# BMAA/AW/057: INSPECTOR AUDIT FORM

## AUDITED INSPECTOR’S DETAILS

<table>
<thead>
<tr>
<th>Registration/s of aircraft used in audit</th>
<th>Categories held: A B C D E F G H I L O</th>
<th>Categories sought: A B C D E F G H I L O</th>
</tr>
</thead>
</table>

## AUDITED INSPECTOR OR APPRENTICE

### Name

I accept the assessment of the auditing inspector and I will undertake to complete the remedial actions indicated below to fill any identified gaps in my knowledge by seeking advice, reading recommended publications and attending relevant training courses.

### Signature

### Date

### Inspect. No.

## AUDITING INSPECTOR

### Name

I have interviewed the above named inspector and I am satisfied that he has sufficient knowledge of the listed subjects below to be able to safely examine microlight aircraft presented to them for the purposes of inspection, within the restrictions of his authorised aircraft type and inspection categories.

### Signature

### Date

### Inspect. No.

## RECOMMENDED AUTHORISATION CATEGORIES (Auditor to tick)

| ☐ | A: Flexwing Aircraft |
| ☐ | B: Three Axis Aircraft |
| ☐ | C: Hybrid Aircraft |
| ☐ | D: Powered Parachutes |
| ☐ | E: Two Stroke Engines |
| ☐ | F: Four Stroke Engines |
| ☐ | G: Wooden Structures |
| ☐ | H: All-Metal Structures |
| ☐ | I: Metal Frame/Fabric Covering Structures |
| ☐ | L: Composite Structures |
| ☐ | O: Own a/c Inspection |

## KNOWLEDGE REQUIREMENTS

✓ = satisfactory  
? = gaps evident  
× = unsatisfactory  
/ = not applicable

### Generic Knowledge (verified in context of the categories currently held)

- **Mechanics**: mass, inertia, force, acceleration, stress, strain, tension, compression, torsion, bending
- **Structure**: struts, ties, beam-columns, shells, monocoque, membranes, truss, loads, stiffness
- **Joints**: fixed, sliding, pinned (rotating), welded, fastened (clamping loads), bonded
- **Fasteners**: bolts, screws, rivets, Velcro, zip fasteners,
- **Electrics**: volts, amps, ohms, watts, fuses, switches, rating, batteries, alternators
- **Instrumentation**: Minimum requirement, mounting, tubing, static vents, magnetic influence, EMI
- **Covering**: Fabric & Stitching, Betts/Brooks testing, tactile (feel), UV & chemical degradation (washing)
- **Controls**: Cable runs, guides, tension, pulleys, safety guards, freedom of movement
- **Wire Rope**: Inspection for corrosion, swaging, thimble deformation, strand breakage, slippage
- **Corrosion**: Types of, identification, prevention, significance, electrolytic pairs etc.
- **Locking Devices**: Chemical, mechanical, areas of importance – rotating joints, turnbuckles
- **NDT techniques**: Dye penetrant, magnifying devices, illumination etc.
- **Safety Practices**: Ignition isolation, propeller hazards, fuel handling, fire extinguisher types
- **Weight & Balance**: Weighing flexwings and 3-axis a/c, CG datum, ZFW, moment calculations, fuel/pax

### BMAA Inspector Authorisation Categories:

- **Category A**: Flexwing Aircraft – weightshift, billowshift, lufflines, washout rod, trim, APS, bungees
- **Category B**: Three-Axis Aircraft – aileron, rudder, elevator, flaps, trim
- **Category C**: Hybrid Aircraft – wing warping, hybrid controls
- **Category D**: Powered Parachute (Canopy) – lines, links, connectors, straps, cleats, pulleys, locks etc.
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| Category E: Two-stroke Engines – ignition, fuel, exhaust, gearbox, lubrication, servicing, propeller CoC |
| Category F: Four-stroke Engines – ignition, fuel, exhaust, gearbox, lubrication, servicing, propeller CoC |
| Category G: Wood Structures – material properties, construction & failure mode |
| Category H: All-Metal Structures – material properties, construction & failure mode |
| Category I: Metal Frame/Fabric Covered Structures – material properties, construction and failure modes |
| Category L: Composite Structures – material properties, construction & failure mode |

**BMAA Guidelines, Procedures, Policies & Paperwork**

- **Maintenance:** Replacement by ‘form, fit and function’ with fully interchangeable parts approved by the manufacturer, required vs recommended maintenance, standard commercial sourced parts identical spec and CoC’s.
- **Repairs:** Prior approval by Technical Office, Manufacturer’s letter of no technical objection, role of Type Approval Holder, optional approved mods, fabrication process, strict replacement.
- **Independent Inspections:** After control system rejoins, changes to vital points, modifications or repairs to primary structure, SIGMA Inspection Matrix.
- **Human factors and preparation:** Self fitness check, pre-brief etc.
- **Logbooks:** Engine/Airframe Log Books: recording of data, correct use, servicing, maintenance.
- **Approved Data:** TIL, TADS, HADS, SB, AAN, MPD, MAAN.
- **BMAA Inspection Forms:** AW/001, 002, 003, 004, 005, 006, 007, 026, 028, 040, 046, 053, 057, 068, 071, 076.
- **Standard Minor Modification Forms:** TIL 101, 102, 103, 104, 105, 106, 107, 108, 109, 109a, 110, 111, 112.
- **Aircraft Data:** Pilot’s Operating Handbook, Aircraft Maintenance Manual, Supplements, Placards.
- **Administration:** Registered & Subscribed to Inspector’s internet forum & receiving notifications.
- **Own a copy of/have access to:** A C 43.13-1B: Aircraft Inspection & Repair - Methods, Techniques & Practices.

**Inspection Techniques**

- **Legal issues:** Signature validity, dual signatures, duty of care, criminality, keeping accurate records.
- **Tools:** Bettsometer, Brooksonmeter, torch, magnifying glass, mirror, wire brush, dye penetrant kit, Borescope, etc.
- **Workplace safety:** Lighting, stepladders, electric hazards, etc.

**Recommendations / Remedial Actions (use additional sheet if necessary)**

**Chief Inspector’s comments & decision (BMAA Internal use only)**

- Remedial actions complete
- Restrictions
- Approval
- Rejection

Chief Inspector: ___________________________  Insp. No: ____________  Signature: ____________  Date: ____________

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