SPECIFIC EXPERIENCE TASKS FOR SAILPLANES, POWERED SAILPLANES and BGA TUG INSPECTOR AUTHORISATIONS

These are the general experience requirements for the issue of a BGA Inspector authorisation. Not all inspectors will achieve all the tasks below but a good percentage will be required to achieve a minimum standard.
These requirements also align with the proposed Part 66 L licence.

The experience record should be recorded on BGA PER sheets stating the date, aircraft type and registration, details of the experience and confirmed by someone in a responsible position

AIRFRAME GENERAL (AF) (formally GL)

General Activities
Internal and external placards; check or replace
Annual Inspection Documentation
Review records for compliance with airworthiness directives
Five Annual Inspections
Inspection after an occurrence or damage
Dismantling/reinstallation of wings and empennages
Cleaning and lubrication
Life extension inspections

Levelling and weighing
Level the sailplane
Weighing, Weight & Balance Sheet
Prepare a weight and balance amendment
Check the list of equipment

Fuselage, wings and tail surfaces
Fuselage and fin; Inspection, cleaning and waxing
Wings; Inspection, play, frequency check, cleaning and waxing
Tail surfaces; Inspection, cleaning and waxing

Flight Controls and Flight Control Systems
Pilot controls general; Inspection, colour coding and operation
Aileron and Flaps; Inspection, removal, balancing and reinstallation
Elevator; Inspection, removal, balancing and reinstallation
Rudder; Inspection, removal, balancing and reinstallation
Control cables; Inspection, fabrication, installation, tensioning and locking
Control pushrods; Inspection, removal, installation, adjustment and locking
Trimmer systems; Inspection, removal, installation, adjustment and locking
Safeguarding of pins, screws, castellated nuts and wire locking
Sealing of gaps
Range of movement checks
Independent inspections

Electrical Systems
Electrical components and wiring; Inspection, removal, repair and installation
Batteries; servicing and capacity checking

Avionics Systems
COM; Inspection, removal, installation and testing
NAV; Inspection, removal and installation
XPDR; inspection, removal and installation
Antenna/ Antenna cable; Inspection, removal and installation

Cabin Equipment / Systems
Belts ï safety harness; inspection, removal and installation
Oxygen system; Removal, installation, testing requirements and safety precautions
Canopy; Inspection, polish, replacement or repair and jettison test
Pitot/Static system; Inspection, component and plumbing removal, installation and test
Flight instruments; Inspection, removal, installation and test
Installation of approved equipment
Compass; Installation and compensation
Tow release; Inspection, removal, installation and test
Water ballast system; inspection, removal, installation and test
Undercarriage; Inspection, removal, installation and function test
Skids; Inspection, wear assessment and replacement
Brake system; Servicing, inspection, adjustments and replacement of components
Wheels and tyres: Inspection, servicing, replacements and creep indicators

SELF SUSTAINING SAILPLANE AND MOTOR GLIDERS (SS or MG)
(In addition to Airframe General)

Piston Engines General
Routine servicing; oil and filter changes, inspections
Reduction gear/ belt system; Inspect, remove and install belts and adjust
Crankshaft/drive flange; Inspect, check crankshaft run-out
Tappets; Inspect, check and adjust clearance
Check and record compression.
Extract broken stud and helicoil repair
Perform ground run.
Establish/check reference RPM.
Troubleshoot engine and systems
Pylon and extension/retraction systems; Inspection, lubrication and testing
Limit switches: Inspection testing and adjustment
Starting systems; Inspection, servicing, replacement of components and testing
Generation systems; Inspection, replacement of components and testing

Propeller
Propeller; remove and refit
Propeller; Inspect and service
Pitch change mechanism; Inspect, adjust, replace cable and test
Perform static functional checks.
Check operation during ground run.
Check track.
Check setting of micro switches
Assessment of blade damage i.a.w. AMM.

Troubleshoot faulty system
Propeller; assess life limitation

Fuel
Water drain system; Inspection, remove/replace valve, test
Booster pump; Inspect, remove/refit and test
Fuel selector; Inspect, remove/replace and test
Fuel tanks and cells; Inspect, remove/replace and leak test
Fuel control valves; Inspect, remove/replace and test
Magnetic fuel level indicators; Inspect, remove/replace test.
Check fuel contents manually and check calibration of fuel quantity gauges.
Check/replace filters
Replace flexible fuel lines
Flow check system
Check operation feed/selectors
Troubleshoot faulty system.

Fuel and control
Replace engine driven pump
Install carburettor/injector
Adjust carburettor/injector
Inspect/replace carburettor diaphragm
Clean injector nozzles
Replace primer line
Check carburettor float setting
Check/replace air filter
Troubleshoot faulty system

Exhaust
Remove/refit exhaust
Inspect, remove/replace shock mounts
Replace exhaust gasket
Inspect welded repair
Pressure check cabin heater muff
Troubleshoot faulty system.

Ignition systems
Change magneto, check and adjust timing to engine
Check magneto internal timing
Change plugs
Test plugs
Check H.T. leads
Install new leads
Check system bonding
Troubleshoot faulty system

Engine Indicating
Replace engine instruments(s)
Replace oil temperature bulb
Replace thermocouples
Check calibration
Troubleshoot faulty system

WOOD REPAIR RATING (WR)
(In addition to Airframe General)

Wooden structures / Metal tubes and fabric
Inspection / testing for damage and deterioration
Identification of types of damage
Rib structure repairs
Plywood skin repairs
Recover with fabric
Rib stitching
Protective coating and finishing
Install patch on fabric material
Repair of fairings
Tubular structure repairs
Inspection of welded repairs

COMPOSITE REPAIR RATING (CR)
(In addition to Airframe General)

Composite Structures
Inspection damage identification and assessment
Laminate repairs, use of appropriate materials and resin systems
Sandwich structure repairs
Post cure heat treatment of repairs
Partial gel coat repair
Complete gel refinishing
Paint refinishing
Repair of fairings
Repair of flying controls, mass and balance checks

METAL REPAIR RATING (MR)
(In addition to Airframe General)

Metal skin structures
Inspection and damage identification
Identifying corrosion and treatments
Crack testing
Skin repairs
Rib, longeron, frame and former repairs
Drilling cracks
Riveting techniques and rivet identification
Bonding of structures
Anti-corrosion treatment
Repair of fairings

SENIOR INSPECTOR RATING (A or ST)
(In addition to Airframe General and appropriate repair rating))

Major repairs as applicable to the above repair ratings
Extensive damage assessment

Major repairs to spars and frames that require jigging of the structure
Major repairs to skins that required jigging and alignment
Major repairs to GRP structures
Major repairs to flying controls
Guidance and mentoring to new inspectors

ELECTRIC POWERPLANT (EP)

(In addition to Airframe General)

Electric motor powered sailplanes
Battery installation; Inspection, testing and servicing
Battery precautions; installation, charging, discharging, servicing and damage
Power feed and control systems. Inspection, repair and testing
Pylon and extension/retraction systems; Inspection, lubrication and testing
Limit switches: Inspection testing and adjustment
Motor; Inspection, servicing, removal/installation and testing
Propeller: Inspection, removal/installation
Propeller; Assessment of blade damage i.a.w. AMM
Propeller; Assess life limitation
Control system: Inspection, BITE testing
Monitoring systems; Interrogation, download and linkup

JET POWERPLANT (JP)

(In addition to Self Sustaining Sailplane and Motor Glider)

Jet turbine powered sailplanes
Engine; Inspection, servicing, removal/installation and testing
Intake: inspection
Fan and IGV; Inspection and damage assessment
Combustion case; Inspection damage assessment
Exhaust collector/nozzle; Inspection, damage assessment
Jet Fuel system: Inspection, servicing and replenishment
Starting systems; Inspection, testing, servicing and troubleshooting
Starting gas bottle; Inspection, replenishing and testing
Engine; assess life limitation

RADIO ENGINEER (RE)

(In addition to Airframe General)

Avionic systems installed in Sailplanes
Installation of avionic systems
Troubleshooting of avionic systems
VHF comm; Inspection, testing and troubleshooting
XPDR: Inspection, testing and troubleshooting

ENGINE OVERHAUL (EO)

(Stand-alone authorisation)

Overhaul of non-type certified engines

Strip and inspect engines
NDT of internal components
Wear and damage assessment
Reconditioning of parts
Assembly and testing of engine
Inspection of engine accessories
Reconditioning of engine accessories

BGA TUG INSPECTOR (TG)

Maintenance of BGA Tug aircraft
(Holder of an appropriate EASA or BCAR type rated licence)

CHIEF ENGINEER/ARC SIGNATORY (CE, ARC Signatory)

(In addition to Airframe General and appropriate rating SS, MG TG)

To issue ARC or make Annex II tug C of A renewal recommendations
Three years as BGA inspector
Additional four years experience in aircraft continued airworthiness, or
Holder of a Part 66 licence
BGA training course
Current licence for tugs