

Annex A to AMC/GM Part 147 - Module 7 Maintenance practices

CASA module Examinations subjects	CASA mech basics exams equavelant	CASA avionic basics exams equavelant
7.1 Safety precautions — aircraft and workshop		
Aspects of safe working practices including precautions to take when working with electricity, gases especially oxygen, oils and chemicals;	BA, FF, or FG	Nil
Instruction in the remedial action to be taken in the event of a fire or another accident with one or more of these hazards including knowledge on extinguishing agents.	BC	Nil
7.2 Workshop practices		
Care of tools, control of tools, use of workshop materials;	BA	QB
Dimensions, allowances and tolerances, standards of workmanship;	BA	Nil
Calibration of tools and equipment, calibration standards.	BA	Nil
7.3 Tools		
Common hand tool types;	BA	QB
Common power tool types;	BA	Nil
Operation and use of precision measuring tools;	BA	QB
Lubrication equipment and methods;	Nil	Nil
Operation, function and use of electrical general test equipment.	BA	QB
7.4 Avionic general test equipment		
Operation, function and use of avionic general test equipment.	BA	QB
7.5 Engineering drawings, diagrams and standards		
Drawing types and diagrams, their symbols, dimensions, tolerances and projections;	BA	QB
Identifying title block information;	BA	QB
Microfilm, microfiche and computerised presentations;	BA	QB
Specification 100 of the ATA of America;	BA	Nil
Aeronautical and other applicable standards including ISO, AN, MS, NAS and MIL;	BA	QB
Wiring diagrams and schematic diagrams.	BA	QB
7.6 Fits and clearances		
Drill sizes for bolt holes, classes of fits;	Nil	Nil
Common system of fits and clearances;	Nil	Nil
Schedule of fits and clearances for aircraft and engines;	Nil	Nil
Limits for bow, twist and wear;	Nil	Nil
Standard methods for checking shafts, bearings and other parts.	Nil	Nil
7.7 Electrical cables and connectors		
Continuity, insulation and bonding techniques and testing;	BA	QB
Use of crimp tools: hand and hydraulic operated;	BA	QB

Testing of crimp joints;	BA	QB
Connector pin removal and insertion;	BA	QB
Co-axial cables: testing and installation precautions;	Nil	QB
Wiring protection techniques: cable looming and loom support, cable clamps, protective sleeving techniques including heat shrink wrapping, shielding.	Nil	Nil
7.8 Riveting		
Riveted joints, rivet spacing and pitch;	FG or FI	Nil
Tools used for riveting and dimpling;	FG or FI	Nil
Inspection of riveted joints.	FG or FI	Nil
7.9 Pipes and hoses		
Bending and belling and flaring aircraft pipes;	FA	Nil
Inspection and testing of aircraft pipes and hoses;	FA	Nil
Installation and clamping of pipes.	FA	Nil
7.10 Springs		
Inspection and testing of springs.	BA	Nil
7.11 Bearings		
Testing, cleaning and inspection of bearings;	BA	Nil
Lubrication requirements of bearings;	BA	Nil
Defects in bearings and their causes.	BA	Nil
7.12 Transmissions		
Inspection of gears, backlash;	BA	Nil
Inspection of belts and pulleys, chains and sprockets;	BA	Nil
Inspection of screw jacks, lever devices, push-pull rod systems.	BA	Nil
7.13 Control cables		
Swaging of end fittings;	BB	Nil
Inspection and testing of control cables;	BB	Nil
Bowden cables;	BB	Nil
Aircraft flexible control systems.	BB	Nil
7.14 Material handling		
7.14.1 Sheet Metal		
Marking out, and calculation of, bend allowance;	FG	Nil
Sheet metal working including bending and forming;	FG	Nil
Inspection of sheet metal work.	FG	Nil
7.14.2 Composite and non-metallic		
Bonding practices;	FG, FI, or FP	Nil
Environmental conditions;	FP	Nil
Inspection methods.	FP	Nil
7.15 Welding, brazing, soldering and bonding		
(a)		
Soldering methods, inspection of soldered joints;	BA	QB
(b)		
Welding and brazing methods;	BA	Nil
Inspection of welded and brazed joints;	BA	Nil
Bonding methods and inspection of bonded joints.	FG	Nil
7.16 Aircraft weight and balance		
(a)		
Centre of gravity and balance limits calculation: use of relevant documents;	BB	Nil

(b)		
Preparation of aircraft for weighing;	Nil	Nil
Aircraft weighing.	Nil	Nil
7.17 Aircraft handling and storage		
Aircraft taxiing and towing and associated safety precautions;	BA	Nil
Aircraft jacking, chocking, securing and associated safety precautions;	BA	Nil
Aircraft storage methods;	Nil	Nil
Refuelling and defuelling procedures;	BA	Nil
De-icing and anti-icing procedures;	BA	Nil
Electrical, hydraulic and pneumatic ground supplies;	Nil	Nil
Effects of environmental conditions on aircraft handling and operation.	Nil	Nil
7.18 Disassembly, inspection, repair and assembly techniques		
(a)		
Types of defects and visual inspection techniques;	FG	Nil
Corrosion	BA	Nil
Corrosion removal, assessment and re-protection;	BA	Nil
(b)		
General repair methods, Structural Repair Manual;	FG or FI	Nil
Ageing, fatigue and corrosion control programs;	FG or FI	Nil
(c)		
Non-destructive inspection techniques including: penetrant, radiographic, eddy current, ultrasonic and boroscope methods	BA	Nil
	BA	Nil
(d)		
Disassembly and re-assembly techniques;	Nil	Nil
(e)		
Trouble shooting techniques.	Nil	Nil
7.19 Abnormal events		
(a)		
Inspections following lightning strikes and HIRF penetration.	FG or FI	Nil
(b)		
Inspections following abnormal events such as heavy landings and flight through turbulence.	FG or FI	Nil
7.20 Maintenance procedures		
Maintenance planning;	Nil	Nil
Modification procedures;	Nil	Nil
Stores procedures;	Nil	Nil
Certification and release procedures;	Nil	Nil
Interface with aircraft operation;	Nil	Nil
Maintenance inspection, quality control and quality assurance;	Nil	Nil
Additional maintenance procedures;	Nil	Nil
Control of life limited components.	Nil	Nil