

ANEXO 2

ANEXO A – EXPERIÊNCIA EM MANUTENÇÃO CIVIL DE AERONAVES

Anexo A do EASA Form 19 – EXPERIÊNCIA EM MANUTENÇÃO CIVIL DE AERONAVES

1- A preencher pela Organização Parte 145

Identificação Organização Parte 145:
CAT n.º

Identificação do requerente:

Identificação Instrutor (aplicável em “On Job Training”):

Identificação da Aeronave (par aeronave motor):

Regras:

- 1^a Qualificação na categoria/subcategoria – Cumprimento de 50 % das tarefas constantes no Anexo A (“On job training”) referente à categoria/subcategorias.
- 2^a ou mais qualificações na categoria/subcategoria – Cumprimento de 30 % das tarefas constantes no Anexo A referente à categoria/subcategorias.
- 3^a ou mais qualificações na categoria/subcategoria referente a aeronaves consideradas na alínea h) do 66.A.45 do Regulamento CE 2042/2003 - Cumprimento de 20 % das tarefas constantes no Anexo A referente à categoria/subcategorias.
- Revalidação das qualificações – Cumprimento de 30 % das tarefas constantes do Anexo A referente às categorias/subcategorias.
- Para a categoria A - por se tratar de uma categoria com formação de tarefa, a experiência considerada será a adequada às tarefas desempenhadas, da responsabilidade da Organização Parte 145

Aircraft Type Practical Experience

(Experiência prática para tipo de aeronave)

All items must be complied with appropriate to the Part 66 category applied.

(Todos os trabalhos têm de ser cumpridos de acordo com a categoria da Parte 66)

Items for B1 and/or B2 are also applicable for category C.

(Trabalhos para B1 e/ou B2 também são aplicáveis para a categoria C)

Date (Data)	Task work card (Carta de trabalho)	Aircraft licence (Matrícula Aeronave)	ATA	List of Tasks (Tarefas)	CAT. (A; B1; B2)	Trainee Signature (Assinatura do formando)	Instructor's Signature (Assinatura do formador) aplicável no “On job Training”	Quality or Maintenance Signature (Assinatura do responsável da Qualidade ou Manutenção)
			05	Time limits/Maintenance checks				
				100 hour check (general aviation aircraft).	B1; B2			
				“B” or “C” check (transport category aircraft)	B1; B2			
				Assist carrying out a scheduled maintenance check i.a.w. AMM	B1; B2			
				Review Aircraft maintenance Log for correct completion	B1; B2			
				Review records for compliance with airworthiness directives.	B1; B2			
				Review records for compliance with component life limits.	B1; B2			
				Procedure for Inspection following heavy landing.	B1; B2			
				Procedure for Inspection following lightning strike.	B1; B2			
			06	Dimensions/Areas				
				Locate component(s) by zone/station number.	B1; B2			
				Perform symmetry check.	B1; B2			
				Lifting and Shoring	B1; B2			
				Assist in :				
				Jack aircraft nose or tail wheel.	B1			
				Jack complete aircraft.	B1			
				Sling or trestle major component.	B1			
			08	Levelling/Weighing				
				Level aircraft	B1			
				Weigh aircraft	B1			
				Prepare weight and balance amendment.	B1			
				Check aircraft against equipment list.	B1			
			09	Towing and Taxiing				
				Prepare aircraft for towing	B1			
				Tow aircraft	B1			
				Be part of aircraft towing team	B1			
			10	Parking and mooring				
				Tie down aircraft	B1			
				Park, secure and cover aircraft	B1			

			Position aircraft in maintenance dock	B1			
			Secure rotor blades	B1			
		11	Placards and Markings				
			Check aircraft for correct placards.	B1			
			Check aircraft for correct markings.	B1			
		12	Servicing				
			Refuel aircraft	B1			
			Defuel aircraft	B1			
			Carry out tank to tank fuel transfer	B1			
			Check/adjust tire pressures	B1			
			Check/replenish oil level	B1			
			Check/replenish hydraulic fluid level	B1			
			Check/replenish accumulator pressure	B1			
			Charge pneumatic system	B1			
			Grease aircraft	B1			
			Connect ground power	B1			
			Service toilet/water system	B1			
			Perform pre-flight/daily check	B1			
		18	Vibration and Noise Analysis				
			Analyse helicopter vibration problem	B1; B2			
			Analyse noise spectrum	B1; B2			
			Analyse engine vibration	B1; B2			
		21	Air Conditioning				
			Replace combustion heater	B1			
			Replace flow control valve	B1			
			Replace outflow valve	B1			
			Replace safety valve	B1			
			Replace vapour cycle unit	B1			
			Replace air cycle unit	B1			
			Replace cabin blower	B1			
			Replace heat exchanger	B1			
			Replace pressurization controller	B1			
			Clean outflow valves	B1			
			Check operation of air conditioning/heating system	B1			
			Check operation of pressurization system	B1; B2			
			Troubleshoot faulty system	B1; B2			
		22	Auto Flight				
			Install servos	B2			
			Rig bridge cables	B2			
			Replace controller	B2			
			Replace amplifier	B2			
			Replacement of the auto flightsystem LRUs in case of the fly-by-wire aircraft	B2			
			Check operation of auto pilot	B2			
			Check operation of auto-throttle/auto-thrust	B2			
			Check operation of yaw damper	B2			
			Check and adjust servo clutch	B2			
			Perform autopilot gain adjustments	B2			
			Perform mach trim functional check	B2			
			Troubleshoot faulty system	B2			
			Check flight management systems	B2			
			Check stability augmentation system	B2			
		23	Communications				
			Replace VHF com unit	B2			
			Replace HF com unit	B2			
			Replace existing antenna	B2			
			Replace static discharge wicks	B2			

			Check operation of radios	B2			
			Perform antenna VSWR check	B2			
			Perform Selcal operational check of passenger address system	B2			
			Functionally check audio integrating system	B2			
			Repair co-axial cable	B2			
			Troubleshoot faulty system	B2			
	24	Electrical Power					
			Charge lead/acid battery	B1; B2			
			Charge ni-cad battery	B1; B2			
			Check battery capacity	B1; B2			
			Deep-cycle ni-cad battery	B1; B2			
			Replace integrated drive/generator /alternator	B1; B2			
			Replace switches	B1; B2			
			Replace circuit breakers	B1; B2			
			Adjust voltage regulator	B1; B2			
			Change voltage regulator	B1; B2			
			Amend electrical load analysis report	B1; B2			
			Repair/replace electrical feeder cable	B1; B2			
			Troubleshoot faulty system	B1; B2			
			Perform functional check of integrated drive/generator/alternator	B1; B2			
			Perform functional check of voltage regulator	B1; B2			
	25	Equipment/Furnishings					
			Replace carpets	B1			
			Replace crew seats	B1			
			Replace passenger seats	B1			
			Check inertia reels	B1			
			Check seats/belts for security	B1			
			Check emergency equipment	B1; B2			
			Check ELT for compliance with regulations	B1			
			Repair toilet waste container	B1			
			Repair upholstery	B1			
			Change cabin configuration	B1			
			Replace cargo loading system actuator	B1			
			Test cargo loading system	B1			
			Replace escape slides/ropes	B1			
	26	Fire protection					
			Check fire bottle contents	B1			
			Check/test operation of fire/smoke detection and warning system	B1; B2			
			Check cabin fire extinguisher contents	B1			
			Check lavatory smoke detector system	B1			
			Install new fire bottle	B1			
			Check cargo panel sealing	B1			
			Replace fire bottle squib	B1			
			Troubleshoot faulty system	B1			
			Inspect engine fire wire detection systems	B1; B2			
	27	Flight Controls					
			Inspect primary flight controls and related components i.a.w. AMM	B1			
			Extending/retracting flaps & slats	B1			
			Replace horizontal stabilizer	B1			
			Replace spoiler/lift dumper	B1			
			Replace elevator	B1			
			Deactivation/reactivation of aileron servo control	B1			
			Replace aileron	B1			

		Replace rudder	B1			
		Replace trim tabs	B1			
		Install control cable and fittings	B1			
		Replace slats	B1			
		Replace flaps	B1			
		Replace powered flying control unit	B1			
		Replace flat actuator	B1			
		Rig primary flight controls	B1			
		Adjust control cable tension	B1			
		Check control range and direction of movement	B1			
		Check for correct assembly and locking	B1			
		Troubleshoot faulty system	B1; B2			
		Functional test of primary flight controls	B1			
		Functional test of flap system	B1			
		Operational test of the side stick assembly	B1			
		Operational test of the THS	B1			
		THS system wear check	B1			
	28	Fuel				
		Water drain system (operation)	B1			
		Replace booster pump	B1			
		Replace fuel tank cells	B1			
		Replace/test fuel control valves	B1			
		Replace magnetic fuel level indicators	B1			
		Replace water drain valve	B1			
		Check/calculate fuel contents manually	B1			
		Check filters	B1			
		Flow check system	B1			
		Check calibration of fuel quantity gauges	B1; B2			
		Check operation feed/selectors	B1; B2			
		Check operation of fuel dump/jettison system	B1			
		Fuel transfer between tanks	B1			
		Pressure re-fuel (manual control)	B1			
		Deactivation/reactivation of the fuel valves (transfer de-fuel, X-feed, re-fuel)	B1			
		Troubleshoot faulty system	B1; B2			
	29	Hydraulics				
		Replace engine driven pump	B1			
		Check/replace case drain filter	B1			
		Replace standby pump	B1			
		Replace hydraulic motor pump/generator	B1			
		Replace accumulator	B1			
		Check operation of shut off valve	B1			
		Check filters/clog indicators	B1			
		Check indicating systems	B1			
		Perform functional checks	B1			
		Troubleshoot faulty system	B1			
		Pressurisation/depressurization of the hydraulic system	B1			
		PTU operation	B1			
	30	Ice and rain protection				
		Replace pump	B1			
		Replace timer	B1			
		Inspect repair propeller deice boot	B1			
		Test repair propeller de-icing system	B1			
		Inspect/test wing leading edge de-icer boot	B1			
		Replace anti-ice/deice valve	B1			
		Install wiper motor	B1			
		Check operation of systems	B1			
		Operational test of the pitot-probe ice	B1			

		protection				
		Operational test of the TAT ice protection	B1			
		Operational test of the wing ice protection system	B1			
		Assistance to the operational test of the engine air-intake ice protection (with engines in operation)	B1			
		Troubleshoot faulty system	B1; B2			
	31	Indicating/recording systems				
		Replace flight data recorder	B1; B2			
		Replace cockpit voice recorder	B1; B2			
		Replace clock	B1; B2			
		Replace master caution unit	B1; B2			
		Replace FDR	B1; B2			
		Pereform FDR data retrieval	B1; B2			
		Troubleshoot faulty system	B1; B2			
		Implement ESDS procedures	B1; B2			
		Inspect for HIRF requirements	B1; B2			
		Start/stop EIS procedure	B1; B2			
		Bite test of the CFDIU	B1; B2			
		Ground scanning of the central warning system	B1; B2			
	32	Landing Gear				
		Build up wheel	B1			
		Replace main wheel	B1			
		Replace nose wheel	B1			
		Replace shimmy damper	B1			
		Replace steering actuator	B1			
		Replace truck tilt actuator	B1			
		Replace gear retraction actuator	B1			
		Replace uplock/dowlock assembly	B1			
		Replace shimmy damper	B1			
		Rig nose wheel steering	B1			
		Functional test of the nose wheel steering system	B1			
		Replace shock strut seals	B1			
		Servicing of shock strut	B1			
		Replace break unit	B1			
		Replace break control valve	B1			
		Bleed brakes	B1			
		Replace brake fan	B1			
		Test anti skid unit	B1			
		Test gear retraction	B1			
		Change bungees	B1			
		Adjust micro switches/sensors	B1			
		Charge struts with oil and air	B1			
		Troubleshoot faulty system	B1			
		Test outbrake system	B1			
		Replace rotorcraft skids	B1			
		Replace rotorcraft skid shoes	B1			
		Pack and check floats	B1			
		Check/test emergency blowdown	B1			
		Operational test of the landing gear doors	B1			
	33	Lights				
		Repair/replace rotating beacon	B1; B2			
		Repair/replace landing lights	B1; B2			
		Repair/replace navigation lights	B1; B2			
		Repair/replace interior lights	B1; B2			
		Replace ice inspection lights	B1; B2			
		Repair/replace logo lights	B1; B2			
		Repair/replace emergency lighting system	B1; B2			

			Perform emergency lighting system checks	B1; B2			
			Troubleshoot faulty system	B1; B2			
	34	Navigation					
			Calibrate magnetic direction indicator	B2			
			Replace airspeed indicator	B2			
			Replace altimeter	B2			
			Replace air data computer	B2			
			Replace VOR unit	B2			
			Replace ADI	B2			
			Replace HIS	B2			
			Check pilot static system for leaks	B1; B2			
			Check operation of directional gyro	B2			
			Functional check weather radar	B2			
			Functional check Doppler	B2			
			Functional check TCAS	B2			
			Functional check DME	B2			
			Functional check ATC Transponder	B2			
			Functional check flight director system	B2			
			Functional check inertial nav system	B2			
			Complete quadrantal error correction of ADF system	B2			
			Update flight management system database	B2			
			Check calibration of pilot static instruments	B2			
			Check calibration of pressure altitude reporting system	B2			
			Troubleshoot faulty system	B2			
			Check marker systems	B2			
			Compass replacement direct/indirect	B2			
			Check Satcom	B2			
			Check GPS	B2			
			Test AVM	B2			
	35	Oxygen					
			Inspect on board oxygen equipment	B1			
			Purge and recharge oxygen system	B1			
			Replace regulator	B1			
			Replace oxygen generator	B1			
			Test crew oxygen system	B1			
			Perform auto oxygen system deployment check	B1			
			Troubleshoot faulty system	B1			
	36	Pneumatic systems					
			Replace filter	B1			
			Replace air shut off valve	B1			
			Replace pressure regulating valve	B1			
			Replace compressor	B1			
			Recharge dessicator	B1			
			Adjust regulator	B1			
			Check for leaks	B1			
			Troubleshoot faulty system	B1			
	37	Vacuum systems					
			Inspect the vacuum system i.a.w. AMM	B1			
			Replace vacuum pump	B1			
			Check/replace filters	B1			
			Adjust regulator	B1			
			Troubleshoot faulty system	B1			
	38	Water/Waste					
			Replace water pump	B1			
			Replace tap	B1			
			Replace toilet pump	B1			

		Troubleshoot faulty system	B1			
		Inspect waste bin flap closure	B1			
	45	Central Maintenance System				
		Retrieve data from CMU	B1; B2			
		Replace CMU	B1; B2			
		Perform Bite check	B1; B2			
		Troubleshoot faulty system	B1; B2			
	49	Airborne Auxiliary power				
		Install APU	B1			
		Inspect hot section	B1			
		Troubleshoot faulty system	B1; B2			
	51	Strutures				
		Sheet metal repair	B1			
		Fibre glass repair	B1			
		Wooden repair	B1			
		Fabric repair	B1			
		Recover fabric control surface	B1			
		Treat corrosion	B1			
		Apply protective treatment	B1			
	52	Doors				
		Inspect passenger door i.a.w. AMM	B1			
		Rig/adjust locking mechanism	B1			
		Adjust air stair system	B1			
		Check operation of emergency exits	B1			
		Test door warning system	B1			
		Troubleshoot faulty system	B1			
		Remove and install passenger door i.a.w. AMM	B1			
		Remove and install emergency i.a.w. AMM	B1			
		Inspect cargo door i.a.w. AMM	B1			
	56	Windows				
		Replace windshield	B1			
		Replace direct vision window	B1			
		Replace cabin window	B1			
		Repair transparency	B1			
	57	Wings				
		Skin repair	B1			
		Recover fabric wing	B1			
		Replace tip	B1			
		Replace rib	B1			
		Replace integral fuel tank panel	B1			
		Check incidence/rig	B1			
	60	Propeller				
		Assemble prop after transportation	B1			
		Replace propeller	B1			
		Replace governor	B1			
		Adjust governor	B1			
		Perform static functional checks	B1			
		Check operation during ground run	B1			
		Check track	B1			
		Check setting of micro switches	B1			
		Assessment of blade damage i.a.w. AMM	B1			
		Dynamically balance prop	B1			
		Troubleshoot faulty system	B1			
	62	Main Rotors				
		Install rotor assembly	B1			

		Replace blades	B1			
		Replace damper assembly	B1			
		Check track	B1			
		Check static balance	B1			
		Check dynamic balance	B1			
		Troubleshoot	B1			
	63	Rotor Drive				
		Replace mast	B1			
		Replace drive coupling	B1			
		Replace clutch/freewheel unit	B1			
		Replace drive belt	B1			
		Install main gearbox	B1			
		Overhaul main gearbox	B1			
		Check gearbox chip detectors	B1			
	64	Tail Rotor				
		Install rotor assembly	B1			
		Replace blades	B1			
		Troubleshoot	B1			
	65	Tail Rotor Drive				
		Replace bevel gearbox	B1			
		Replace universal joints	B1			
		Overhaul bevel gearbox	B1			
		Install drive assembly	B1			
		Check chip detectors	B1			
		Check/install bearings and hangers	B1			
		Check/service/assemble flexible couplings	B1			
		Check alignment of drive shafts	B1			
		Install and rig drive shafts	B1			
	67	Rotorcraft flight controls				
		Install swash plate	B1			
		Install mixing box	B1			
		Adjust pitch links	B1			
		Rig collective system	B1			
		Rig cyclic system	B1			
		Rig anti-torque system	B1			
		Check controls for assembly and locking	B1			
		Check controls for operation and sense	B1			
		Troubleshoot faulty system	B1			
	71	Power Plant				
		Build up ECU	B1			
		Replace engine	B1			
		Repair cooling baffles	B1			
		Repair cowling	B1			
		Adjust cowl flaps	B1			
		Repair faulty wiring	B1			
		Troubleshoot	B1			
		Assist in dry motoring check	B1			
		Assist in wet motoring check	B1			
		Assist in engine start (manual mode)	B1			
	72	Piston Engines				
		Remove/install reduction gear	B1			
		Check crankshaft run-out	B1			
		Check tappet clearance	B1			
		Check compression	B1			
		Extract broken stud	B1			
		Install helicoil	B1			
		Perform ground run	B1			

			Establish/check reference RPM	B1			
			Troubleshoot	B1			
	72	T	Turbine Engine				
			Replace module	B1			
			Replace fan blade	B1			
			Hot section inspection/boroscope check	B1			
			Carry out engine/compressor wash	B1			
			Carry out engine dry cycle	B1			
			Engine ground run	B1			
			Establish reference power	B1			
			Trend monitoring/gas path analysis	B1			
			Troubleshoot	B1			
	73		Fuel and control, piston				
			Replace engine driven pump	B1			
			Adjust AMC	B1			
			Adjust ABC	B1			
			Install carburettor/injector	B1			
			Adjust carburetor/injector	B1			
			Clean injector nozzles	B1			
			Replace primer line	B1			
			Check carburetor float setting	B1			
			Troubleshoot faulty system	B1			
	73		Fuel and control, turbine				
			Replace FCU	B1			
			Replace Engine Electronic Control Unit (FADEC)	B1; B2			
			Replace Fuel Metering Unit (FADEC)	B1			
			Replace engine driven pump	B1			
			Clean/test fuel nozzles	B1			
			Clean/replace filters	B1			
			Adjust FCU	B1			
			Troubleshoot faulty system	B1; B2			
			Functional test of FADEC	B1; B2			
	74		Ignition systems, piston				
			Change magneto	B1			
			Change ignition vibrator	B1			
			Change plugs	B1			
			Test plugs	B1			
			Check H. T. leads	B1			
			Install new leads	B1			
			Check timing	B1			
			Check system bonding	B1; B2			
			Troubleshoot faulty system	B1; B2			
	74		Ignition systems, turbine				
			Perform functional test of the ignition system	B1			
			Check glow plugs/ignitors	B1			
			Check H.T. leads	B1			
			Check ignition unit	B1			
			Replace ignition unit	B1			
			Troubleshoot faulty system	B1; B2			
	76		Engine Controls				
			Rig thrust lever	B1			
			Rig RPM control	B1			
			Rig mixture HP cock lever	B1			
			Rig power lever	B1			
			Check control sync (multi-eng)	B1			
			Check controls for correct assembly and	B1			

		locking				
		Check controls for range and direction of movement	B1			
		Adjust pedestal micro-switches	B1			
		Troubleshoot faulty system	B1			
	77	Engine Indicating				
		Replace engine instruments	B1; B2			
		Replace oil temperature bulb	B1; B2			
		Replace thermocouples	B1; B2			
		Check calibration	B1; B2			
		Troubleshoot faulty system	B1; B2			
	78	Exhaust, piston				
		Replace exhaust gasket	B1			
		Inspect welder repair	B1			
		Pressure check cabin heater muff	B1			
		Troubleshoot faulty system	B1			
	78	Exhaust, turbine				
		Change jet pipe	B1			
		Change shroud assembly	B1			
		Install trimmers	B1			
		Inspect/replace thrust reverser	B1			
		Replace thrust reverser component	B1			
		Deactivate/reactivate thrust reverser	B1			
		Operational test of the thrust reverser system	B1			
	79	Oil				
		Change oil	B1			
		Check filter(s)	B1			
		Adjust pressure relief valve	B1			
		Replace oil tank	B1			
		Replace oil pump	B1			
		Replace oil cooler	B1			
		Replace firewall shut off valve	B1			
		Perform oil dilution test	B1			
		Troubleshoot faulty system	B1			
	80	Starting				
		Replace starter	B1			
		Replace start relay	B1			
		Replace start control valve	B1			
		Check cranking speed	B1			
		Troubleshoot faulty system	B1			
	81	Turbines, piston engines				
		Replace PRT	B1			
		Replace turbo-blower	B1			
		Replace heat shields	B1			
		Replace waste gate	B1			
		Adjust density controller	B1			
	82	Engine water injection				
		Replace water/methanol pump	B1			
		Flow check water/methanol system	B1			
		Adjust water/methanol control unit	B1			
		Check fluid for quality	B1			
		Troubleshoot faulty system	B1			
	83	Accessory gear boxes				
		Replace gearbox	B1			
		Replace drive shaft	B1			

			Inspect magnetic chip detector	B1			
			49 APU				
			Removal/installation of the APU	B1			
			Removal/installation of the inlet guide-vane actuator	B1			
			Operational test of the APU emergency shut down test	B1			
			Operational test of the APU	B1			