.K5	Fuel transfer, fueling, and defueling.	2	J	K	5		Part 1 - J.6, J.6.1, J.6.2, J.7, J.12.2.1, J.12.2.2, J.12.2.3, J.12.2.4		0.75	28		
	AM.II.J.R5	Defueling aircraft.	2	J	R	5		Part 1 - J.7, J.7.1		0.25	29		
	AM.II.J.S14	Locate fuel system defueling procedures.	2	J	S	14		Part 1 - J.7, J.7.1	AF66	0.25	30		
	AM.II.J.S13	Locate fuel system required placards.	2	J	S	13		Part 1 - J.7.1.1	AF66	1.25	31		
	AM.II.J.S7	Drain fuel system sump(s).	2	J	S	7		Part 1 - J.8	AF67	1.25	32		
	AM.II.K.R3	Maintenance on energized circuits/systems.	2	K	R	3		Part 1 - K.2		0.25	1		
	AM.II.K.R4	Maintenance in areas containing aircraft wiring.	2	K	R	4		Part 1 - K.2		0.25	2		
	AM.II.K.K13	Electrical system troubleshooting.	2	K	K	13		Part 1 - K.4		3.5	3		
	AM.II.K.S6	Troubleshoot an airframe electrical circuit.	2	K	S	6		Part 1 - K.4	AF70	2.5	4		
	AM.II.K.K10	Aircraft lightning protection.	2	K	K	10		Part 1 - K.4.2		1.5	5		
	AM.II.K.K11	Instrument or instrument panel removal and installation.	2	K	K	11		Part 1 - K.4.2		1	6		
	AM.II.K.S10	Install bonding jumpers.	2	K	S	10		Part 1 - K.4.2	AF71	1.75	7		

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ELECTRICAL SYSTEMS	AM.II.K.S18	Perform a continuity test to verify the condition of a conductor.	2	K	S	18		Part 1 - K.4.3	AF70	1.25	8		
	AM.II.K.K16	Electrical system measurement, adjustment, and testing.	2	K	K	16		Part 1 - K.4.5		1.75	9		
	AM.II.K.R1	Testing/troubleshooting electrical systems or components.	2	K	R	1		Part 1 - K.4.5		0.25	10		
	AM.II.K.S12	Check the resistance of an electrical system component.	2	K	S	12		Part 1 - K.4.6	AF70	0.75	11		
	AM.II.K.S19	Perform a test on a conductor for a short to ground.	2	K	S	19		Part 1 - K.4.6	AF70	0.75	12		
	AM.II.K.S20	Perform a test on a conductor for a short to other conductors.	2	K	S	20		Part 1 - K.4.6	AF70	1.25	13		
	AM.II.K.K14	Soldering preparation, types of solder, and flux usage.	2	K	K	14		Part 1 - K.5		2.5	14		
	AM.II.K.R8	Effects of soldering.	2	K	R	8		Part 1 - K.5		0.25	15		
	AM.II.K.R9	Soldering practices.	2	K	R	9		Part 1 - K.5		0.25	16		
	AM.II.K.S5	Solder aircraft wiring.	2	K	S	5		Part 1 - K.5.5	AF71	2.5	17		
	AM.II.K.S15	Inspect components in an electrical system.	2	K	S	15		Part 1 - K.6	AF70	2.5	18		
	AM.II.K.K17	Aircraft battery troubleshooting and maintenance.	2	K	K	17		Part 1 - K.6.1		1	19		
	AM.II.K.S7	Install airframe electrical wiring, switches, or protective devices.	2	K	S	7		Part 1 - K.6.9 , K.6.14	AF70	2.75	20		
	AM.II.K.K15	Aircraft electrical connectors, splices, terminals, and switches.	2	K	K	15		Part 1 - K.6.9, K.8		4	21		
	AM.II.K.K8	Derating factors in switch selection.	2	K	K	8		Part 1 - K.6.9.1		1.5	22		
	AM.II.K.K7	Aircraft wiring sizes, types, selection, installation, and circuit protection devices.	2	K	K	7		Part 1 - K.7		2	23		
	AM.II.K.K9	Aircraft wiring shielding.	2	K	K	9		Part 1 - K.7		2	24		
	AM.II.K.R5	Routing and securing wires and wire bundles.	2	K	R	5		Part 1 - K.7		0.25	25		
	AM.II.K.R6	Selecting the size of wire in an electrical circuit.	2	K	R	6		Part 1 - K.7		0.25	26		
	AM.II.K.S1	Inspect aircraft wiring to verify installation and routing.	2	K	S	1		Part 1 - K.7	AF70	2.5	27		
	AM.II.K.S8	Secure wire bundles.	2	K	S	8		Part 1 - K.7	AF70	2	28		
	AM.II.K.R7	Selection or installation of wire terminals.	2	K	R	7		Part 1 - K.8		0.25	29		
	AM.II.K.S2	Perform wire terminating and splicing.	2	K	S	2		Part 1 - K.8	AF71	1.754	30		
	AM.II.K.S3	Assemble an aircraft electrical connector.	2	K	S	3		Part 1 - K.8	AF71	2.5	31		
	AM.II.K.S4	Use a wiring circuit diagram to identify components.	2	K	S	4		Part 1 - K.9	AF70	2.5	32		
	AM.II.K.K5	Voltage regulators and overvolt and overcurrent protection.	2	K	K	5		Part 2 - K.13.11, K.13.13		3.5	33		
	AM.II.K.K1	Generators, DC generation systems, and DC power distribution systems.	2	K	K	1		Part 2 - K.13.1, K.13.2, K.13.9		4	34		
	AM.II.K.S16	Troubleshoot a DC electrical system supplied by an AC electrical system.	2	K	S	16		Part 2 - K.13.15		2.5	35		
	AM.II.K.S17	Identify components in an electrical schematic where AC is rectified to a DC voltage.	2	K	S	17		Part 2 - K.13.15	AF80	2.5	36		
	AM.II.K.S9	Determine an electrical load in a given aircraft system.	2	K	S	9		Part 2 - K.13.15.1	AF70	2.5	37		
	AM.II.K.S13	Inspect generator brush serviceability and brush spring tension.	2	K	S	13		Part 2 - K.13.3.3		2.75	38		
	AM.II.K.S11	Check output voltage of a DC generator.	2	K	S	11		Part 2 - K.13.3.5	AF70	1.75	39		
	AM.II.K.K3	Starter generators.	2	K	K	3		Part 2 - K.13.6		3.75	40		
	AM.II.K.K2	Alternators, AC generation systems, and AC power distribution systems.	2	K	K	2		Part 3 - K.14.1		3.75	41		
	AM.II.K.K4	Constant Speed Drive (CSD) and Integrated Drive Generator (IDG) systems and components.	2	K	K	4		Part 3 - K.14.7.1, K.14.8		1.5	42		
	AM.II.K.K6	Inverter systems.	2	K	K	6		Part 4 - K.15.4		1.5	43		
	AM.II.K.R2	Connecting or disconnecting external power.	2	K	R	2		Part 4 - K.15.5		0.25	44		
	AM.II.K.K12	Aircraft lighting systems.	2	K	K	12		Part 4 - K.16		1.5	45		
	AM.II.K.S14	Inspect and check anti-collision, position, and landing lights for proper operation.	2	K	S	14		Part 4 - K.16.4	AF70	1.75	46		
ICE & RAIN CONTROL SYSTEMS	AM.II.L.K7	Environmental conditions that degrade vision.	2	L	K	7		Part 1 - L.1		1	1		
	AM.II.L.S2	Inspect and operationally check deicer boot.	2	L	S	2		Part 1 - L.10.1, L.10.2	AF212	2.5	2		
	AM.II.L.S3	Clean a pneumatic deicer boot.	2	L	S	3		Part 1 - L.10.1, L.10.4	AF212	3	3		
	AM.II.L.R2	Storage and handling of deicing fluids.	2	L	R	2		Part 1 - L.16		0.25	4		
	AM.II.L.K5	Wiper blade, chemical, and pneumatic bleed air rain control systems.	2	L	K	5		Part 1 - L.17, L.17.1, L.17.2, L.17.3		2.5	5		
	AM.II.L.S7	Locate and explain the procedures for inspecting an electrically-operated windshield wiper system.	2	L	S	7		Part 1 - L.17.1	AF212	0.5	6		
	AM.II.L.S8	Locate and explain the procedures for replacing blades on a windshield wiper system.	2	L	S	8		Part 1 - L.17.1	AF3481	0.5	7		
	AM.II.L.S9	Locate and explain the procedures for inspecting a pneumatic rain removal system.	2	L	S	9		Part 1 - L.17.3	AF212	0.5	8		
	AM.II.L.R3	Selection and use of cleaning materials for heated windshields.	2	L	R	3		Part 1 - L.18.1		0.25	9		
	AM.II.L.S6	Inspect and operationally check an electrically-heated windshield.	2	L	S	6		Part 1 - L.18.1	AF212	0.75	10		
	AM.II.L.K1	Aircraft icing causes/effects.	2	L	K	1		Part 1 - L.4		1.75	11		
	AM.II.L.K2	Ice detection systems.	2	L	K	2		Part 1 - L.5		0.5	12		
	AM.II.L.K3	Aircraft and powerplant anti-ice systems and components.	2	L	K	3		Part 1 - L.7, L.7.1, L.7.1.1, L.7.1.1.1, L.7.1.2, L.7.1.2.1, L.7.2, L.7.3		3	13		
	AM.II.L.S5	Inspect thermal anti-ice systems.	2	L	S	5		Part 1 - L.7, L.7.1.1	AF212	2	14		
	AM.II.L.R1	System testing or maintenance.	2	L	R	1		Part 1 - L.7.2 , L.7.2.1		0.25	15		
	AM.II.L.S1	Inspect and operationally check pitot-static anti-ice system.	2	L	S	1		Part 1 - L.7.2.1	AF212	0.5	16		
	AM.II.L.S4	Troubleshoot an electrically-heated pitot system.	2	L	S	4		Part 1 - L.7.2.1	AF3481	2.5	17		
	AM.II.L.K6	Anti-icing and de-icing system maintenance.	2	L	K	6		Part 1 - L.7.3.1, L.10		3	18		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
	AM.II.L.K4	De-ice systems and components.	2	L	K	4		Part 1 - L.8, L.8.2, L.8.3, L.8.4, L.8.4.1, L.8.4.2, L.8.4.3, L.8.4.4, L.8.4.5, L.8.4.6, L.8.4.7, L.8.4.8, L.8.4.9, L.8.4.10 , L.11, l.12		4	19		
FIRE PROTECTION	AM.II.M.R3	Fire extinguishing agents.	2	M	R	3		Part 1 - M.11.2		0.5	1		
	AM.II.M.K1	Types of fires and aircraft fire zones.	2	M	K	1		Part 1 - M.2.1, M.3		2.5	2		
	AM.II.M.K2	Overheat and fire detection and warning systems.	2	M	K	2		Part 1 - M.5, M.5.1, M.5.2		2.5	3		
	AM.II.M.K3	Overheat and fire detection system maintenance and inspection.	2	M	K	3		Part 1 - M.5.3		2.5	4		
	AM.II.M.S7	Locate and explain the procedures for inspecting an overheat detection system.	2	M	S	7		Part 1 - M.5.3	AF87	0.25	5		
	AM.II.M.S12	Inspect a continuous-loop type fire detection system.	2	M	S	12		Part 1 - M.5.3	AF86	0.75	6		
	AM.II.M.S3	Identify maintenance procedures for fire detection and/or extinguishing system(s) and system component(s).	2	M	S	3		Part 1 - M.5.3, M.7.3	AF85/86	0.55	7		
	AM.II.M.S9	Inspect fire detection/protection system.	2	M	S	9		Part 1 - M.5.3.1	AF87	1.5	8		
	AM.II.M.S1	Troubleshoot an aircraft fire detection or extinguishing system.	2	M	S	1		Part 1 - M.5.3.2	AF85	2	9		
	AM.II.M.K4	Smoke and carbon monoxide detection systems.	2	M	K	4		Part 1 - M.6		1	10		
	AM.II.M.R2	Use of PPEs when working on or testing fire extinguishing systems.	2	M	R	2		Part 1 - M.6.6		0.25	11		
	AM.II.M.S4	Inspect a smoke and toxic gas detection system.	2	M	S	4		Part 1 - M.6.6	PENDING AIR	1	12		
	AM.II.M.S5	Inspect a carbon monoxide detector.	2	M	S	5		Part 1 - M.6.6	AF88	1	13		
	AM.II.M.S6	Locate and explain the procedures for checking a smoke detection system.	2	M	S	6		Part 1 - M.6.6	P*AF89	0.25	14		
	AM.II.M.K6	Types of fire extinguishing systems.	2	M	K	6		Part 1 - M.7		2	15		
	AM.II.M.K5	Fire extinguishing agents.	2	M	K	5		Part 1 - M.7.2, M.11.2		2	16		
	AM.II.M.R1	Maintenance on circuits associated with fire bottle squibs.	2	M	R	1		Part 1 - M.7.3.2		0.25	17		
	AM.II.M.K7	Fire extinguishing system maintenance and inspection requirements.	2	M	K	7		Part 1 - M.7.4		1	18		
	AM.II.M.S8	Inspect fire protection system cylinders and check for hydrostatic test date.	2	M	S	8		Part 1 - M.7.4	AF86	0.25	19		
	AM.II.M.S2	Determine proper container pressure for an installed fire extinguisher system.	2	M	S	2		Part 1 - M.7.4.1	AF86	0.75	20		
	AM.II.M.S11	Inspect fire extinguishing agent bottle discharge cartridge.	2	M	S	11		Part 1 - M.7.4.2	AF90	1.5	21		
	AM.II.M.S10	Perform operational check of fire detection/protection system.	2	M	S	10		Part 1 - M.10	AF85	1.5	22		
ROTORCRAFT FUNDAMENTALS	AM.II.N.K1	Rotorcraft aerodynamics.	2	N	K	1		Part 1 - N.1		3.5	1		
	AM.II.N.K2	Flight controls.	2	N	K	2		Part 1 - N.2		2.5	2		
	AM.II.N.K3	Transmissions.	2	N	K	3		Part 1 - N.5		2	3		
	AM.II.N.K5	Design, type, and operation of rotor systems.	2	N	K	5		Part 1 - N.6		2	4		
	AM.II.N.S1	Locate components of a helicopter rotor system.	2	N	S	1		Part 1 - N.6.1.2, N.6.1.3, N.6.1.4	AF91	2.5	5		
	AM.II.N.K8	Rotor vibrations, track, and balance.	2	N	K	8		Part 2 - N.11		2.5	6		
	AM.II.N.K9	Drive system vibrations and inspection.	2	N	K	9		Part 2 - N.11, N.15		2.5	7		
	AM.II.N.S2	Locate helicopter rotor blade track and balance procedures.	2	N	S	2		Part 2 - N.11.2.2	AF92	1.5	8		
	AM.II.N.S4	Locate and explain procedures to track and balance a rotor system.	2	N	S	4		Part 2 - N.11.2.2, N.11.2.3, N.11.3	AF92	1.5	9		
	AM.II.N.K6	Helicopter skid shoe and tube inspection.	2	N	K	6		Part 2 - N.12		1.5	10		
	AM.II.N.K4	Rigging requirements for rotary wing aircraft.	2	N	K	4		Part 2 - N.13		1.5	11		
	AM.II.N.S3	Locate and explain procedures needed to rig helicopter controls.	2	N	S	3		Part 2 - N.13, N.13.1, N.13.2, N.13.3	AF93	1.5	12		
	AM.II.N.R3	Ground operations and functional tests.	2	N	R	3		Part 2 - N.14, N.14.4		0.25	13		
	AM.II.N.R1	Working around helicopter blades during ground operations.	2	N	R	1		Part 2 - N.14.4		0.25	14		
	AM.II.N.R2	Ground-handling procedures.	2	N	R	2		Part 2 - N.14.4		0.25	15		
	AM.II.N.R4	Maintenance and inspection of rotorcraft systems and components.	2	N	R	4		Part 2 - N.15		0.25	16		
	AM.II.N.K7	Rotor blade functions and construction.	2	N	K	7		Part 2 - N.9, N.10		3.5	17		
WATER & WASTE SYSTEMS	AM.II.O.K1	Portable water system components and operation.	2	O	K	1		Part 1 - O.2		2.5	1		
	AM.II.O.K3	Inspection and servicing requirements for water and waste systems.	2	O	K	3		Part 1 - O.2.1, O.2.7 & O.3.1.1		.1.25	2		
	AM.II.O.S2	Locate and explain the procedures for servicing a potable water system.	2	O	S	2		Part 1 - O.2.7	AF94 PENDIN	0.25	3		
	AM.II.O.K2	Lavatory waste system components and operation.	2	O	K	2		Part 1 - O.3		0.75	4		
	AM.II.O.R1	Servicing lavatory waste systems, including use of safety equipment.	2	O	R	1		Part 1 - O.3.2.2.1 & O.3.2.3.2		0.25	5		
	AM.II.O.S1	Locate and explain the procedures for servicing a lavatory waste system.	2	O	S	1		Part 1 - O.3.2.2.1 & O.3.2.3.2	AF94 PENDIN	0.25	6		

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POWERPLANT

Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
RECIPROCATING ENGINES	AM.III.A.K3	Internal combustion engine operating principles/theory of operation.	3	A	K	3		Part 1 - A.1		5	1		
	AM.III.A.K1	Types of reciprocating engines.	3	A	K	1		Part 1 - A.3		3	2		
	AM.III.A.K4	Horizontally-opposed engine construction and internal components.	3	A	K	4		Part 1 - A.3.1		5	3		
	AM.III.A.K5	Radial engine construction and internal components.	3	A	K	5		Part 1 - A.3.2		2	4		
	AM.III.A.K2	Reciprocating engine operating principles/theory of operation.	3	A	K	2		Part 1 - A.4		2	5		
	AM.III.A.S3	Install piston and knuckle/wrist pin(s).	3	A	S	3		Part 1 - A.4.1	PL1	2	6		
	AM.III.A.S4	Identify the parts of a cylinder.	3	A	S	4		Part 1 - A.4.1	PL1	1	7		
	AM.III.A.S5	Identify the parts of a crankshaft.	3	A	S	5		Part 1 - A.4.1	PL1	1	8		
	AM.III.A.S6	Identify and inspect various types of bearings.	3	A	S	6		Part 1 - A.4.1 Part 2 - A.9.4.1	PL1	1	9		
	AM.III.A.K10	Diesel engine operating principles/theory of operation.	3	A	K	10		Part 1 - A.4.2.1.2		2	10		
	AM.III.A.S8	Locate top dead-center position of number one cylinder.	3	A	S	8		Part 1 - A.4.3	PL2	2	11		
	AM.III.A.K7	Reciprocating engine performance (e.g., PLANK, SFC).	3	A	K	7		Part 1 - A.5		2	12		
	AM.III.A.K9	Reciprocating engine ground operations.	3	A	K	9		Part 1 - A.6		3	13		
	AM.III.A.R2	Preparation for and ground operation of a reciprocating engine.	3	A	R	2		Part 1 - A.6		1.2	14		
	AM.III.A.K6	Storage and preservation.	3	A	K	6		Part 2 - A.10		1	15		
	AM.III.A.S2	Operate and troubleshoot reciprocating engine.	3	A	S	2		Part 2 - A.7	PL3	3	16		
	AM.III.A.R3	Actions in the event of a reciprocating engine fire.	3	A	R	3		Part 2 - A.7.2		0.5	17		
	AM.III.A.R4	Use of other than the manufacturer's procedures during maintenance.	3	A	R	4		Part 2 - A.8		0.5	18		
	AM.III.A.K8	Reciprocating engine maintenance and inspection.	3	A	K	8		Part 2 - A.9		2	19		
	AM.III.A.R1	Maintenance that requires moving the propeller.	3	A	R	1		Part 2 - A.9	PL2	0.5	20		
	AM.III.A.S7	Inspect and rig cable and push-pull engine controls.	3	A	S	7		Part 2 - A.9.4.1	PL2	3	21		
	AM.III.A.S1	Perform a cylinder assembly inspection.	3	A	S	1		Part 2 - A.9.4.3	PL1	2	22		
	AM.III.A.S9	Install a cylinder on a horizontally-opposed engine.	3	A	S	9		Part 2 - A.9.5.1	PL1	5	23		
TURBINE ENGINES	AM.III.B.K2	Types of turbine engines.	3	B	K	2		Part 1 - B.4, B.4.1		2	1		
	AM.III.B.S4	Map airflow direction and pressure changes in turbine engines.	3	B	S	4		Part 1 - B.4.1,B.4.1.1.1	PL7	1.5	2		
	AM.III.B.R1	Operation of a turbine engine.	3	B	R	1		Part 1 - B.4.1.1		1	3		
	AM.III.B.S3	Identify components of turbine engines.	3	B	S	3		Part 1 - B.5	PL7	2	4		
	AM.III.B.K3	Turbine engine construction and internal components.	3	B	K	3		Part 1 - B.5,B.5.1, B.5.2		1	5		
	AM.III.B.S1	Identify different turbine compressors.	3	B	S	1		Part 1 - B.5.2	PL5	2	6		
	AM.III.B.S2	Identify different types of turbine engine blades.	3	B	S	2		Part 1 - B.5.5.3	PL6	1	7		
	AM.III.B.K1	Turbine engine operating principles/theory of operation.	3	B	K	1		Part 1 -B.1, B.2 , B.2.1		2	8		
	AM.III.B.K8	Bleed air systems.	3	B	K	8		Part 2 - B.10 , B.10.1		1	9		
	AM.III.B.R3	Actions in the event of a turbine engine fire.	3	B	R	3		Part 2 - B.11.3		1	10		
	AM.III.B.K4	Turbine engine performance and monitoring.	3	B	K	4		Part 2 - B.8, B.8.1, B.8.2		1	11		
	AM.III.B.S12	Identify causes for turbine engine performance loss.	3	B	S	12		Part 2 - B.8.5 , B.8.5.1, B.8.5.2	PL5	2	12		
	AM.III.B.K7	Causes for turbine engine performance loss.	3	B	K	7		Part 2 - B.8.5, B.8.5.1, B.8.5.2		2	13		
	AM.III.B.K10	Auxiliary power unit(s).	3	B	K	10		Part 2 - B.9, B.9.1, B.9.1.1,B.9.1.2,B.9.1.3,B.9.1.4, B.9.1.5		3	14		
	AM.III.B.S9	Locate the installation or removal procedures for a turbine engine.	3	B	S	9		Part 3 - B.13	PL9	2	15		
	AM.III.B.K6	Procedures required after the installation of a turbine engine.	3	B	K	6		Part 3 - B.13.6		2	16		
	AM.III.B.K11	Turbine engine adjustment and testing.	3	B	K	11		Part 3 - B.13.6.3 , B.13.6.4, B.13.6.5		2	17		
	AM.III.B.S7	Locate the procedures for the adjustment of a fuel control unit.	3	B	S	7		Part 3 - B.13.6.4.2	PL4	1	18		
	AM.III.B.S10	Locate and explain the procedure for trimming a turbine engine.	3	B	S	10		Part 3 - B.13.6.4.3	PL4	1	19		
	AM.III.B.K9	Storage and preservation.	3	B	K	9		Part 3 - B.14, B.14.1, B.14.2, B.14.3, B.14.4,B.14.4.1,B.14.4.2, B.14.4.3,B.14.5, B.14.6,B.14.7		1	20		
	AM.III.B.R2	Performing maintenance on a turbine engine.	3	B	R	2		Part 3 - B.15		2	21		
	AM.III.B.K5	Turbine engine troubleshooting, maintenance, and inspection procedures.	3	B	K	5		Part 3 - B.15,B.15.1, B.15.1.1,B.15.1.1.1 ,B.16, B.16.1		1	22		
	AM.III.B.S13	Inspect the first two stages of a turbine fan or compressor for foreign object damage.	3	B	S	13		Part 3 - B.15.1.1	PL5	2	23		
	AM.III.B.R4	Foreign object damage.	3	B	R	4		Part 3 - B.15.1.1.2		1	24		
	AM.III.B.S8	Perform turbine engine inlet guide vane and compressor blade inspection.	3	B	S	8		Part 3 - B.15.1.1.2	PL5	2	25		
	AM.III.B.S6	Inspect a combustion liner.	3	B	S	6		Part 3 - B.15.1.2	PL8	2	26		
	AM.III.B.S5	Remove and install a fuel nozzle in a turbine engine.	3	B	S	5		Part 3 - B.15.1.2.3	PL8	6	27		
	AM.III.B.S11	Identify damaged turbine engine blades.	3	B	S	11		Part 3 - B.15.2.2 , Part 2 - B.8.5	PL6	4	28		
ENGINE INSPECTIONS	AM.III.C.K1	Inspection requirements under 14 cfr PART 43 and 14 CFR Part 91.	3	C	K	1		Part 1 - C.1		2	1		
	AM.III.C.K4	Use of FAA-approved data.	3	C	K	4		Part 1 - C.1.1		2	2		
	AM.III.C.S2	Evaluate powerplant for compliance with FAA-approved or manufacturer data.	3	C	S	2		Part 1 - C.1.1, C.2	PL10	4	3		
	AM.III.C.S13	Perform a portion of a 100-hour inspection on an engine in accordance with Part 43.	3	C	S	13		Part 1 - C.1.2, C.1.3	PL2	3	4		
	AM.III.C.S5	Determine engine installation eligibility.	3	C	S	5		Part 1 - C.1.3.1	PL10	4	5		
	AM.III.C.K5	Compliance with service letters, service bulletins, or instructions for continued airworthiness, ADs, or TCDSs.	3	C	K	5		Part 1 - C.2		2	6		
	AM.III.C.S4	Inspect for compliance with applicable ADs.	3	C	S	4		Part 1 - C.2.1	PL10	4	7		
	AM.III.C.S6	Determine compliance with engine specifications, TCDS, or engine listings.	3	C	S	6		Part 1 - C.2.2	PL10	4	8		
	AM.III.C.K2	Identification of life-limited parts and their replacement interval.	3	C	K	2		Part 1 - C.2.5		2	9		
	AM.III.C.K6	Maintenance recordkeeping requirements under 14 CFR Part 43.	3	C	K	6		Part 1 - C.2.5		1	10		

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	AM.III.C.S11	Inspect engine records for time or cycles on life-limited parts.	3	C	S	11		Part 1 - C.2.5	PL10	3	11		
	AM.III.C.S3	Perform a powerplant records inspection.	3	C	S	3		Part 1 - C.2.5.1	PL10	2	12		
	AM.III.C.K3	Special inspections.	3	C	K	3		Part 1 - C.3, C.3.4		1	13		
	AM.III.C.K7	Engine component inspection, checking, and servicing.	3	C	K	7		Part 1 - C.4		1	14		
	AM.III.C.S7	Perform a portion of a required inspection on an engine.	3	C	S	7		Part 1 - C.4	PL8	2	15		
	AM.III.C.K8	Engine mounts, mounting hardware, and the inspection and checking of each.	3	C	K	8		Part 1 - C.4.11		1	16		
	AM.III.C.S14	Inspect an engine mount to determine serviceability.	3	C	S	14		Part 1 - C.4.11.3	PL11	3	17		
	AM.III.C.R1	A compression test on a reciprocating engine.	3	C	R	1		Part 1 - C.4.2	PL2	1	18		
	AM.III.C.S1	Perform a compression check on a cylinder.	3	C	S	1		Part 1 - C.4.2	PL2	3	19		
	AM.III.C.S10	Inspect an aircraft engine accessory for serviceability.	3	C	S	10		Part 1 - C.4.3	PL10	2	20		
	AM.III.C.S9	Inspect an engine for leaks after performing maintenance.	3	C	S	9		Part 1 - C.4.7	PL3	4	21		
	AM.III.C.S8	Check engine controls for proper operation and adjustment.	3	C	S	8		Part 1 - C.4.8	PL4	3	22		
	AM.III.C.R3	Maintenance on an operating turbine engine.	3	C	R	3		Part 1 - C.5		1	23		
	AM.III.C.S12	Perform an engine start and inspect engine opertional parameters.	3	C	S	12		Part 1 - C.5	PL3	5	24		
	AM.III.C.R2	Maintenance on an operating reciprocating engine.	3	C	R	2		Part 1 - C.5.1		1	25		
ENGINE INSTRUMENT SYSTEMS	AM.III.D.K8	Engine indicating and crew alerting (EICAS).	3	D	K	8		Part 1 - D.12		1	1		
	AM.III.D.K10	Electronic centralized aircraft monitor (ECAM).	3	D	K	10		Part 1 - D.13		1	2		
	AM.III.D.K5	Annunciator indicating systems (e.g., warning, caution, and advisory lights).	3	D	K	5		Part 1 - D.13.1		1	3		
	AM.III.D.K9	Digital engine control module (e.g., Full Authority Digital Engine Controls (FADEC)).	3	D	K	9		Part 1 - D.14		1	4		
	AM.III.D.S8	Perform resistance measurements of thermocouple indication system.	3	D	S	8		Part 1 - D.2.2, D.2.6	PL12	1	5		
	AM.III.D.R2	Engine instrument calibration or instrument error.	3	D	R	2		Part 1 - D.2.6		1	6		
	AM.III.D.S9	Remove, inspect, and install turbine engine exhaust gas temperature (EGT) component.	3	D	S	9		Part 1 - D.2.6	PL8	1	7		
	AM.III.D.S13	Inspect EGT probes.	3	D	S	13		Part 1 - D.2.6	PL12	1.5	8		
	AM.III.D.S18	Troubleshoot an EGT indicating system.	3	D	S	18		Part 1 - D.2.6	******	2.5	9		
	AM.III.D.R1	Maintenance damage to the instrument or indicating system.	3	D	R	1		Part 1 - D.2.6, D.4.2.1, D.4.3.1, D.4.4.1, D.5.1.6, D.5.2.5, D.6.1,D.7.4		1	10		
	AM.III.D.K3	Engine speed indicating systems.	3	D	K	3		Part 1 - D.4, D.4.1, D.4.2, D.4.3, D.4.4		1	11		
	AM.III.D.S5	Identify components of an electric tachometer system.	3	D	S	5		Part 1 - D.4.2, D.4.3	PL12	1	12		
	AM.III.D.S7	Inspect tachometer markings for accuracy.	3	D	S	7		Part 1 - D.4.2.1	PL12	2	13		
	AM.III.D.S11	Troubleshoot a tachometer system.	3	D	S	11		Part 1 - D.4.2.1	PL12	3	14		
	AM.III.D.K7	Engine pressure ratio (EPR).	3	D	K	7		Part 1 - D.5, D.5.1		1	15		
	AM.III.D.S10	Locate procedures for troubleshooting a turbine EPR system.	3	D	S	10		Part 1 - D.5.1.6	*****	1	16		
	AM.III.D.K4	Pressure (e.g., air, fuel, manifold, oil).	3	D	K	4		Part 1 - D.5.2, D.5.2.1, D.5.2.2, D.5.2.3, D.5.2.4, D.5.2.6		3	17		
	AM.III.D.K11	Engine instrument range markings and instrument conditions.	3	D	K	11		Part 1 - D.5.2.1		1	18		
	AM.III.D.S2	Troubleshoot a low fuel pressure indicating system.	3	D	S	2		Part 1 - D.5.2.1	PL12	3	19		
	AM.III.D.S14	Locate and inspect engine low fuel pressure warning system components.	3	D	S	14		Part 1 - D.5.2.1	PL12	1	20		
	AM.III.D.S17	Repair a low oil pressure warning system.	3	D	S	17		Part 1 - D.5.2.2	*****	1	21		
	AM.III.D.K2	Temperature (e.g. exhaust gas, oil, oil cylinder head, turbine inlet).	3	D	K	2		Part 1 - D.6		1	22		
	AM.III.D.S12	Replace a cylinder head temperature thermocouple.	3	D	S	12		Part 1 - D.6.1	PL9372	2	23		
	AM.III.D.S19	Inspect an oil temperature probe.	3	D	S	19		Part 1 - D.6.1	PL12	2.5	24		
	AM.III.D.S1	Troubleshoot an engine oil temperature/pressure instrument system.	3	D	S	1		Part 1 - D.6.1, D.5.2.2	PL12	3	25		
	AM.III.D.K1	Fuel flow.	3	D	K	1		Part 1 - D.7		1	26		
	AM.III.D.S6	Check fuel-flow transmitter power supply.	3	D	S	6		Part 1 - D.7.4	PL12	2	27		
	AM.III.D.S3	Remove, inspect, and/or install a fuel-flow transmitter.	3	D	S	3		Part 1 - D.7.4, D.7.5	PL12	2.5	28		
	AM.III.D.S4	Remove, inspect, and/or install fuel flow gauge.	3	D	S	4		Part 1 - D.7.5	PL12	2	29		
	AM.III.D.S15	Check aircraft engine manifold pressure gauge for proper operation.	3	D	S	15		Part 1 - D.8	PL12	1.5	30		
	AM.III.D.S16	Inspect a manifold pressure system.	3	D	S	16		Part 1 - D.8	PL12	1	31		
	AM.III.D.K6	Torquemeters.	3	D	K	6		Part 1 - D.9		1	32		
ENGINE FIRE PROTECTION SYSTEMS	AM.III.E.K1	Types of fires and engine fire zones.	3	E	K	1		Part 1 - E.1, E.2.1, E.3.1		1	1		
	AM.III.E.K2	Fire detection warning system operation.	3	E	K	2		Part 1 - E.4, E.4.1, E.4.2		1	2		
	AM.III.E.S2	Identify fire detection sensing units.	3	E	S	2		Part 1 - E.4, E.4.1, E.4.2	PL13	2	3		
	AM.III.E.S4	Inspect fire detection thermal switch or thermocouple system.	3	E	S	4		Part 1 - E.4.1.1	PL13	1	4		
	AM.III.E.S12	Inspect flame detectors for operation.	3	E	S	12		Part 1 - E.4.1.3	PL13	1	5		
	AM.III.E.S14	Identify continuous-loop fire detection system components.	3	E	S	14		Part 1 - E.4.2, E.4.2.1, E.4.2.2, E.4.2.3, E.4.2.4, E.4.2.5	PL13	1	6		
	AM.III.E.S3	Inspect fire detection continuous loop system.	3	E	S	3		Part 1 - E.4.3	PL13	1.5	7		
	AM.III.E.K3	Fire detection system maintenance and inspection requirements.	3	E	K	3		Part 1 - E.4.3, E.4.3.1		1	8		
	AM.III.E.S1	Troubleshoot and repair an engine fire detection system.	3	E	S	1		Part 1 - E.4.3.2	PL13	3	9		
	AM.III.E.S5	Locate troubleshooting procedures for a fire detection system.	3	E	S	5		Part 1 - E.4.3.2	PL13****	1	10		
	AM.III.E.K4	Fire extinguishing agents, types of systems, and operation.	3	E	K	4		Part 1 - E.5.1, E.5.1.2		1	11		
	AM.III.E.R1	Container discharge cartridges.	3	E	R	1		Part 1 - E.5.1.1	PL15	1	12		
	AM.III.E.R2	Extinguishing agents.	3	E	R	2		Part 1 - E.5.1.2	PL15	1.5	13		
	AM.III.E.K5	Fire extinguishing system maintenance and inspection.	3	E	K	5		Part 1 - E.5.2, E.5.2.1, E.5.2.2, E.5.2.3, E.5.2.4, E.5.2.5		1	14		
	AM.III.E.S7	Inspect a turbine engine fire extinguisher container.	3	E	S	7		Part 1 - E.5.2.1	PL13	1	15		
	AM.III.E.R3	Maintenance on circuits associated with electrically-activated container discharge cartridges (squibs).	3	E	R	3		Part 1 - E.5.2.2	PL15	2	16		
	AM.III.E.S10	Inspect a fire extinguisher container discharge cartridge (squib).	3	E	S	10		Part 1 - E.5.2.2	PL13	1	17		
	AM.III.E.S11	Inspect fire extinguisher container and determine hydrostatic test requirements.	3	E	S	11		Part 1 - E.5.2.2	PL13	0.5	18		
	AM.III.E.S6	Inspect engine fire extinguisher system blowout plugs.	3	E	S	6		Part 1 - E.5.2.4	PL13****	0.5	19		
	AM.III.E.S9	Troubleshoot and repair a fire extinguishing system.	3	E	S	9		Part 1 - E.5.3	PL13	2	20		

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	AM.III.E.S13	Check operation of fire warning press-to-test and troubleshoot faults.	3	E	S	13		Part 1 - E.5.4, E.5.4.1, E.5.4.2	PL13	2	21		
	AM.III.E.S8	Inspect fire extinguisher discharge circuit.	3	E	S	8		Part 1 - E.5.4.3, E.5.1	PL13	1	22		
ENGINE ELECTRICAL SYSTEMS	AM.III.F.K1	Generators.	3	F	K	1		Part 1 - F.3, F.3.1, F.3.2		1	1		
	AM.III.F.K5	DC generation systems.	3	F	K	5		Part 1 - F.3.1		1	2		
	AM.III.F.K6	AC generation systems.	3	F	K	6		Part 1 - F.3.2		1	3		
	AM.III.F.K2	Alternators.	3	F	K	2		Part 1 - F.4, F.4.1		1	4		
	AM.III.F.R1	Polarity when performing electrical system maintenance.	3	F	R	1		Part 1 - F.4.1, F.14		1	5		
	AM.III.F.K3	Starter generators.	3	F	K	3		Part 1 - F.5		1	6		
	AM.III.F.S14	Inspect a turbine engine starter generator.	3	F	S	14		Part 1 - F.5, F.5.1	PL38	2.5	7		
	AM.III.F.S7	Troubleshoot a direct-drive electric starter system.	3	F	S	7		Part 1 - F.5.1	PL38	2.5	8		
	AM.III.F.K4	Voltage regulators and overvoltage and overcurrent protection.	3	F	K	4		Part 1 - F.6, F.6.1		1	9		
	AM.III.F.K9	CSD and IDG systems and components.	3	F	K	9		Part 1 - F.7		1	10		
	AM.III.F.K8	The purpose and procedure for paralleling a dual-generator electrical system.	3	F	K	8		Part 1 - F.8		1	11		
	AM.III.F.K7	The procedure for locating the correct electrical cable/wire size needed to fabricate a cable/wire.	3	F	K	7		Part 1 - F.9		1	12		
	AM.III.F.R4	Routing and security of wiring near flammable fluid lines.	3	F	R	4		Part 1 - F.9		1	13		
	AM.III.F.S9	Determine wire size for engine electrical system.	3	F	S	9		Part 1 - F.9	PL38	1	14		
	AM.III.F.K10	Engine electrical wiring, switches, and protective devices.	3	F	K	10		Part 1 - F.9, F.10, F.10.1, F.10.2, F.10.3, F.10.4, F.11, F.11.1, F.11.2, F.11.3		4	15		
	AM.III.F.S1	Inspect engine electrical wiring, switches, and protective devices.	3	F	S	1		Part 1 - F.9, F.10, F.11, F.11.1, F.11.2, F.12	PL38	2	16		
	AM.III.F.S11	Replace a wire bundle lacing.	3	F	S	11		Part 1 - F.9, F.9.1, F.9.2	PL39	4	17		
	AM.III.F.S15	Inspect engine electrical connectors.	3	F	S	15		Part 1 - F.9.3	PL38	1	18		
	AM.III.F.S10	Repair a broken engine electrical system wire.	3	F	S	10		Part 1 - F.9.4	PL39	1	19		
	AM.III.F.S12	Troubleshoot an electrical system using a schematic or wiring diagram.	3	F	S	12		Part 1 - F.9.6, F.14	PL38	2	20		
	AM.III.F.S8	Inspect an electrical system cable.	3	F	S	8		Part 1 - F.1, F.2, F.9	PL38	1	21		
	AM.III.F.R2	Actions in response to a warning or caution annunciator light.	3	F	R	2		Part 1 - F.13		1	22		
	AM.III.F.R3	Maintenance on energized aircraft circuits/systems.	3	F	R	3		Part 1 - F.14		1	23		
	AM.III.F.S2	Determine suitability of a replacement component by part number.	3	F	S	2		Part 1 - F.14	PL38	2.5	24		
	AM.III.F.S3	Replace an engine-driven generator or alternator.	3	F	S	3		Part 1 - F.14	PL38	2.5	25		
	AM.III.F.S4	Inspect an engine-driven generator or alternator in accordance with manufacturer's instructions.	3	F	S	4		Part 1 - F.14	PL38	1.5	26		
	AM.III.F.S5	Troubleshoot an aircraft electrical generating system.	3	F	S	5		Part 1 - F.14	PL38	2	27		
	AM.III.F.S6	Remove and install an engine direct-drive electric starter.	3	F	S	6		Part 1 - F.14	PL39	2.5	28		
	AM.III.F.S13	Fabricate a bonding jumper.	3	F	S	13		Part 1 - F.14	PL39	1	29		
LUBRICATION SYSTEMS	AM.III.G.K1	Types, grades, and uses of engine oil.	3	G	K	1		Part 1 - G.2, G.3		3	1		
	AM.III.G.S4	Determine approved oils for different climatic temperatures.	3	G	S	4		Part 1 - G.2.1, G.2.2, G.2.2.1	PL14	1	2		
	AM.III.G.S2	Determine the correct type of oil for a specific engine.	3	G	S	2		Part 1 - G.2.2	PL14	1	3		
	AM.III.G.R1	Use or mixing of engine oils.	3	G	R	1		Part 1 - G.2.2, G.2.4.6	PL14	0.5	4		
	AM.III.G.K4	Dry-sump system.	3	G	K	4		Part 1 - G.2.3.2.1, G.3.3.2		0.5	5		
	AM.III.G.K3	Wet-sump system.	3	G	K	3		Part 1 - G.2.3.2.2, G.3.3.1		1	6		
	AM.III.G.K2	Lubrication system operation and components.	3	G	K	2		Part 1 - G.2.3.3, G.3.5		1	7		
	AM.III.G.S8	Identify oil system components.	3	G	S	8		Part 1 - G.2.3.3, G.3.5	PL14	1.5	8		
	AM.III.G.K6	Lubrication system maintenance, inspection, servicing, and analysis.	3	G	K	6		Part 1 - G.2.4, G.2.4.7, G.3.6, G.3.7		1	9		
	AM.III.G.S1	Inspect an oil cooler or oil lines.	3	G	S	1		Part 1 - G.2.4.2	PL14	1	10		
	AM.III.G.S7	Perform oil pressure adjustment.	3	G	S	7		Part 1 - G.2.4.5	PL14	1	11		
	AM.III.G.S9	Replace an oil system component.	3	G	S	9		Part 1 - G.2.4.6	PL14	1	12		
	AM.III.G.S6	Inspect an oil filter or screen.	3	G	S	6		Part 1 - G.2.4.7, G.2.4.6.1, G.3.7.1	PL14	1	13		
	AM.III.G.S13	Identify types of metal found in an oil filter.	3	G	S	13		Part 1 - G.2.4.7, G.3.7.1, G.3.6.4.1,	PL14	1	14		
	AM.III.G.S12	Troubleshoot an engine oil temperature system.	3	G	S	12		Part 1 - G.2.4.8	PL14	1	15		
	AM.III.G.K7	Excessive aircraft engine oil consumption.	3	G	K	7		Part 1 - G.2.4.8, G.3.7.1		1	16		
	AM.III.G.S11	Troubleshoot an engine oil pressure malfunction.	3	G	S	11		Part 1 - G.2.4.8, G.3.7.1	PL14	2	17		
	AM.III.G.S10	Identify oil system flow.	3	G	S	10		Part 1 - G.3.3.2, G.3.3.2.1, G.3.3.2.2	PL14	1	18		
	AM.III.G.K5	Chip detectors.	3	G	K	5		Part 1 - G.3.5.13		0.5	19		
	AM.III.G.S14	Remove and inspect an engine chip detector.	3	G	S	14		Part 1 - G.3.5.13	PL14	1.5	20		
	AM.III.G.S3	Identify turbine engine oil filter bypass indicator.	3	G	S	3		Part 1 - G.3.5.3	PL14	1	21		
	AM.III.G.R2	Following other than manufacturer's recommendations regarding the use of engine lubricants.	3	G	R	2		Part 1 - G.3.6.2, G.3.6.2.1		1	22		
	AM.III.G.R3	Handling, storage, and disposal of used lubricating oil.	3	G	R	3		Part 1 - G.3.6.7		1	23		
	AM.III.G.S5	Locate procedures for obtaining oil samples.	3	G	S	5		Part 1 - G.3.7.1	PL14	1	24		
IGNITION & STARTING SYSTEMS	AM.III.H.K7	Engine starters.	3	H	K	7		Part 1 - H.1		1	1		
	AM.III.H.S5	Inspect an electrical starting system.	3	H	S	5		Part 1 - H.1.2	PL18	2	2		
	AM.III.H.S9	Troubleshoot an electrical starting system.	3	H	S	9		Part 1 - H.1.2	PL18	1	3		
	AM.III.H.K1	Ignition system theory.	3	H	K	1		Part 1 - H.1.3, H.2.2		1	4		
	AM.III.H.S12	Identify the correct spark plugs used for replacement installation.	3	H	S	12		Part 1 - H.1.3.1	PL19	0.5	5		
	AM.III.H.K8	Magneto system components and operation.	3	H	K	8		Part 1 - H.1.3.2.1, H.1.3.2.1.5		1	6		
	AM.III.H.K4	Three electrical circuits of a magneto system.	3	H	K	4		Part 1 - H.1.3.2.1.1, H.1.3.2.1.2.1, H.1.3.2.1.3		1	7		
	AM.III.H.R1	Advanced and retarded ignition timing (piston engine).	3	H	R	1		Part 1 - H.1.3.2.1.4, H.1.3.2.1.4.1, H.1.3.2.1.4.2		1	8		
	AM.III.H.K3	Shower of sparks and impulse coupling.	3	H	K	3		Part 1 - H.1.3.2.1.6		1	9		
	AM.III.H.R3	Working around reciprocating engines with an ungrounded magneto.	3	H	R	3		Part 1 - H.1.3.2.5		1	10		
	AM.III.H.S1	Set magneto internal timing.	3	H	S	1		Part 1 - H.1.3.2.5.1	PL16	2.5	11		
	AM.III.H.S2	Time magneto to engine.	3	H	S	2		Part 1 - H.1.3.2.5.1	PL16	3	12		
	AM.III.H.S10	Troubleshoot ignition switch circuit.	3	H	S	10		Part 1 - H.1.3.2.5.1	PL20	1	13		

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	AM.III.H.S6	Inspect magneto breaker points.	3	H	S	6		Part 1 - H.1.3.2.5.2	PL16	1	14		
	AM.III.H.S8	Inspect a magneto impulse coupling.	3	H	S	8		Part 1 - H.1.3.2.5.2	PL16	1	15		
	AM.III.H.S7	Inspect an ignition harness.	3	H	S	7		Part 1 - H.1.3.2.5.2, H.1.3.2.6	PL17	1	16		
	AM.III.H.K2	Spark plug theory.	3	H	K	2		Part 1 - H.1.3.3		1	17		
	AM.III.H.S11	Inspect and check gap of spark plugs.	3	H	S	11		Part 1 - H.1.3.3.9, H.1.3.3.9.1, H.1.3.3.9.2, H.1.3.3.9.3, H.1.3.3.9.4	PL19	1	18		
	AM.III.H.S3	Remove, clean, and install spark plug.	3	H	S	3		Part 1 - H.1.3.3.9.2, H.1.3.3.10	PL19	1	19		
	AM.III.H.K5	Solid-state ignition systems.	3	H	K	5		Part 1 - H.1.4.1, H.1.4.3		1	20		
	AM.III.H.K6	Digital engine control module (e.g., FADEC).	3	H	K	6		Part 1 - H.1.4.3		1	21		
	AM.III.H.K9	Turbine engine ignition systems.	3	H	K	9		Part 1 - H.2.2		1	22		
	AM.III.H.S14	Identify the correct igniter plug and replace turbine engine igniter plugs.	3	H	S	14		Part 1 - H.2.2.2	PL8	1	23		
	AM.III.H.S4	Troubleshoot and repair an ignition system.	3	H	S	4		Part 1 - H.2.2.3	PL19	1	24		
	AM.III.H.S13	Troubleshoot a turbine or reciprocating engine ignition system.	3	H	S	13		Part 1 - H.2.2.3	PL20	1	25		
	AM.III.H.S15	Troubleshoot turbine engine igniters.	3	H	S	15		Part 1 - H.2.2.3	PL8	0.5	26		
	AM.III.H.S16	Inspect turbine engine ignition system.	3	H	S	16		Part 1 - H.2.2.3	PL8	0.5	27		
	AM.III.H.S17	Inspect igniters.	3	H	S	17		Part 1 - H.2.2.3	PL8	0.5	28		
	AM.III.H.R2	Maintenance on engines with capacitor discharge ignition systems.	3	H	R	2		Part 1 - H.2.2.4		0.5	29		
ENGINE FUEL & FUEL METERING SYSTEMS	AM.III.I.S11	Locate procedures for a turbine engine revolutions per minute (rpm) overspeed inspection.	3	I	S	11		Part 1 - I.11.4	PL25	0.5	1		
	AM.III.I.S15	Identify components of an engine fuel system.	3	I	S	15		Part 1 - I.3	PL21	0.5	2		
	AM.III.I.K12	Fuel lines.	3	I	K	12		Part 1 - I.3.2		0.5	3		
	AM.III.I.K13	Fuel pumps.	3	I	K	13		Part 1 - I.3.4, I.8.1		0.5	4		
	AM.III.I.K14	Fuel valves.	3	I	K	14		Part 1 - I.3.6		0.5	5		
	AM.III.I.K1	Fuel/air ratio and fuel metering, and carburetor theory and operation.	3	I	K	1		Part 1 - I.4, I.4.1		2	6		
	AM.III.I.S3	Identify carburetor components.	3	I	S	3		Part 1 - I.4.1	PL23	1	7		
	AM.III.I.K2	Float carburetor theory, components, operation, and adjustment.	3	I	K	2		Part 1 - I.4.2.1		1	8		
	AM.III.I.S4	Identify fuel and air flow through a float-type carburetor.	3	I	S	4		Part 1 - I.4.2.1	PL23	0.5	9		
	AM.III.I.S10	Adjust carburetor idle speed and mixture.	3	I	S	10		Part 1 - I.4.2.1, I.4.2.1.1	PL23*	0.5	10		
	AM.III.I.S6	Inspect a carburetor fuel inlet screen.	3	I	S	6		Part 1 - I.4.2.1.3	PL23	1	11		
	AM.III.I.S8	Inspect the needle, seat, and float level on a float-type carburetor.	3	I	S	8		Part 1 - I.4.2.1.3	PL23	1	12		
	AM.III.I.S5	Remove and install a carburetor main metering jet.	3	I	S	5		Part 1 - I.4.2.1.4	PL23	1	13		
	AM.III.I.K3	Pressure carburetor theory, operation, and adjustment.	3	I	K	3		Part 1 - I.4.2.2.1		1	14		
	AM.III.I.S7	Adjust a continuous-flow fuel injection system.	3	I	S	7		Part 1 - I.4.2.2.2	PL22	3	15		
	AM.III.I.K4	Continuous-flow fuel injection theory, components, operation, troubleshooting and adjustment.	3	I	K	4		Part 1 - I.4.2.2.2, I.4.2.2.2.1, I.4.3		1	16		
	AM.III.I.S1	Inspect, troubleshoot, and repair a continuous-flow fuel injection system.	3	I	S	1		Part 1 - I.4.2.2.2, I.4.3	PL23	1	17		
	AM.III.I.S12	Inspect fuel metering cockpit controls for proper adjustment.	3	I	S	12		Part 1 - I.4.3	PL8	0.5	18		
	AM.III.I.S18	Locate and identify fuel selector placards.	3	I	S	18		Part 1 - I.4.3	PL21	0.5	19		
	AM.III.I.S22	Inspect fuel pressure warning light function.	3	I	S	22		Part 1 - I.4.3	PL22	0.5	20		
	AM.III.I.R2	Adjusting reciprocating engine fuel control systems.	3	I	R	2		Part 1 - I.4.3.1	PL23	0.5	21		
	AM.III.I.S9	Remove and install a float-type carburetor.	3	I	S	9		Part 1 - I.4.3.3, I.4.3.4	PL23	1	22		
	AM.III.I.K10	Fuel system operation.	3	I	K	10		Part 1 - I.5		1	23		
	AM.III.I.R4	Considerations during fuel system maintenance.	3	I	R	4		Part 1 - I.6, I.6.1	PL21	0.5	24		
	AM.III.I.K9	Inspection requirements for an engine fuel system.	3	I	K	9		Part 1 - I.6, I.6.1, I.6.2		1	25		
	AM.III.I.R3	Handling of fuel metering system components that may contain fuel.	3	I	R	3		Part 1 - I.6.1	PL21	0.5	26		
	AM.III.I.R5	Handling of engine fuel control units that may contain fuel.	3	I	R	5		Part 1 - I.6.1	PL23	0.5	27		
	AM.III.I.S17	Inspect a remotely-operated fuel valve for proper operation.	3	I	S	17		Part 1 - I.6.2	PL21	1	28		
	AM.III.I.S19	Inspect a main fuel filter assembly for leaks.	3	I	S	19		Part 1 - I.6.2	PL21	1	29		
	AM.III.I.S24	Inspect engine fuel system fluid lines and components.	3	I	S	24		Part 1 - I.6.2	PL24	1	30		
	AM.III.I.S27	Remove, clean, and reinstall an engine fuel filter.	3	I	S	27		Part 1 - I.6.2	PL21	1	31		
	AM.III.I.S29	Inspect fuel selector valve.	3	I	S	29		Part 1 - I.6.2	PL21	1	32		
	AM.III.I.S25	Troubleshoot abnormal fuel pressure.	3	I	S	25		Part 1 - I.6.3	PL22	1	33		
	AM.III.I.S28	Troubleshoot engine fuel pressure fluctuation.	3	I	S	28		Part 1 - I.6.3	PL22	1	34		
	AM.III.I.S23	Adjust fuel pump fuel pressure.	3	I	S	23		Part 1 - I.8.1	PL22	0.5	35		
	AM.III.I.S16	Remove and install an engine-driven fuel pump.	3	I	S	16		Part 1 - I.8.1.1	PL21	1	36		
	AM.III.I.S20	Inspect fuel boost pump.	3	I	S	20		Part 1 - I.8.1.1	PL21	1.5	37		
	AM.III.I.K11	Fuel heaters.	3	I	K	11		Part 1 - I.8.2		0.5	38		
	AM.III.I.S26	Locate the procedures for troubleshooting a turbine engine fuel heater system.	3	I	S	26		Part 1 - I.8.2	PL22	0.5	39		
	AM.III.I.S21	Locate and identify a turbine engine fuel heater.	3	I	S	21		Part 1 - I.8.2	PL22	0.5	40		
	AM.III.I.K15	Fuel filters.	3	I	K	15		Part 1 - I.8.3		0.5	41		
	AM.III.I.S2	Remove, inspect, and install a turbine engine fuel nozzle.	3	I	S	2		Part 1 - I.8.4	PL24*	4	42		
	AM.III.I.K7	Fuel nozzles and manifolds design, operation, and maintenance.	3	I	K	7		Part 1 - I.8.4, I.8.4.1, I.8.4.2, I.8.4.3, I.11.1		2	43		
	AM.III.I.S30	Determine correct fuel nozzle spray pattern.	3	I	S	30		Part 1 - I.8.4.3	PL24	0.5	44		
	AM.III.I.K16	Engine fuel drains.	3	I	K	16		Part 1 - I.8.7		0.5	45		
	AM.III.I.K8	Components, theory, and operation of turbine engine fuel metering system.	3	I	K	8		Part 1 - I.9, I.10		0.5	46		
	AM.III.I.R1	Adjusting a turbine engine fuel control.	3	I	R	1		Part 1 - I.9, I.9.1, I.9.2		0.5	47		
	AM.III.I.S14	Locate and explain procedures for removing and installing a turbine engine fuel control unit.	3	I	S	14		Part 1 - I.9, I.9.1, I.9.2	PL25	0.5	48		
	AM.III.I.K6	Hydromechanical fuel control system design and components.	3	I	K	6		Part 1 - I.9.1		0.5	49		
	AM.III.I.S13	Locate procedures for adjusting a hydromechanical fuel control unit.	3	I	S	13		Part 1 - I.9.1	PL4	0.5	50		
	AM.III.I.K5	Digital engine control module (e.g., FADEC).	3	I	K	5		Part 1 - I.9.3, I.9.3.1, I.9.3.2		0.5	51		
RECIPROCATING ENGINE INDUCTION & COOLING	AM.III.J.K1	Reciprocating engine induction and cooling system theory, components, and operation.	3	J	K	1		Part 1 - J.1, J.1.1, J.1.2, J.1.2.1, J.1.2.2, J.2, J.2.1, J.2.2, J.2.2.1		0.5	1		
	AM.III.J.K7	Carburetor heaters.	3	J	K	7		Part 1 - J.1.2, J.1.2.2.2		0.5	2		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
SYSTEMS	AM.III.J.K6	Induction system filtering.	3	J	K	6		Part 1 - J.1.2.1		0.5	3		
	AM.III.J.R3	Maintenance-related FOD.	3	J	R	3		Part 1 - J.1.2.1		0.5	4		
	AM.III.J.K2	Causes and effects of induction system icing.	3	J	K	2		Part 1 - J.1.2.2, J.1.2.2.1, J.1.2.2.2		1	5		
	AM.III.J.S1	Inspect a carburetor heat system.	3	J	S	1		Part 1 - J.1.2.2.2, J.1.3	PL26	1	6		
	AM.III.J.S2	Inspect an alternate air valve for proper operation.	3	J	S	2		Part 1 - J.1.2.2.2, J.1.3	PL26	1	7		
	AM.III.J.R2	Ground operation of aircraft engines.	3	J	R	2		Part 1 - J.1.3		0.5	8		
	AM.III.J.S3	Inspect an induction system drain for proper operation.	3	J	S	3		Part 1 - J.1.3	PL26	0.5	9		
	AM.III.J.S5	Service an induction air filter.	3	J	S	5		Part 1 - J.1.3	PL26	1	10		
	AM.III.J.S8	Inspect an induction system for obstruction.	3	J	S	8		Part 1 - J.1.3	PL26	1	11		
	AM.III.J.S9	Inspect an air intake manifold for leaks.	3	J	S	9		Part 1 - J.1.3	PL26	1	12		
	AM.III.J.S15	Perform an induction and cooling system inspection.	3	J	S	15		Part 1 - J.1.3, J.2.3	PL30	1	13		
	AM.III.J.K3	Superchargers and controls.	3	J	K	3		Part 1 - J.1.4, J.1.4.1, J.1.4.1.1, J.1.4.1.2		0.5	14		
	AM.III.J.K4	Turbochargers, intercoolers, and controls.	3	J	K	4		Part 1 - J.1.4, J.1.4.2, J.1.4.2.1, J.1.4.2.2		1	15		
	AM.III.J.S12	Identify components of a turbocharger induction system.	3	J	S	12		Part 1 - J.1.4.2, J.1.4.2.1	PL4287	1	16		
	AM.III.J.S7	Inspect and service a turbocharger waste gate.	3	J	S	7		Part 1 - J.1.4.2.2, J.1.4.2.3	PL4287	1	17		
	AM.III.J.R1	Maintenance on turbochargers.	3	J	R	1		Part 1 - J.1.4.2.3		0.5	18		
	AM.III.J.S6	Inspect a turbocharger for leaks and security.	3	J	S	6		Part 1 - J.1.4.2.3	PL4287	1	19		
	AM.III.J.K10	Liquid cooling system theory, components, and operation.	3	J	K	10		Part 1 - J.2.1		0.5	20		
	AM.III.J.R4	Chemicals uses in liquid cooling systems.	3	J	R	4		Part 1 - J.2.1		0.5	21		
	AM.III.J.S10	Locate the proper specifications for coolant used in a liquid-cooled engine.	3	J	S	10		Part 1 - J.2.1	PL30	0.5	22		
	AM.III.J.K8	Pressure cowling air flow and control.	3	J	K	8		Part 1 - J.2.2		1	23		
	AM.III.J.S4	Inspect engine exhaust augmenter cooling system.	3	J	S	4		Part 1 - J.2.2.1	PL1994	1	24		
	AM.III.J.S13	Identify exhaust augmenter-cooled engine components.	3	J	S	13		Part 1 - J.2.2.1	PL1994	1	25		
	AM.III.J.S14	Inspect an air inlet duct for security.	3	J	S	14		Part 1 - J.2.2.1	PL26	1	26		
	AM.III.J.K5	Augmenter cooling system.	3	J	K	5		Part 1 - J.2.2.1,		0.5	27		
	AM.III.J.S18	Inspect cowl flap system for normal operation.	3	J	S	18		Part 1 - J.2.3, J.2.3.1	PL30	1	28		
	AM.III.J.S11	Inspect reciprocating engine cooling ducting (rigid or flexible) or baffle seals.	3	J	S	11		Part 1 - J.2.3, J.2.3.2	PL30	1	29		
	AM.III.J.S19	Inspect cylinder cooling fins.	3	J	S	19		Part 1 - J.2.3, J.2.3.3	PL30	1	30		
	AM.III.J.K9	Reciprocating engine baffle and seal installation.	3	J	K	9		Part 1 - J.2.3.2		1	31		
	AM.III.J.S16	Repair a cylinder baffle.	3	J	S	16		Part 1 - J.2.3.2	PL30	2.5	32		
	AM.III.J.S17	Inspect cylinder baffling.	3	J	S	17		Part 1 - J.2.3.2	PL30	1	33		
TURBINE ENGINE AIR SYSTEMS	AM.III.K.K6	Turbine engine induction system theory, components, and operation.	3	K	K	6		Part 1 - K.1		2	1		
	AM.III.K.S1	Perform an induction and cooling system inspection.	3	K	S	1		Part 1 - K.1 Part 1 - K.3	PL40	1	2		
	AM.III.K.K2	Turbine engine cowling air flow.	3	K	K	2		Part 1 - K.1.1		1	3		
	AM.III.K.S7	Inspect a particle separator.	3	K	S	7		Part 1 - K.1.2	PL40	2	4		
	AM.III.K.K5	Turbine engine insulation blankets and shrouds.	3	K	K	5		Part 1 - K.2 Part 1 - K.3.8		0.5	5		
	AM.III.K.K7	Turbine engine bleed air system theory, components, and operation.	3	K	K	7		Part 1 - K.2.1		1	6		
	AM.III.K.R1	Maintenance on compressor bleed air systems.	3	K	R	1		Part 1 - K.2.1.1		0.5	7		
	AM.III.K.S8	Inspect/check a bleed air system.	3	K	S	8		Part 1 - K.2.1.1	PL40	1	8		
	AM.III.K.K1	Air cooling system theory, components, and operation.	3	K	K	1		Part 1 - K.3		0.5	9		
	AM.III.K.K3	Turbine engine internal cooling.	3	K	K	3		Part 1 - K.3		0.5	10		
	AM.III.K.S3	Identify turbine engine cooling air flow.	3	K	S	3		Part 1 - K.3	PL40	1	11		
	AM.III.K.S4	Inspect turbine engine cooling ducting (rigid or flexible) or baffle seals.	3	K	S	4		Part 1 - K.3	PL40	1	12		
	AM.III.K.K4	Turbine engine baffle and seal installation.	3	K	K	4		Part 1 - K.3.7 Part 1 - K.2.2		0.5	13		
	AM.III.K.S2	Identify location of turbine engine insulation blankets.	3	K	S	2		Part 1 - K.3.8	PL40	0.5	14		
	AM.III.K.K8	Turbine engine anti-ice system.	3	K	K	8		Part 1 - K.4		0.5	15		
	AM.III.K.S5	Inspect a turbine engine air intake anti-ice system.	3	K	S	5		Part 1 - K.4.3	PL40	0.5	16		
	AM.III.K.S6	Identify turbine engine ice and rain protection system components.	3	K	S	6		Part 1 - K.4.3.1	PL40	0.5	17		
	AM.III.K.R2	Ground operation of aircraft engines following other than manufacturer's instructions.	3	K	R	2		Part 1 - K.5		0.5	18		
	AM.III.L.K1	Reciprocating engine exhaust system theory, components, operation, and inspection.	3	L	K	1		Part 1 - L.1		0.5	19		
ENGINE EXHAUST & REVERSER SYSTEMS	AM.III.L.S1	Identify the type of exhaust system on a particular aircraft.	3	L	S	1		Part 1 - L.1.1	PL6830	0.5	20		
	AM.III.L.S3	Inspect a reciprocating engine exhaust system.	3	L	S	3		Part 1 - L.1.2	PL33	1.5	21		
	AM.III.L.S5	Inspect exhaust heat exchanger.	3	L	S	5		Part 1 - L.1.2	PL33	1	22		
	AM.III.L.S7	Perform a pressure leak check of a reciprocating engine exhaust system.	3	L	S	7		Part 1 - L.1.2.1	PL33	3.5	23		
	AM.III.L.R3	Operation of reciprocating engines with exhaust systems leaks.	3	L	R	3		Part 1 - L.1.2.1, L.1.4		0.5	24		
	AM.III.L.R4	Exhaust system failures.	3	L	R	4		Part 1 - L.1.3		0.5	25		
	AM.III.L.S4	Inspect exhaust system internal baffles or diffusers.	3	L	S	4		Part 1 - L.1.3.3	PL33	2.5	26		
	AM.III.L.R1	Maintenance and inspection of exhaust system components.	3	L	R	1		Part 1 - L.1.4, L.1.5, L.2.6		0.5	27		
	AM.III.L.K3	Noise suppression theory, components, and operation (e.g., mufflers, hush kits, augmenter tubes).	3	L	K	3		Part 1 - L.1.6, L.2.5		0.5	28		
	AM.III.L.K2	Turbine engine exhaust system theory, components, operation, and inspection.	3	L	K	2		Part 1 - L.2		0.5	29		
	AM.III.L.K4	Thrust reverser theory, components, and operation.	3	L	K	4		Part 1 - L.2.4, L.2.4.1		0.5	30		
	AM.III.L.R2	Operation of turbine engine reversing systems.	3	L	R	2		Part 1 - L.2.4.1, L.2.4.1.2.1		0.5	31		
	AM.III.L.S6	Locate procedures for testing and troubleshooting a turbine thrust reverser system.	3	L	S	6		Part 1 - L.2.4.1.2.2	PL34	0.5	32		
	AM.III.L.S2	Inspect a turbine engine exhaust system component.	3	L	S	2		Part 1 - L.2.6	PL34	1	33		
	AM.III.L.R5	Ground operation of aircraft engines.	3	L	R	5		Part 1 - L.2.9		0.5	34		

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Section	ACS Code	Element	Section	Subject	KRS	Sorter	Sub-element	EKANOS Reference	Skills Reference	Estimated time	Block Sequence	Overall Sequence	Notes
PROPELLERS	AM.III.M.K3	Pitch control and adjustment.	3	M	K	3		Part 1 - M.2.2, M.2.3, M.2.4, M.2.5, M.2.6, M.2.7, M.2.8, M.3.1, M.3.2, M.3.6, M.3.7, M.3.8, M.3.12		1	1		
	AM.III.M.K4	Constant speed propeller and governor theory and operation.	3	M	K	4		Part 1 - M.2.7, M.2.8, M.3.1, M.3.2, M.3.3, M.3.4, M.3.4.1		2	2		
	AM.III.M.S9	Identify propeller range of operation.	3	M	S	9		Part 1 - M.3.5	PL37	0.5	3		
	AM.III.M.S7	Locate and explain the procedures for balancing a fixed-pitch propeller.	3	M	S	7		Part 2 - M.6.12, M.6.12.2.2	PL37	1	4		
	AM.III.M.S6	Perform propeller lubrication.	3	M	S	6		Part 2 - M.6.15.1, M.6.15.2	PL37	1	5		
	AM.III.M.S11	Determine what minor propeller alterations are acceptable using the propeller specifications, TCDS, and listings.	3	M	S	11		Part 2 - M.6.2	PL37	0.5	6		
	AM.III.M.S5	Perform a minor repair to a metal propeller blade.	3	M	S	5		Part 2 - M.6.2, M.6.1.5	PL37	1	7		
	AM.III.M.K5	Turbine engine propeller reverse/beta range operation.	3	M	K	5		Part 1 - M.3.5,M.3.6,M.3.7,M.3.8		0.5	8		
	AM.III.M.K9	Propeller synchronization systems.	3	M	K	9		Part 1 - M.4		0.5	9		
	AM.III.M.K10	Propeller ice control systems.	3	M	K	10		Part 1 - M.5		0.5	10		
	AM.III.M.K1	Propeller theory and operation.	3	M	K	1		Part 1- M.1.1, M.1.2, M.1.3, M.1.6, M.1.6.1, M.1.9		2	11		
	AM.III.M.K2	Types of propellers and blade design.	3	M	K	2		Part 1- M.1.4, M.2.1, M.2.2		1	12		
	AM.III.M.K6	Propeller servicing, maintenance, and inspection requirements.	3	M	K	6		Part 2 - M.6		2	13		
	AM.III.M.R2	Propeller maintenance and inspections.	3	M	R	2		Part 2 - M.6		0.5	14		
	AM.III.M.S3	Inspect a propeller for condition and airworthiness.	3	M	S	3		Part 2 - M.6.1.1	PL36	0.5	15		
	AM.III.M.S10	Perform a 100-hour inspection of a propeller and determine airworthiness.	3	M	S	10		Part 2 - M.6.1.1	PL36	1	16		
	AM.III.M.S2	Check blade static tracking.	3	M	S	2		Part 1 - M.1.1.1, Part 2 - M.6.14	PL36	0.5	17		
	AM.III.M.S12	Inspect and repair a propeller anti-icing or de-icing system.	3	M	S	12		Part 2 - M.6.13	PL36	2	18		
	AM.III.M.S4	Measure propeller blade angle.	3	M	S	4		Part 2 - M.6.8	PL36	0.5	19		
	AM.III.M.R1	Ground operation.	3	M	R	1		Part 2 - M.6.12, M.6.12.2.4		0.5	20		
	AM.III.M.K7	Procedures for removal and installation of a propeller.	3	M	K	7		Part 2 - M.6.15		1	21		
	AM.III.M.S1	Remove and install a propeller.	3	M	S	1		Part 2 - M.6.15	PL35	2.55	22		
	AM.III.M.S8	Adjust a propeller governor.	3	M	S	8		Part 2 - M.6.15.4.1	PL4	0.5	23		
	AM.III.M.K8	Propeller TCDS.	3	M	K	8		Part 2 - M.6.2		1	24		

Hudson Valley Community College (HVCC)
Aeronautical Technical Institute (ATI)

List of Approved Instructors

	Name	Position	Certificate	Rating (s)	Certificate Number	Expiration	Basis for Experience	Authorized Subject Areas
C5	Alix, Brian	Adjunct Instructor	Mechanic	Airframe & Powerplant Inspection Authority (IA)	3713160	N/A	A&P Mechanic Certificate / IA	All General, Airframe, & Powerplant
	Alstrup, Karen	Adjunct Instructor	Mechanic	Airframe & Powerplant	3649872	N/A	A&P Mechanic Certificate	All General, Airframe, & Powerplant
C5	Bender, Duncan	Adjunct Instructor	Mechanic	Airframe & Powerplant Inspection Authority (IA)	3781803	N/A	A&P Mechanic Certificate / IA	All General, Airframe, & Powerplant
C5	Constantini, Walter	Director	Mechanic	Airframe & Powerplant	3670272	N/A	A&P Mechanic Certificate 20 Years as Director MVCC Part 147 School	All General, Airframe, & Powerplant
	Hack, Dillon	Adjunct Instructor	Mechanic	Airframe & Powerplant	3769104	N/A	A&P Mechanic Certificate	All General, Airframe, & Powerplant
	Hadzimusovic, Admir	Adjunct Instructor	Mechanic	Airframe & Powerplant	3909036	N/A	A&P Mechanic Certificate	All General, Airframe, & Powerplant
	Major, Wesley	Adjunct Instructor	Mechanic	Airframe & Powerplant Inspection Authority (IA)	3645783	N/A	A&P Mechanic Certificate	All General, Airframe, & Powerplant
	McNiven, Robert	Adjunct Instructor	Mechanic	Airframe & Powerplant	4208711	N/A	A&P Mechanic Certificate	All General, Airframe, & Powerplant
	Rader, Raymond	Adjunct Instructor	Mechanic	Airframe & Powerplant	4462212	N/A	A&P Mechanic Certificate	All General, Airframe, & Powerplant
	Roe, Christopher	Adjunct Instructor	Mechanic	Airframe & Powerplant	4746007	N/A	A&P Mechanic Certificate	All General, Airframe, & Powerplant
	Spencer, Christopher R.	Adjunct Instructor	Airline Transport Pilot	Airplane, Multi Engine Commercial Privilege: Airplane, Single Engine Rotorcraft, Helicopter Type Ratings: S-70, ERJ-170, ERJ-190	2612954	N/A	Certificated Flight Instructor and experience teaching in the military.	General: Weight & Balance, Ground Operations & Servicing, Human Factors, Physics for Aviation
			Certificated Flight Instructor	Airplane, Multi Engine Airplane, Single Engine Rotorcraft, Helicopter Instrument, Airplane Instrument, Helicopter	2612954CFI	31-Jul-25		
	Witte, Barry	Adjunct Instructor	Public School Teaching Certificate	STEM Technology Education Physics	N/A	N/A	High School and College level teaching experience in the areas of physics, electronics, aeronautics, and other STEM subjects.	General: Basic Electricity, Mathematics, Human Factors, Physics for Aviation