CIVIL AVIATION DIRECTORATE Airworthiness Inspectorate

Matla Transport Centre, Pantar Road, Lija, LJA2021, Malta Tel: +356 2555 5601Fax: +356 2555 5634, <u>civil.aviation@transport</u>. www.transport.gov.mt



Information and Advisory Notice No. 03B

Issue No: 2 Dated: 21 October 2020

Aircraft Maintenance Programme Development and Approval for Aircraft subject to Regulation (EU) 1321/2014 Part-ML

Contents Page

1.	Revision highlights	. 3
2.	Introduction	. 4
3.	AMP Development Responsibilities	. 5
4.	Definitions	. 6
5.	Development of the AMP	. 7
6.	Approval of the AMP	. 8
7.	Deviations from the DAH's instructions	. 9
8.	Alternative Maintenance Actions	10
9.	Pilot Owner Tasks	11
10.	Transitioning from the MIP to and AMP based on DAH data	11
11.	Review of the AMP	11
12.	Mediation of deficiencies highlighted during the AMP review	12
13.	TM Civil Aviation Directorate additional requirements and policy	12
14.	APPENDIX I – Checklist for annual review	15
15.	APPENDIX II – Extract from EASA SIB 2011-15	16

1. Revision highlights

Date	Revision	Comments
20/04/2020	Issue 1	Initial issue of IAN 03B to cover Regulation (EU) 1321/2014 Annex Vb (Part-ML)
21/10/2020	Issue 2	Paragraph 8 amended to include risk-based approach in the evaluation of an alternative to maintenance tasks issued or recommended by the DAH, as per AMC1 ML.A.302(c).

2. Introduction

This **Information and Advisory Notice** is issued to identify the Transport Malta Civil Aviation Directorate (TM CAD) interpretation of the requirements of Regulation (EU) 1321/2014 ANNEX Vb (PART-ML) point ML.A.302 and the respective means of compliance and to provide some further clarifications and guidance in complying with the established National Requirements listed in table 1 to this IAN.

These interpretations, clarifications and instructions shall be referred to by Owners and CAMO or CAO responsible for managing the continuing airworthiness of the aircraft which are subject to EASA Part ML requirements and are not listed in the Air Operator Certificate of an air carrier licensed in accordance with Regulation (EC) No 1008/2008.

These include:

- a) Aeroplanes with a maximum take-off mass (MTOM) of 2730 kg or less
- b) Rotorcraft with an MTOM of 1200 kg or less, certified for a maximum of up to 4 occupants.
- c) Other ELA2 aircraft.

NOTE:

Where aircraft referred to in points (a), (b) and (c) are listed in the air operator certificate of an air carrier licensed in accordance with Regulation (EC) No 1008/2008, the requirements of Annex I (Part-M) shall apply.

Other-than-complex motor-powered aircraft used for:

- (a) Commercial specialised operations;
- (b) Commercial training organisations (ATOs) and commercial DTOs referred to in Article 10a of Regulation (EU) No 1178/2011;

also fall under Part-M.A.302.

3. AMP Development Responsibilities

As per ML.A.201(a) of Regulation (EU) No 2020/270 the owner of the aircraft shall be responsible for the continuing airworthiness of the aircraft and shall ensure that no flight takes place unless the maintenance of the aircraft is performed in accordance with the Aircraft Maintenance Programme ('AMP') specified in point ML.A.302.

For aircraft falling under **Part-ML** operated by:

- commercial Approved Training Organisations ('ATO'); and
- commercial Declared Training Organisations ('DTO') referred to in Article 10a of Regulation (EU) No 1178/2011; or
- not operated in accordance with Annex VII to Regulation (EU) No 965/2012 (Part-NCO); or
- operated in accordance with Subpart-ADD of Annex II (Part-BOP) to Regulation (EU) 2018/395 or Subpart-DEC of Annex II (Part-SAO) to Regulation (EU) 2018/1976,

the operator shall be approved as a CAMO or as a CAO for the management of the continuing airworthiness of its aircraft in accordance with Annex Vc (Part-CAMO), Subpart G of Annex I (Part-M) or Annex Vd (Part-CAO), or contract such an organization using the contract set out in Appendix I to Part-ML (Annex Vb).

For the development of an AMP for aircraft subject to **Part-ML**, the owner of the aircraft may contract the development of the AMP to an organisation approved as a CAMO or CAO in accordance with Annex Vc (Part-CAMO), Subpart G of Annex I (Part-M) or Annex Vd (Part-CAO). In that case, the contracted organization shall assume responsibility.

The AMP development may also be contracted to another organisation under the control of the operator's CAMO.

For aircraft under Part-ML operated in accordance with Annex VII to Regulation (EU) No 965/2012 (Part-NCO), the owner of the aircraft may contract the tasks associated with continuing airworthiness management to an organisation approved as a CAMO or CAO in accordance with Annex Vc (Part-CAMO), Subpart G of Annex I (Part-M) or Annex Vd (Part-CAO). In that case, the contracted organisation shall assume responsibility for the AMP under a **Part-ML Appendix I** agreement.

If the owner of an aircraft for aircraft subject to **Part-ML**, does not contract such an organization, the owner is responsible for the development of the AMP, and this can be declared in accordance point (c)(7) of point ML.A.302.

For those aircraft falling under Part-ML managed by a Part-CAO or CAMO, Aircraft Maintenance Programmes based on Part-ML are no longer approved by TM-CAD. The AMP and any subsequent amendments thereto shall be, alternatively:

- declared by the owner in accordance with point (c)(7) of point ML.A.302, where the continuing airworthiness of the aircraft is not managed by a CAMO or CAO;
- approved by the CAMO or CAO responsible for managing the continuing airworthiness of the aircraft.

The owner declaring the AMP in accordance with point (c)(7) of ML.A.302 or the organization approving the AMP shall keep the AMP updated in accordance with point 10 of this IAN.

4. Definitions

'AR' means Airworthiness Review

'ARS' means Airworthiness Review Staff

'CAO' means Combined Airworthiness Organisation

'CAMO' means Continuing Airworthiness Management Organisation

'DAH' Design Approval Holder, refers to the holder of a type certificate (TC), restricted type certificate, supplemental type certificate (ST), European Technical Standard Order (ETSO) authorisation, repair or change to the type design.

'ELA1 aircraft' means the following manned European Light Aircraft:

1. an aeroplane with a Maximum Take-off Mass (MTOM) of 1200 kg or less that is not classified as complex motor-powered aircraft;

2. a sailplane or powered sailplane of 1200 kg MTOM or less;

3. a balloon with a maximum design lifting gas or hot air volume of not more than 3400 m 3 for hot air balloons, 1050 m 3 for gas balloons, 300 m 3 for tethered gas balloons.

'ELA2 aircraft' means the following manned European Light Aircraft:

1. an aeroplane with a Maximum Take-off Mass (MTOM) of 2000 kg or less that is not classified as complex motor-powered aircraft;

2. a sailplane or powered sailplane of 2000 kg MTOM or less;

3. a balloon;

4. a Very Light Rotorcraft with a MTOM not exceeding 600 kg which is of a simple design, designed to carry not more than two occupants, not powered by turbine and/or rocket engines; restricted to VFR day operations."

'Maintenance Programme' is intended to include scheduled maintenance tasks, the associated procedures and standard maintenance practices.

'**MIP**' means Minimum Inspection Programme published by EASA for aeroplanes of 2730kg MTOM and below, and for ELA2 aircraft other than airships (ELA2 sailplanes, ELA2 powered sailplanes, and ELA2 balloons);

'Owner' means the person responsible for the continuing airworthiness of the aircraft, including, alternatively:

- The registered owner of the aircraft
- The lessee in the case of a leasing contract
- The operator.

'Pilot Owner', is a person qualified in accordance with M.A.803

'TM-CAD' means Transport Malta – Civil Aviation Directorate

5. Development of the AMP

The maintenance programme may take the format of the standard template provided in AMC2 ML.A.302 (EASA Form AMP TM/CAD/0381). The template can be downloaded in word format from the Transport Malta website <u>here</u>. The maintenance programme may include several aircraft registrations as long as the maintenance requirements for each registration are clearly identified.

The AMP can be based on the **Minimum Inspection Programme** published by EASA in **AMC1 ML.A.302(d)**, The MIP should be customised to the aircraft in question. It is not applicable to rotorcraft and airships.

AMPs developed and meeting all the conditions listed in ML.A.302(e) (derogation where declaration by the owner or approval by the management organization is not required), the AMP applicable to the aircraft shall consist of the following:

1. the ICA issued by the DAH;

2. the maintenance recommendations, such as TBO intervals, issued through service bulletins, service letters, and other non-mandatory service information;

3. the mandatory continuing airworthiness information, such as repetitive ADs, the ALS of the ICA and specific maintenance requirements contained in the TCDS. This is further clarified under GM1 ML.A.302(c)(4).

4. the tasks due to specific operational or airspace directives or requirements in relation to particular instruments and equipment.

The below table is a summary of the provisions contained in ML.A.302 in relation to the content of the maintenance programme, its approval and its link with the AR:

	OPTION 1 OPTION 2		
Responsibility for developing the AMP	Contracted CAMO or CAO	Owner (if allowed under ML.A.201(f))	
Approval/declaration of the maintenance programme	Approved by the CAMO or CAO, or none required in case of compliance with ML.A.302(e)Declaration by the owner or nor required in case of compliance w ML.A.302(e)		
Basis for the maintenance programme	MIP (not applicable to rotorcraft and airships) or ICA issued by the DAH		
Deviations from the DAH's ICADeviations from the DAH's instructions are justified. The CAMO/CAO keeps a record of the justifications and provides a copy of them to the ownerDeviations		Deviations do not need to be justified.	
AMP Annual Review	AMP Annual Review In conjunction with the AR, by the AR staff or, if not performed in conjunction with the (e.g. in case of ARC extension), by the CAMO or CAO.		

It should be considered that for some grandfathered aircraft there was the understanding, under their former regulatory system, that all maintenance instructions issued for the aircraft would be complied with by the aircraft owner or operator. Therefore for these aircraft there is no explicit identification of mandatory continuing airworthiness information, since all were and are to be assumed as such.

Aircraft owners declaring AMP should educate themselves, or consult knowledgeable organisations (e.g. DAH, CAMO, CAO) or competent authorities, if in doubt of potential safety impact when disregarding maintenance instructions while defining the AMP for the affected aircraft.

CAMO and CAO should understand the implications of Regulation (EU) 2019/1383 and ensure that the personnel involved in the development and approval of AMP have the proper information, understanding and experience when deviating from the design approval holder ICA in the development of the AMP.

6. Approval of the AMP

AMPs are no longer approved by Transport Malta, and are either declared by the owner or approved by the CAMO or CAO responsible for managing the continuing airworthiness of the aircraft.

The owner declaring the AMP or the organisation approving the AMP in accordance with point ML.A.302 (b)(2) shall keep the AMP updated.

Although there is no requirement for the owner to send a copy of the maintenance programme to the TM CAD, this does not prevent TM CAD from requesting at any time the owner to send information about, or a copy of the AMP.

In addition, a copy of the AMP must be presented to the person or organisation performing the Airworthiness Review.

The content of the owner-declared maintenance programme cannot be challenged up front either by TM-CAD or by the contracted maintenance organisation. This declared maintenance programme is the basis for adequate planning of maintenance, as well as for the ARs and the aircraft continuing airworthiness monitoring (ACAM) inspections in accordance with ML.B.303. Nevertheless, the maintenance programme will be subject to periodic reviews at the occasion of the AR and, in case of discrepancies, linked with deficiencies in the content of the maintenance programme, the owner shall amend the maintenance programme accordingly, as required by ML.A.302(c)(9).

As per ML.A.302(e) a derogation exists whereby a declaration by the owner or an approval by a CAMO or CAO is not required, and an AMP document is not required to be produced when the following conditions are met:

- 1. all the ICA issued by the DAH are being followed without any deviations;
- 2. all maintenance recommendations, such as TBO intervals, issued through service bulletins, service letters, and other non-mandatory service information, are being followed without any deviations;
- 3. there are no additional maintenance tasks to be performed resulting from any of the following:
 - a. specific installed equipment and modifications of the aircraft;
 - b. repairs carried out in the aircraft;
 - c. life-limited components and flight-safety-critical components;
 - d. special operational approvals;
 - e. use of the aircraft and operational environment.
- 4. Pilot-owners are authorised to perform Pilot-owner maintenance.

This derogation is not applicable if the pilot-owner or, in case of jointly-owned aircraft, any of the pilotowners is not authorised to perform Pilot-owner maintenance because this has to be specified in the declared or approved AMP.

7. Deviations from the DAH's instructions

Since the competent authority is not responsible for the content of a declared maintenance programme, the competent authority does not authorise the accomplishment of the scheduled maintenance to deviate from the AMP content (other than the tolerances provided for in ML.A.302(d)(1)). In such cases, deviations do not need to be justified and the owner may declare an amended AMP.

If the AMP is contracted to a management organisation, deviations from the DAH's instructions needs to be justified. AMC1 of ML.A.302(c) provides guidance of this. The CAMO or CAO keeps a record of the justifications and provides a copy of them to the owner.

PERMITTED VARIATIONS TO MAINTENANCE PERIODS

i) Items Controlled by Flying Hours

Period Involved Maximum Variation of the Prescribed Period

All

10%

(ii) Items Controlled by Calendar Time

Period Involved Maximum Variation of the Prescribed Period

6 month check	10% (18 days)
Annual Check	30 days

The tolerances shall be of non cumulative basis, i.e the next compliance time shall be determined from the initial due date.

Conditions

The Annual Check may be anticipated for a maximum period of 30 days however, the interval between annual checks shall not exceed 12 Months. Thus, for example, where the full 30 days is invoked, the following Annual Check would become due 12 months after the completion of the Annual Check which was anticipated. The period by which the Annual Check was anticipated and the date of the next Annual Check shall be recorded in the appropriate log book.

Items Controlled by More Than One Limit. For items controlled by more than one limit, e.g. items controlled by flying hours and calendar time, the more restricted limit shall be applied.

Variations shall be permitted only when the periods prescribed within the AMP cannot be complied with due to circumstances, which could not reasonably have been foreseen by the Operator or by the contracted Maintenance Organisation.

Particulars of every variation so made shall be entered in the appropriate Log Book(s) and also the CAMO records.

The variations permitted do not apply to those components for which an ultimate (scrap) or retirement life has been prescribed (e.g. primary structure, CMR tasks, ALI's, Airworthiness Directive, or components with limited fatigue lives and high energy rotating parts of which containment is not provided).

8. Alternative Maintenance Actions

'Maintenance actions alternative to those referred to in point ML.A.302(c)(2)(b)' refer to when the DAH's ICA are used as the basis for the AMP development and the CAMO, CAO or owner (as applicable), when developing the AMP, decides to deviate from certain of these DAH's instructions, introducing, for example, a less frequent interval or a different task type (inspection instead of check) than the one established by the ICA.

These alternative maintenance actions shall not be less restrictive than those set out in the applicable MIP. This means that the extent of the maintenance to be covered by the deviating task cannot be less than the extent of the corresponding task in the MIP in terms of frequency and task type. GM1 ML.A.302(c)(3) provides examples of alternate maintenance actions.

When evaluating an alternative to a maintenance task issued or recommended by the DAH, such as the extension of TBO intervals, or when considering not to include a task issued or recommended by the DAH, a risk-based approach should be taken, considering aspects such as the operation of the aircraft, type of the aircraft, hours and years in service, maintenance of the aircraft, compensating measures, redundancy of components, etc.

The table below provides more details of aspects that should be considered when conducting the risk assessment.

	Examples		
	HIGHER RISK: commercial operation, commercial flight training		
	MEDIUM RISK: flight training by an association, non-commercial		
	specialized operations (SPO)		
	LOWER RISK: private		
	HIGHER RISK: instrument flight rules (IFR)		
Flight rules	MEDIUM RISK: visual flight rules (VFR) at night		
	LOWER RISK: VFR by day		
	HIGHER RISK: Other than ELA1		
Aircraft weight	MEDIUM RISK: ELA1 other than light sport aeroplanes (LSA), very		
	light aircraft (VLA), sailplanes and powered sailplanes		
	LOWER RISK: LSA, VLA, sailplanes and powered sailplanes		
Who manages the airworthiness of the	HIGHER RISK: owner		
aircraft?	LOWER RISK: CAMO/CAO		
	HIGHER RISK: pilot-owner		
Who maintains the aircraft?	MEDIUM RISK: independent certifying staff		
	LOWER RISK: maintenance organization		
Time in service	HIGHER RISK: very high number of hours or years		
(flight hours years)	MEDIUM RISK: medium number of hours or years		
(inglit hours, years)	LOWER RISK: low number of hours or years		
	HIGHER RISK: less than 50 h per year		
Aircraft utilisation	MEDIUM RISK: around 200 h per year		
	LOWER RISK: more than 400 h per year		
	HIGHER RISK: numerous findings in ACAM or ramp inspections		
ACAM findings	MEDIUM RISK: few findings in ACAM inspections		
	LOWER RISK: rare findings in ACAM inspections		
System redundancy	HIGHER RISK: single-engined aircraft		
(for components such as	I OWER RISK: multi-engined aircraft		
engine/propeller)			
	HIGHER RISK: no supplementary measures		
Supplementary maintenance measures	LOWER RISK: supplementary measures (such as oil analysis, engine		
	data monitoring, borescope inspections, corrosion inspections, etc.)		
	HIGHER RISK: engine failure on a helicopter		
Risk factor of the component failure	MEDIUM RISK: engine failure on an aeroplane		
	LOWER RISK: sailplane, or powered sailplane		

The above information may be useful for CAMOs and CAOs when developing and approving maintenance programmes, and for the airworthiness review staff performing ARs and reviewing the effectiveness of the declared maintenance programme. It may also be useful for the owner in order to take an informed decision before introducing deviations from the DAH's recommendations. Nevertheless, when the owner issues a declaration for the maintenance programme, they don't need to justify such deviations.

9. Pilot-owner tasks

In the case of jointly-owned aircraft, the AMP should list the names of all pilot-owners that are competent and designated to perform pilot-owner maintenance (ref. ML.A.302(c)(6)). As an alternative, the AMP may contain a procedure to ensure how such a list should be managed and kept current.

10. Transitioning from the MIP to AMP based on DAH data

The aircraft should only be maintained according to one maintenance programme at a given point in time. Where an owner wishes to change from one programme to another (e.g. from an AMP based on minimum inspection programme (MIP) to an AMP based on DAH's data), certain additional maintenance may need to be carried out on the aircraft to implement this transition.

11. Review of the AMP

Point ML.A.302(c)(9) requires that the AMP is reviewed on an annual basis. The owner declaring the AMP in accordance with point (b)(1) or the organisation approving the AMP in accordance with point (b)(2) shall keep the AMP updated by reviewing it at least on an annual basis. This can be done during the annual airworthiness review.

During the review, the following should be taken into consideration:

- 1. the results of the maintenance performed during that year, which may reveal that the current maintenance programme is not adequate;
- 2. the results of the AR performed on the aircraft, which may reveal that the current maintenance programme is not adequate;
- revisions introduced on the documents affecting the programme basis, such as the ML.A.302(d) MIP or the DAH's data;
- 4. changes in the aircraft configuration, and type and specificity of operation;
- 5. changes in the list of pilot-owners; and
- 6. applicable mandatory requirements for compliance with Part 21, such as airworthiness directives (ADs), airworthiness limitations, certification maintenance requirements and specific maintenance requirements contained in the type certificate data sheet (TCDS)

When reviewing the effectiveness of the AMP, the AR staff (or the CAMO/CAO staff if the review of the AMP is not performed in conjunction with an AR) may need to review the maintenance carried out during the last 12 months, including unscheduled maintenance. To this end, he or she should receive the records of all the maintenance performed during that year from the owner/CAMO/CAO. When reviewing the results of the maintenance performed during that year and the results of the AR, attention should be paid as to whether the defects found could have been prevented by introducing in the maintenance programme certain DAH's recommendations, which were initially disregarded by the owner, CAMO or CAO.

A sample checklist provided in Appendix 2 of this IAN can be used to document the review.

12. Mediation of deficiencies highlighted during the AMP review

In the case that no agreement is reached between the owner and AR staff about the changes required in the AMP, for a particular aircraft, Transport Malta should be notified, who shall then contact the owner, and request a copy of the maintenance programme. TM-CAD shall then decide which amendment to the AMP is necessary and raise the associated finding (ref. ML.A.302(c)(9)). If necessary, TM-CAD may also react in accordance with ML.B.304. Based on the information received, the reported deficiencies and the identified risks, the competent authority may in addition adapt the ACAM programme accordingly (ref. ML.B.303).

13. TM Civil Aviation Directorate additional requirements and policy

In absence of specific recommendations issued by the TC or STC holder or other equipment manufacturer the maintenance tasks identified in the table 1 below should be used by the owners/operators and CAMO's when developing aircraft maintenance programmes.

Tolerance in line to those defined in point 7 may be applied to the maintenance tasks listed in Table 1.

Maintenance Inspection Programs developed for ELA 1 aircraft not involved in commercial operations shall include Maintenance Tasks listed in Table 1 as applicable.

<u>Terminology</u>

Inspection

A visual check performed externally or internally to detect unsatisfactory conditions/discrepancies using, where necessary, inspection aids (mirrors, torches, magnifying glasses etc.) Surface cleaning and removal of panels, covers and fabric may be required.

Check

Verification of compliance with the instructions specified in the maintenance data.

Operational Check

A test used to determine that a system or component or any function thereof is operating normally. This is usually performed by operating the system or the component on the aircraft either in normal or in test mode.

Functional Check

A detailed examination of a complete system, sub-system or component to determine if operating parameters are within limits of range of movement, rate of flow, temperature, pressure, revolutions per minute, degrees of travel, etc., as specified in the appropriate maintenance data. Parameters are usually measured and recorded. External test equipment is usually used.

Bench test

Functional check of a component off the aircraft using ground testing/laboratory equipment.

Table 1 - Maintenance	tasks and	intervals
-----------------------	-----------	-----------

No	Task	Nature of Maintenance	Interval
1	Lead-acid battery capacity test	Bench test	12 months
2	Nickel-cadmium battery capacity test	Bench Test	12 months
3	Compass swing (Note 1)	Functional check	36 months/ 24 months (Note1)
4	Airspeed Indicator calibration (Note 2)	Calibration	24 months
5	Altimeter calibration (Note 2)	Calibration	24 months
6	Pitot/static system leak check	Functional check/Calibration	24 months
7	Hydrostatic test of pressure vessels (Note 3)	Inspection & bench	60 months
		Inspection & bench	72 months
8	Flexible fuel and oil hoses pressure test.	check	Repeat 36 months
9	Fire extinguisher content by weight	Check	12 months
10	Cabin Carbon Monoxide Detector	Check	12 months
11	First Aid Kit contents	Check	12 months
12	Over/under voltage system warnings. Load sharing.	Operational check	12 months
13	Ground operable circuits, manually operated circuit breakers.	Operational check	12 months
14	ADF receiver (Note 4)	Functional check	12 months
15	ILS receiver (Note 5)	Functional check	12 months
16	VOR receiver (Note 6)	Functional check	12 months
17	Marker (Note 7)	Functional check	12 months
18	DME (Note 8)	Functional check	12 months
19	Transponder (Note 9)	Functional check	12 months
20	Mode S Transponder (Note 13)	Operational check	24 months
21	Weather radar	Operational check	12 months
22	Satellite navigation (GPS)	Operational check	12 months

23	Audio/intercom including emergency operation	Operational check	12 months
24	ELT (Battery and Transmitter overhaul) (Note 10)	ELT Manufacturers' Recommendations Refer to Installation Manuals	
25	Auto pilot/Flight director	Operational check	12 months
26	Instruments and indicators (Note 11)	Inspection & operational check	12 months
27	VHF transceiver (Note 12)	Functional check	36 months
28	Aircraft Weight & Balance	Aircraft weighing	5 years
29	Carefully examine all cable terminal fittings that attach to all turnbuckles for corrosion and/or cracking (Note 14)	Inspection	12 Months

Notes:

- Applies for remote and stand-by magnetic compasses. For aircraft in which magnetic compass is used as means of primary navigation device – 24 months. For aircraft in which magnetic compass is used as means of supplemental navigation device - 36 months. Stand-by magnetic compass – 36 months.
- Calibration in-situ is permitted. Includes stand-by units.
 For further information on Altitude Reporting Equipment and Transponder System Maintenance and inspection practices please refer also to <u>FAA AC 43-6D</u>.
- 3. Including fire extinguisher vessels. Refer to <u>EASA SIB No: 2015-11</u> and vendor recommendations.
- 4. Using stations of known bearing for checking accuracy. Check audio signal on all bands.
- 5. With a field test set, including flag warnings, accuracy, sense, course width and audio.
- 6. With a field test set, including flag warnings, radial resolving, RMI accuracy at 90° intervals.
- 7. With a field test set, including 3-tone operational check, high/low sensitivity.
- 8. With a field test set, including range accuracy, audio.
- 9. With a field test set, including frequency tolerance, side lobe suppression, mode "C".
- 10. Reference to the ELT installation/operations manual from the manufacturers' of the ELT should be made
- 11. Applies to all instruments and indicators. Check for satisfactory condition, mounting, marking and operation (on ground).
- 12. With a field test. Frequency tolerance is to be checked only if recommended by the equipment manufacturer.
- Refer to <u>EASA SIB No 2011-15</u> or US Title 14 CFR Part 43 Appendix F recommendations for ground testing and Appendix I to this IAN. testing.
 This is also appendent to include the MID test described in ML A 202(d)(2(d))

This is also considered to include the MIP task described in ML.A.302(d)(2(d) 14. Refer to EASA SIB No 2019-12 or US SAIB CE-19-13 – recommendations to aeroplane owners,

14. Refer to <u>EASA SIB NO 2019-12</u> of US SAIB CE-19-13 – recommendations to aeropiane owners, pilots, operators and manufacturers of an airworthiness concern regarding the risks of cracking and fracturing of flight control cable terminal attachment fittings connected to turnbuckle barrels on small aeroplanes with mechanical flight control cables

14. APPENDIX I – Checklist for annual review

CHECKLIST FOR THE ANNUAL REVIEW OF THE AMP						
AMP Reference:			Revision:			
Aircraft Registrations Covered:						
Engine Type:						
Propeller Type:						
Programme Ref	Task				Not OK	ок
Block 1	Check details in the	e Aircraft Identification Sec	tion to see if they match the	aircraft.		
Block 2	Check that the app	ropriate boxes are ticked a	accordingly to the AMP in que	estion		
Block 3	Check that the AM statement 'After Re the owner/Manage	P is being reviewed every y eview, No changes Require ment organisation	year, and if no changes are e ed are entered, and the box	effected, the is signed by		
Block 4	Check that the ICA	document references are	up to date and all are listed.			
Block 5	Check that Addition block	nal Maintenance Requirem	ents are all listed for every s	ection in the		
Block 6	See if there are an all are listed in App	y alternate maintenance ta endix C	sks to the DAH's ICAs, and i	f marked Yes		
Block 7	Check if the Pilot C See that it is signed	Owners listed are still currer d and that the license num	nt and not changed. per is still correct			
Block 8 See that the Decla and signed accord		ration by the owner or maningly	agement organisation has b	een checked		
Block 9	See that the Certifi	cation Statement is ticked	and signed accordingly			
Block 10 See that all Appen Appendices are a		dices are ticked and what is ached.	s marked as YES, correspor	nding		
Appendix A	See if the MIP task	s listed are not less restric	tive than that of EASA publis	hed MIP		
Appendix B See that the Addition operation have been Also see that all ar		onal Maintenance requirem en adopted. e listed in accordance with	nents specific to the aircraft a Manufacturer Requirements	and type of		
Appendix C See if there are any maintenance tasks alternate to the DAH's ICA and that they are not less restrictive than the MIP						
Appendix D See if any SBs or r		nandatory SBs have been	adopted and all tasks are lis	ted.Appe		
If the review shows discrepancies on the aircraft linked to deficiencies in the content of the AMP, the AMP shall be amended accordingly. In this case the person performing the review shall inform the TM-CAD if she/he does not agree with the measures amending the AMP taken by the owner, CAMO or CAO. Transport Malta shall decide which amendments to the AMP are necessary, raising the corresponding findings and, if necessary, reacting in accordance with point ML.B.304. If the review shows deficiencies in the AMP, inform the owner. Attached documentary evidence of what discrepancies on the aircraft or deficiencies in the AMP were noted.					all be es not s and, what	
Name:			Signature:			
Date of Review:						

15. APPENDIX II – Extract from EASA SIB 2011-15

Testing for correct functionality should include the following items:

- The Mode S 24-Bit aircraft address
- Altitude reporting including the check of the altitude sensor at adequate intervals from ground to the certified altitude ceiling of the aircraft
- Mode S Elementary Surveillance (ELS) & Downlink Aircraft Parameters (DAPs):
 - Aircraft Identification
 - o Capability Report
 - Pressure Altitude
 - Flight Status
- Mode S Enhances Surveillance (EHS) & Downlink Aircraft Parameters (DAPs)
 - Magnetic Heading
 - Indicated Airspeed
 - o Mach No.
 - o Vertical Rate
 - Roll Angle
 - Track Angle Rate or True Airspeed
 - o True Track Angle
 - Ground Speed
 - Selected Altitude (and Barometric Pressure Setting where appropriate)

Note 1: Care should be taken, not to disturb the operation of ATC or other aircraft when performing any transponder (or ACAS) related tests. Guidance for the ground testing of transponders can be found in Appendix 1 of this SIB.

Note 2: In case the ramp test equipment indicates an error with the transmission of the data as specified above, or indicates any other type of failure (e.g. out of frequency, power etc), the problem should be corrected prior to the next flight.

Note 3; Detailed information on EHS DAP's may be found in EASA AMC 20-13 - Certification of Mode S Transponder Systems for Enhanced Surveillance.