IGSA Airworthiness Management Procedures

Document History

Issue 1, Rev.0. October 19th, 2018

Note: This document replaces the previous “Airworthiness Briefing Note”.

The IGSA airworthiness system has moved from a structure which has been primarily self-contained to one which is now integrated with EASA / IAA airworthiness requirements and procedures. The IGSA has been issued with Part M Sub-Part G (Continuing Airworthiness Management Organisation) and Sub-Part F (Maintenance Organisation) approvals by the IAA. This document sets out in brief the background and main features of the new system.

1. Part M

Part M is a Europe-wide EU Regulation (2042/2003, Annex 1 and subsequent amendments) theoretically common to all aircraft, (ranging from an Airbus 380 to the humble K8), with the object of ensuring that all aircraft coming under its ambit are maintained by competent personnel working to approved standards within the structure of a competent organisation.

2. Sub-Part G (Continuing Airworthiness Management)

The IGSA Part M Sub-Part G approval authorises the IGSA to manage the continuing airworthiness of those gliders listed in its approval document, including issuing of Airworthiness Review Certificates (ARCs).

CAMOs may choose to work in either a “Controlled” or an “Uncontrolled” environment. We have chosen to work in the uncontrolled environment. This essentially mirrors the traditional IGSA approach to airworthiness. i.e. the aircraft owner is responsible for arranging for the maintenance and continuing airworthiness of his/her aircraft. This is now done in compliance with the recommended practices and procedures provided by the IGSA Sub-Part G organisation.

3. Sub-Part F (Maintenance Organisation)

The IGSA Part M Sub-Part F approval authorises the IGSA to maintain those gliders listed in its authorisation. IGSA Certifying Staff (CS) essentially work under the Sub-Part F approval and are authorised to maintain those gliders listed in the approval document and as listed in their own Personal Authorisation Certificate (PAC).

4. CAME / MOM

The IGSA Continuing Airworthiness Management Exposition / Maintenance Organisation Manual (CAMO/MOM) sets out how the IGSA Sub-Part G and Sub-Part F organisations function.

5. Quality Control

Part M requires that a quality control system be put in place. A Quality Monitor has been appointed who implements the quality system, conducts regular organisational reviews and conducts regular internal audits. This includes random inspections of aircraft and processes, including documentation.
In addition, the IAA conducts random audits from time to time. These audits encompass the internal workings of the sub-part F and sub-part G organisations, as well as audits of individual aircraft (also known as an ACAM).

6. Documentation

Before a glider can fly legally in the Republic of Ireland, certain documents must exist to verify that:

- the glider type is approved in Ireland or by EASA,
- the individual glider conforms with its Type Certificate Data Sheet (TCDS),
- all the relevant information is available
- the glider has been maintained by personnel qualified, appropriately experienced, and currently approved to do so,
- the information used to maintain the aircraft is the up to date and available and,
- the glider is in fact fit to fly.

The primary purpose of these documents is simply to communicate the airworthiness status of any particular glider from one organisation or person to another.

This paperwork cannot be avoided; however, if its purpose is understood and if it is used properly, it provides a powerful system for ensuring that a particular glider is fit for flight.

The owner should ensure that maintenance documentation is stored in a dedicated folder, sub-divided into logical sections. A lever arch file is recommended.

7. Certificate of Registration

This document records the existence of the glider and identifies who holds the Certificate of Registration. The Certificate of Registration holder is the person(s) or organisation who is responsible for the airworthiness of the glider. The CoR holder fulfils this responsibility by ensuring that all the necessary maintenance is properly performed and recorded.

8. Type Approval

The Certificate of Type Approval is the document which certifies that a particular glider type has been approved for use within the Republic of Ireland. To qualify for award of an EASA Certificate of Airworthiness, a glider must either hold an EASA Type Certificate or an EASA approved Type Certificate. The Type Certificate will be based upon the information contained in the Type Certificate Data Sheet (TCDS).

Gliders which do not possess either of the above may be granted a Permit. This effectively means that the glider will be authorised to fly within the State and will be controlled by the National Authorised Authority (the IAA).

9. Certificate of Airworthiness

This document certifies that an individual glider complies with the original Type Certificate.

The Certificate of Airworthiness is issued by the IAA and is non-expiring.

The Certificate of Airworthiness is validated annually by issue of an Airworthiness Review Certificate. This Certificate is issued by an ARO (Airworthiness Review Officer) subsequent to a satisfactory review of the aircraft and its maintenance documentation.

The Certificate of Airworthiness / ARC do not attest to the day-to-day detailed airworthiness of a particular glider; this is provided for by means of the Daily Inspection, recorded in the glider DI book.

The Certificate of Airworthiness and associated Airworthiness Review Certificate must be carried on board the glider on a cross-country flight. Otherwise they may be stored with the maintenance records, with copies carried on board the aircraft.

10. ARC Review

The Certificate of Airworthiness is validated annually by means of an Airworthiness Review. The Airworthiness Review essentially acts to maintain the validity of the Certificate of Airworthiness. The ARC review will entail a detailed review of all relevant aircraft documentation, including the log-book, and a physical survey of the aircraft. A successful Airworthiness Review results in the issue of an Airworthiness Review Certificate, valid for twelve months from the date of the expiry of the previous ARC if the review takes place within ninety days of the expiry date, otherwise the ARC will valid for twelve months from the date of the review.

The owner should complete a Form 211 Work Order, or the work order sheet contained in the Form 200 or 202 as appropriate and forward it to the Sub-Part G Manager, requesting an ARC review, and include a copy of the following:

- Form 211 Work Order Form
- Form 200 Glider Annual Maintenance Workpack and any associated documentation
- Form 201 Glider Annual Maintenance Checklist, DOA Approved checklist or MIP Checklist
- Form 202 Glider Maintenance Worksheet (if applicable)
- Form 203 Glider Maintenance Worksheet (if applicable)
- Form 208 (Weight & Balance Report), if applicable
- Any relevant calibration certificates, Form 1s, Release Notes, etc.
- Insurance Cert
- Aircraft log-book
- The aircraft maintenance Programme (MPLA[G] or SDMP as appropriate)
- Completed & signed PARCL (Programme Annual Review Check List), for those sailplanes maintained in accordance with an MPLA(G)

The glider may only be flown if it possesses:

- a valid CofA **and**
- a valid ARC **and**
- a valid CRS **and**

- a valid insurance certificate

and is within its annual maintenance period, no time expired equipment, AD or SB falls due and neither annual maintenance period nor its ARC has expired.

The MPLA/G specifies the allowed variation on the annual maintenance period; this is normally one month. Extensions of up to one month in the annual maintenance period can be authorised by the owner for EASA gliders or for Permit Gliders. It should be noted that no variation is allowed for Airworthiness Directives.

11. ARC Scheduling

An application for ARC renewal may be forwarded to the IGSA within 90 days of the due date. Due allowance should be made for application processing and any holiday periods etc. which may influence turnaround time. It is wise to submit an application at least 4 weeks before the due date. The revalidated ARC will normally be dated to commence from the date of the review but will be valid until the anniversary of the expiry date of the current ARC (if carried out within the 90-day period) or 12 months if the current ARC has expired. The owner may request the validity to start from the date of the review; it this case there will no refund of the unused validity period. The existing ARC, even if it has unexpired time, ceases to be valid and must be returned to the IGSA.

12. Airworthiness Directives

Airworthiness Directives are issued either by:

- EASA. for all gliders with EASA Type Certificates
- The National Authorised Authority of the State of Manufacture for Permit aircraft

They may be either one-off or recurring. Most manufacturers maintain an on-line database of all AD's affecting their aircraft – owners should keep a watching brief on this. An automatic email notification service is usually available.
EASA maintain an online database of Airworthiness Directives available here:
https://ad.easa.europa.eu/
EASA also provide access to an emailing facility whereby any Airworthiness Directives of interest are automatically forwarded by email.
An ongoing list, updated fortnightly, of EASA AD's along with all AD's issued prior to 2004 is maintained and stored in the IGSA cabinet. The owner is responsible for ensuring that all ADs are complied with at all times and are also double-checked at the annual maintenance / inspection. Compliance with all relevant ADs needs to be captured annually on the Form 200 as part of the annual maintenance, as well as in the aircraft log-book.

13. Maintenance

It is the responsibility of the Registered Owner to ensure that all maintenance which is required to maintain the glider in an airworthy condition does take place at the appropriate time (including actions required by any Airworthiness Directives or Service Bulletins which may be issued affecting the glider).

Glider maintenance is carried out in accordance with the IGSA Continuing Airworthiness Maintenance Exposition (CAME), the IGSA Maintenance Operations Manual (MOM) the Maintenance Procedures for Light Aircraft/Gliders (MPLA/G) or a Self Declared Maintenance Programme (SDMP) as appropriate and the manufacturer's Flight/Maintenance Manual. All maintenance data and documentation used in the maintenance of a glider must be the latest version available.

Each individual glider has its own bespoke maintenance programme (either an MPLA/G or SDMP) developed for it. To be valid, an MPLA/G must be authorised individually by the IAA and incorporate an IAA Approval. In order to be valid, an SDMP needs to have a declaration forwarded to the IAA and a Flight Manual Approval Cert supplied by the IAA.

All maintenance (including Pilot-Owner maintenance) must be recorded and certified, both in individual worksheets as appropriate with a reference added in, the glider log-book.

Maintenance can be either scheduled or non-scheduled.

Scheduled maintenance (usually, but not always, annual) must be certified by IGSA Certifying Staff, usually by means of Forms 200, 201, 202 and/or 203. These are used to record the details of the maintenance work carried out and to certify that the work has been carried out correctly. The Sub-Part F manager will issue a reference number that is to be used be certifying staff on all documentation relating to the maintenance.

Scheduled maintenance is normally scheduled annually. This twelve-monthly period may, or may not, be coincident with the ARC period. In any case, the ARC lapses if the annual maintenance does not take place within twelve months of the previous maintenance activity. unless an extension has been granted. The certificate of release to service (CRS) is valid for twelve months if the scheduled maintenance takes place within thirty days of the expiry date, otherwise it is twelve months from the date of the CRS.

Non-scheduled maintenance must be certified by IGSA certifying staff and recorded in the log book. The pilot-owner may carry maintenance tasks as specified in Appendix 1 and this maintenance must be recorded in the log book.

The owner should retain the following in the glider maintenance file:

- ARC Certificate
- IGSA Form 112 ARC Review
- IGSA Form 200 Glider Annual Maintenance Workpack
- IGSA Form 201/DOA checklist/MIP checklist
- IGSA Form 202 Glider Maintenance Worksheet
- IGSA Form 203 Non-Scheduled Glider Maintenance
- IGSA Form 208 Weight and Balance Worksheet
- IGSA Form 211 Work Order
- Instrument Calibration Sheets
- EASA Form 1s
- Certificates of Conformity
- Release Certificates
- Maintenance Programme

The glider may require a check flight subsequent to any particular maintenance activity. It must be made clear to the owner if a check flight is required.

14. Maintenance File

The owner maintains a Maintenance File for his aircraft. This file contains the **master** copy of all maintenance documents and will include the masters of the following documents :

- ARC Certificate
- IGSA Form 112 ARC Review
- IGSA Form 200 Glider Annual Maintenance Workpack
- IGSA Form 201/DOA checklist/MIP checklist
- IGSA Form 202 Glider Maintenance Worksheet
- IGSA Form 203 Non-Scheduled Glider Maintenance
- IGSA Form 208 Weight and Balance Worksheet
- IGSA Form 211 Work Order
- Instrument Calibration Sheets
- EASA Form 1s
- Certificates of Conformity
- Release Certificates
- Maintenance Programme

etc.

i.e. the Maintenance File is the primary repository for all the maintenance documentation for the aircraft. Clearly it should be neat, tidy and well ordered.

The IGSA and the Certifying Staff will require a copy of the relevant documentation.

15. Lifed Items

A number of items in gliders are life limited (e.g. the airframe itself, cable release hooks, engines, propellors, some harnesses) - some are limited by a maximum number of allowed cycles, some by the max. no. of hour's usage allowed, some by a combination of both. Owners need to monitor these items as applicable to their glider and take appropriate action in good time. Lifed items are listed in the approved Maintenance Programme (MPLA/G or SDMP).

16. Instruments

Some instruments, in particular those specified in the Type Certificate Data Sheet (TCDS), (typically the altimeter and ASI) require calibration at regular intervals. We have an approved avionics engineer who can do this and provide a check certificate.

17. Approved Equipment

Any new equipment fitted to a glider (whether it be a new instrument or fabric used to repair a tear or whatever) must not be used unless it has been released by means of an EASA Form 1

or a Certificate of Conformity. This does not apply to non-required instruments such as varios, flight computers, loggers etc but does apply to radios or transponders.

Any new equipment or equipment returned after repair will have a Form 1 or Certificate of Conformity associated with it. The equipment and associated documentation needs to be logged in to the IGSA s/p F store and issued with an IGSA storage reference number. A goods inwards and outwards register is maintained in the IGSA stores for this purpose. When appropriate, the equipment is booked out of stores for installation on the glider involved.

18. Pilot-Owner Maintenance

The Pilot-owner can perform limited maintenance as laid down in the aircraft MPLA/G or SDMP.

All pilot-owner maintenance must be recorded in the aircraft log-book and be signed by the Pilot-owner. Any uncertainty regarding what a pilot-owner is or is not allowed to do should be referred to a member of IGSA Certifying Staff.

The Pilot-Owner(s) must be specifically named in the SDMP or MPLA(G).

For further details, refer to Appendix 1 Pilot Owner Maintenance

19. Log-Book

The glider log-book should contain a record of all flights and all maintenance work performed on the glider (scheduled or otherwise), with reference to worksheets or workpacks as appropriate. A separate file (the aircraft maintenance file) should be used to hold the documents and forms.

All Airworthiness Directives must be listed and signed off in the log-book.

The new IAA glider logbook contains a supplement in Part A – section 2.5. This contains the EASA Part M CRS wording, as applicable, for the release under Subpart F and for release under pilot-owner maintenance. Where the respective Subpart F authorisation or Pilot-owner licence number is used, this is deemed to refer to the applicable CRS release wording in Section 2.5. The basis for the 2.5 supplement is to ensure that the correct wording is in force for the respective Sub-part F or pilot-owner maintenance and to eliminate the need to continually write the respective CRS wording.

All relevant maintenance entries shall be certified by a pilot-owner or duly authorised aircraft engineer with a signature and Subpart F authorisation number or the pilot licence number in column 7.

Particulars of inspections and of maintenance checks required by the maintenance schedule and of overhauls, repairs and replacements will be entered in Part A of the logbook and reference will be made to the approved maintenance schedule and authority for any repairs.

Where replacements are made, the following will be given: serial number ON and OFF, reason for replacement, details of Release Note, Form 1, or equivalent document.
Where the particulars of the work done are so bulky as to render it inconvenient to enter them in the space provided in the log book, these particulars shall be entered in a separate maintenance record (i.e. a workpack) and shall be numbered for identification purposes, certified in the same manner as required for the relevant entry in the log book, and retained in safe custody for as long as the relevant log book is required. The reference number of such record shall be inserted in the log book together with a brief description of the work to which it relates.

20. IGSA Forms

Each worksheet/workpack should be allocated a unique file reference identifier by the Sub-Part F Manager.

This identifier should take the following form: 123/ABC/20100101/AB where:

- the first three digits are the form number,
- the second set is the glider registration,
- the third set is the date and
- the last set is the inspector initials

E.g. 200/GLA/20100225/CS would be the identifier for the Form 200 for EI-GLA issued on the 25th February 2010 by Ciaran Sinclair

Form 112 ARC Review Form

Used by the ARO officer when issuing an ARC.

Form 200 Annual Maintenance Workpack

IGSA Form 200 encompasses the Work Order Form, AD Listing (newly issued and recurrent only), the list of lifed items, range of controls measurements, insurance details and the CRS (Certificate of Release to Service). For aircraft maintained under an SDMP, it may also include a MIP (a checklist tailored to the requirements of each specific aircraft) as an attachment
This form is available on the IGSA website at: http://www.igsa.ie/airworthiness/forms/

Form 201 Glider Annual Maintenance Checklist

Form 201 is the equivalent of the old 267 Form and acts as an annual maintenance activity checklist. It may consist of a generic IGSA checklist or may be an extract from the aircraft maintenance manual.
This form is available on the IGSA website at: http://www.igsa.ie/airworthiness/forms/

Form 202 Glider Maintenance Worksheet

Form 202 is used to record and certify (including any duplicate inspections which may be required) details of all maintenance work which takes place on a glider that is not part of the scheduled maintenance list.
This form is available on the IGSA website at: http://www.igsa.ie/airworthiness/forms/

Form 203 Glider Non-Scheduled Maintenance Worksheet

This workpack is used for non-scheduled maintenance
This form is available on the IGSA website at: http://www.igsa.ie/airworthiness/forms/

Form 208 Weight & Balance Report

Used to record aircraft weight and balance measurements and calculations. Note that the latest version includes provision for weighing the wings separately and calculating limits based on max weight of non-flying parts. The spreadsheet calculates the maximum cockpit weight based on the lowest of either max all-up weight or max weight of non-flying parts or manufacturer's limitation. Use of max weight of non-flying parts applies to all but the oldest gliders. The maintenance manual will specify the limiting weights.

This form is available on the IGSA website at: http://www.igsa.ie/airworthiness/forms/

Form 211 – Work Order Form

Form 211 is used by an owner to request either an Annual Maintenance or an ARC review.
This form is available on the IGSA website at: http://www.igsa.ie/airworthiness/forms/

Form 220 – Programme Annual Review Check List

Form 220 is used by the owner, who is essentially responsible for the maintenance of his aircraft, to confirm that he/she has reviewed the MPLA(G) and has approved it. This in theory should be done upon the anniversary of the MPLA(G) but in practice takes place co-incident with the Annual Maintenance and should be forwarded to the Inspector along with the signed Work Order Form.

21. How to register a glider

Typically, a glider will have been imported from abroad, where it will have been on the local National Register of Civil Aircraft. The previous owner will have completed the local documentary process required to remove the glider form the local register. As part of this process, the previous owner will have notified the local NAA of the intended destination State of the aircraft and of the contact details of the purchaser. The local NAA will then pass this information onto the IAA registration department.

Once the ownership transfer takes place, contact the IAA registration department and let them know of the intended new arrival. They may be in a position to allocate a registration number to the new arrival.

Download and complete the IAA "Application for Aircraft Registration or Change in Aircraft Ownership Form AWSD.F.300A" from:

https://www.iaa.ie/general-aviation/airworthiness-application-forms

The new registration letters must be in conformance with the following SI (Statutory Instrument):

https://www.iaa.ie/docs/default-source/publications/legislation/statutory-instruments-(orders)/irish-aviation-authority-(nationality-and-registration-of-aircraft)-order-2015.pdf?sfvrsn=ecb70df3_4

A fire proof plate with the newly allocated registration letters stamped thereon must be fitted to the cockpit internal wall.

Photographs of the newly applied registration letters (underneath the port wing and on each side of the fuselage) and of the fireproof plate should accompany the application.

If fitted with a (8.33 KHz spacing) radio, apply to Comreg for a licence for this using:

https://www.comreg.ie/media/2016/04/ComReg0944-R4.pdf

Once it arrives, the aircraft will need to be inspected and weighed.

The process is:

- Download and complete Form 211 from the IGSA website at http://www.igsa.ie/airworthiness/forms/
- Forward this to the Sub-Part F Manager who will arrange for the work to be carried out
- Complete the IAA F.104B and F.104C in conjunction with the allocated CS member and Airworthiness Review officer.
- Then forward all required documentation to the IAA.

Form AWSD F.104B

Form AWSD F.104b is an application for the issue of a Certificate of Airworthiness (CofA) and initial Airworthiness Review Certificate (ARC) and is completed by the owner.
This document is used in the case of a new glider entering the system where a CofA is not already in place and needs to be granted.

Form AWSD F.104C

Form AWSD F.104C is an ARC/Permit to Fly Recommendation for ELA1 Aircraft. In our case, this document is mainly complied by the IGSA s/p F/G organisation which carries out the necessary maintenance work and inspects the aircraft and associated documentation and issues a recommendation on the basis of that inspection

22. IGSA Certifying Staff

Each Certifying Staff member (formerly known as Inspectors) will be issued with a PAC by the IGSA Accountable Manager. The Accountable Manager heads the IGSA Subpart-F and G organisations and is responsible for the overall operation. The PAC will detail which glider types the certifying staff is authorised to work on and, in some cases, whether he/she is authorised to work on some elements only of the aircraft (e.g. engine, propeller). PAC application form 216 must be completed by certifying staff. PAC certs on form 217 will be issued after an interview with the PAC board.

23. Personal Authorisation Certificate

Each inspector will be issued with a PAC by the IGSA Accountable Manager. The Accountable Manager heads the IGSA Subpart-F and G organisations and is responsible for the overall operation. The PAC will detail which glider types the inspector is authorised to work on and, in some cases, whether he/she is authorised to work on some elements only of the aircraft (e.g. engine, propeller). PAC application form 217 must be completed by the inspector. PAC certs on form 216 will be issued after an interview with the PAC board and is valid for 24 months.

24. Certifying Staff Currency Requirements

In order to retain the privileges of the authorisation, certifying staff will be required to have been involved in six months' work on gliders in any consecutive twenty-four months. Work is understood to comprise any actual work on gliders, relevant seminar or meeting attendance, dealing with owner queries, investigating any possible defects, reviewing any sailplane documentation, audit involvement, meetings, related admin, etc.
Certifying Staff should keep an individual record of all work performed on Gliders.

25. Appendix 1 Pilot Owner Maintenance

Abbreviations:

- AMC: Acceptable Means of Compliance
- N/A: not applicable
- SP: sailplane
- SSPS: self-sustained powered sailplane
- SLPS/TM: self-launching powered sailplane/touring motorglider

AMC to Appendix VIII 'Limited Pilot Owner Maintenance'

1. The lists below specify items that can be expected to be completed by an owner who holds a current and valid pilot licence for the aircraft type involved and who meets the competence and responsibility requirements of Appendix VIII to Part-M.
2. The list of tasks may not address in a detailed manner the specific needs of the various aircraft categories. In addition, the development of technology and the nature of the operations undertaken by these categories of aircraft cannot be always adequately considered.
3. Therefore, the following lists are considered to be the representative scope of limited Pilot-owner maintenance referred to in M.A.803 and Appendix VIII:
— Part A applies to aeroplanes;
— Part B applies to rotorcraft;
— Part C applies to sailplanes and powered sailplanes;
— Part D applies to balloons and airships.

ATA	Area	Task	SP	SSPS	SLPS/ TM
08	Weighing	Recalculation – Small changes of the Trim plan without needing a reweighing	Yes	Yes	Yes
09	Towing	Tow release unit and tow cable retraction mechanism – Cleaning, lubrication and tow cable replacement (including weak links).	Yes	Yes	Yes
		Mirror - Installation and replacement of mirrors	Yes	Yes	Yes
11	Placards	Placards, Markings – Installation and renewal of placards and markings required by AFM and AMM	Yes	Yes	Yes
12	Servicing	Lubrication – Those items not requiring a disassembly other than of non-structural items such as cover plates, cowlings and fairings	Yes	Yes	Yes
20	Standard. Practices	Safety Wiring – Replacement of defective safety wiring or cotter keys, excluding those in engine controls, transmission controls and flight control systems	Yes	Yes	Yes
		Simple Non-Structural Standard Fasteners – Replacement and adjustment, excluding the replacement of receptacles and anchor nuts requiring riveting.	Yes	Yes	Yes
		Free play – Measurement of the free play in the control system	Yes	Yes	Yes

		and the wing to fuselage attachment including minor adjustments by simple means provided by the manufacturer			
21	Air Conditioning	Replacement of flexible hoses and ducts	Yes	Yes	Yes
23	Communication	Communication devices – Remove and replace self contained, instrument panel mount communication devices with quick disconnect connectors	Yes	Yes	Yes
24	Electrical power	Batteries and solar panels – Replacement and servicing	Yes	Yes	Yes
		Wiring - Installation of simple wiring connections to the existing wiring for additional non-required equipment such as electric variometers, flight computers but excluding required communication, navigation systems and engine wiring	Yes	Yes	Yes
		Wiring – Repairing broken circuits in landing light and any other wiring for non-required equipment such as electrical variometers or flight computers, excluding ignition system, primary generating system and required communication, navigation system and primary flight instruments	Yes	Yes	Yes
		Bonding – Replacement of broken bonding cable	Yes	Yes	Yes
		Switches – This includes soldering and crimping of nonrequired equipment such as electrical variometers or flight computers, but excluding ignition system, primary generating system and required communication, navigation system and primary flight instruments	Yes	Yes	Yes
		Fuses – Replacement with the correct rating	Yes	Yes	Yes
25	Equipment	Safety Belts – Replacement of safety belt and harnesses	Yes	Yes	Yes
		Seats – Replacement of seats or seat parts not involving disassembly of any primary structure or control system.	Yes	Yes	Yes
		Non-essential instruments and/or equipment - Replacement of self-contained, instrument panel mount equipment with quick disconnect connectors	Yes	Yes	Yes
		Removal and installation of non-required instruments and/or equipment	Yes	Yes	Yes
		Wing Wiper, Cleaner – Servicing, removal and reinstallation not involving disassembly or modification of any primary structure, control	Yes	Yes	Yes
		Static Probes – Removal or reinstallation of variometer static and total energy compensation probes	Yes	Yes	Yes
		Oxygen System – Replacement of portable oxygen bottles and systems in approved mountings, excluding permanently installed bottles and systems.	Yes	Yes	Yes
		Air Brake Chute – Installation and servicing	Yes	Yes	Yes
		ELT – Removal / Reinstallation	Yes	Yes	Yes
26	Fire Protection	Fire Warning – Replacement of sensors and indicators	N/A	Yes	Yes
27	Flight Control	Gap Seals – Installation and servicing if it does not require complete flight control removal.	Yes	Yes	Yes
		Control System – Measurement of the control system travel without removing the control surfaces	Yes	Yes	Yes
		Control Cables – Simple optical Inspection for Condition	Yes	Yes	Yes
		Gas Dampener – Replacement of Gas Dampener in the Control or Air Brake System.	Yes	Yes	Yes
		Co-pilot stick and pedals - Removal or reinstallation where provision for quick disconnect is made by design.	Yes	Yes	Yes
28	Fuel System	Fuel lines – Replacement of prefabricated fuel lines fitted with	N/A	Yes	NO

		self-sealing couplings.			
		Fuel Filter – Cleaning and/or replacement	N/A	Yes	Yes
31	Instruments	Instrument Panel– Removal and reinstallation provided this is a design feature with quick disconnect, excluding IFR operations	Yes	Yes	Yes
		Pitot Static System – Simple sense and leak check	Yes	Yes	Yes
		Instrument Panel vibration damper/shock absorbers replacement.	Yes	Yes	Yes
		Drainage – Drainage of water drainage traps or filters within the Pitot static system	Yes	Yes	Yes
		Flexible tubes - Replacement of damaged tubes	Yes	Yes	Yes
32	Landing Gear	Wheels – Removal, replacement and servicing, including replacement of wheel bearings and lubrication	Yes	Yes	Yes
		Servicing – Replenishment of hydraulic fluid	Yes	Yes	Yes
		Shock Absorber – Replacement or servicing of elastic cords or rubber dampers	Yes	Yes	Yes
		Shock Struts – Replenishment of oil or air	Yes	Yes	Yes
		Landing gear doors - Removal or reinstallation and repair including operating straps	Yes	Yes	Yes
		Skis – Changing between wheel and ski landing gear	Yes	Yes	Yes
		Skids – Removal or reinstallation and servicing of main, wing and tail skids	Yes	Yes	Yes
		Wheels fairing (spats) – Removal and reinstallation	Yes	Yes	Yes
		Mechanical brakes – Adjustment of simple cable operated systems	Yes	Yes	Yes
		Brake – Replacement of worn brake pads	Yes	Yes	Yes
		Springs – Replacement of worn or aged springs	Yes	Yes	Yes
		Gear Warning –Removal or reinstallation of simple gear warning systems	Yes	Yes	Yes
33	Lights	Lights – Replacement of internal and external bulbs, filaments, reflectors and lenses	N/A	N/A	Yes
34	Navigation	Software – Updating self contained, instrument panel mount navigational software databases, excluding automatic flight control systems and transponders and including update of non-required instruments/equipment	Yes	Yes	Yes
		Navigation devices – Removal and replacement of self contained instrument panel mount navigation devices with quick disconnect connectors, excluding automatic flight control systems, transponders, primary flight control system	Yes	Yes	Yes
		Self contained data logger – Installation, data restoration.	Yes	Yes	Yes
51	Structure	Fabric patches – Simple patches extending over not more than one rib and not requiring rib stitching or removal of structural parts or control surfaces	Yes	Yes	Yes
		Protective Coating – Applying preservative material or coatings where no disassembly of any primary structure or operating system is involved	Yes	Yes	Yes
		Surface finish - Minor restoration of paint or coating where the underlying primary structure is not affected. This includes application of signal coatings or thin foils as well as Registration markings.	Yes	Yes	Yes
		Fairings – Simple repairs to non-structural fairings and cover plates which do not change the contour.	Yes	Yes	Yes
52	Doors	Doors - Removal and reinstallation	Yes	Yes	Yes
53	Fuselage	Upholstery, furnishing – Minor repairs which do not require disassembly of primary structure or operating systems, or	Yes	Yes	Yes

		interfere with control systems			
56	Windows	Side Windows - Replacement if it does not require riveting, bonding or any special process	Yes	Yes	Yes
		Canopies - Removal and re-fitment	Yes	Yes	Yes
		Gas dampener – Replacement of Canopy Gas dampener	Yes	Yes	Yes
57	Wings	Wing Skids – Removal or reinstallation and service of lower wing skids or wing roller including spring assembly.	Yes	Yes	Yes
		Water ballast – Removal or reinstallation of flexible tanks	Yes	Yes	Yes
		Turbulator and sealing tapes – Removal or reinstallation of approved sealing tapes and turbulator tapes	Yes	Yes	Yes
61	Propeller	Propeller Spinner – Removal and reinstallation	N/A	Yes	Yes
71	Powerplant installation	Removal or installation of Powerplant unit including engine and propeller	N/A	Yes	Yes
		Cowling - Removal and reinstallation not requiring removal of propeller or disconnection of flight controls	N/A	Yes	Yes
		Induction System – Inspection and replacement of induction air filter.	N/A	Yes	Yes
72	Engine	Chip detectors – Removal, checking and reinstallation provided the chip detector is a self-sealing type and not electrically indicated	N/A	Yes	Yes
73	Engine fuel	Strainer or Filter elements – Cleaning and/or replacement Fuel - Mixing of required oil into	N/A	Yes	Yes
74	Ignition	Spark Plugs – Removal, cleaning, adjustment and reinstallation	N/A	Yes	Yes
75	Cooling	Coolant – Replenishment of coolant fluid	N/A	Yes	Yes
76	Engine Controls	Controls – Minor adjustments of non-flight or propulsion controls whose operation is not critical for any phase of flight	N/A	Yes	NO
77	Engine Indicating	Engine Indicating – Removal and replacement of self-contained instrument panel mount indicators that have quick-release connectors and do not employ direct reading connections	N/A	Yes	Yes
79	Oil System	Strainer or Filter elements – Cleaning and/or replacement	N/A	Yes	Yes
		Oil – Changing or replenishment of engine oil and gearbox fluid	N/A	Yes	Yes