MOZAMBIQUE CIVIL AVIATION TECHNICAL STANDARDS

INSTITUTO DA AVIAÇÃO CIVIL DE MOÇAMBIQUE
MOZAMBIQUE CIVIL AVIATION AUTHORITY

PART 43

AIRCRAFT: GENERAL MAINTENANCE RULES

AUTORIDADE DE AVIAÇÃO CIVIL DE MOÇAMBIQUE

APPROVAL

By Powers granted to the Chairman and CEO of the Instituto de Aviação Civil de Moçambique (IACM) through, n.° 2, Article 15 of Civil Aviation Law n.°5/2016 of 14 of June, this amendment of the Technical Standards (MOZCATS Part 43) is hereby approved and published for implementation, from the day of approval.

Comments and recommendations for revision/amendment action to this publication should be forwarded to the head of Legal Office of Instituto de Aviação Civil de Moçambique.

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Maputo, 05 September 2018

Approved by Board

Captain João Martins De Abreu
The Chairman and Chief Executive Officer

REGISTER OF REVISIONS

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LIST OF EFFECTIVE PAGES

The list of effective pages below will be used to assist in keeping track of revisions and updates to the **Mozambique Civil Aviation Technical Standards (MOZ-CATS) - Part 43 – AIRCRAFT: GENERAL MAINTENANCE RULES.** The list shows the number of the last revision for each page of the Mozambique Civil Aviation Technical Standards. Accordingly, with each revision to the Mozambique Civil Aviation Technical Standards a new list of effective pages will be published and distributed to all Mozambique Civil Aviation Technical Standards holders.

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INTRODUCTION

1. GENERAL

Article 15 (2) of Civil Aviation LAW Nº 5/2016 allow Director General for Civil Aviation Authority to issue technical standards for civil aviation on the matters which are prescribed by regulation.

2. PURPOSE

Document MOZ-CATS-GMR contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of maintenance being performed in any aircraft, aircraft components and parts.

Each reference to a technical standard in this document, is a reference to the corresponding regulation in the Mozambique Civil Aviation Regulations, for example, technical standard 43.04.2 refers to regulation 2 of Subpart 04 of Part 43 of the Regulations.

The abbreviation “CAR” is used throughout this document when referring to any regulation. The abbreviation “TS” refers to any technical standard.

3. SCHEDULES AND NOTES

Guidelines and recommendations in support of any particular technical standard are contained in schedules to, and/or notes inserted throughout the technical standards.

LIST OF TECHNICAL STANDARDS

43.02.4 REPORT OF DEFECTS

1. Occurrences

(a) The air operator of aeroplanes over 5,700 kg and helicopters over 3,175 kg maximum certificated take-off mass, shall transmit information on faults, malfunctions, defects *and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the aircraft* to:

(i) the organization responsible for the type design of that aircraft/engine/propeller,
(ii) the State of Design,
(iii) the organization of Design or Manufacturer of the aircraft/engine/propeller, and
(iv) the organization responsible for the design of the modification, where a continuing airworthiness safety issue is associated with a modification.

(b) Whenever the information sated in (a) above relates to an engine or propeller, such information shall be transmitted to both the organization responsible for engine or propeller type design and the organization responsible for aircraft type design.

(c) The above information on faults, malfunctions, defects and other occurrences shall be also reported to the Authority; and in line with **MOZ-CAR 43.03.4 (2)**, the occurrences to be reported to **the Authority**, includes but not limited to the following:

(i) Fires caused by a system or equipment failure, malfunction, or defect.

(ii) An engine exhaust system failure, malfunction, or defect which causes damage to the engine, adjacent aircraft structure, equipment or components.

(iii) The accumulation or circulation of toxic or noxious gases in the crew compartment or passenger cabin.

(iv) A malfunction, failure or defect of a propeller control system.

(v) A propeller or rotorcraft hub or blade structural failure.

(vi) Flammable fluid leakage in areas where an ignition source normally exists.

(vii) A brake system failure caused by structural or material failure during operation.

(viii) A significant aircraft primary structural defect or failure caused by any autogenous condition (fatigue, understrength, corrosion, etc.).

(ix) Any abnormal vibration or buffeting caused by a structural or system malfunction, defect or failure.

(x) An engine failure.

(xi) Any structural or flight control system malfunction, defect or failure which causes an interference with normal control of the aircraft or which derogates the flying qualities.

(xii) A complete loss of more than one electrical power generating system or hydraulic power system during a given operation of the aircraft.

(xiii) A failure or malfunction of more than one attitude, airspeed or altitude instrument during a given operation of the aircraft.

(d) The notification to the Authority shall be through an electronic format or otherwise as prescribed by the Authority.

43.03.1 PERSONS TO CARRY OUT MAINTENANCE

1. Maintenance to be carried out by pilots

The maintenance that the holder of a pilot license, other than a student pilot license or learner's certificate, with an appropriate rating issued in terms of Part 61 or Part 62 may carry out is limited to the following items on an aeroplane with a maximum certificated mass of 5 700 kg or less or a maximum approved passenger seating configuration of nine seats or a helicopter with a maximum certificated mass of 3 175 kg or less or a maximum approved passenger seating configuration of nine seats:

(1) Emergency/*en route* maintenance comprising of the following, provided that only approved materials, parts and components are used:

(a) changing of tyres and tubes and repairing punctures;

(b) servicing landing gear shock struts with air;

(c) correcting defective locking wire and split pins;

(d) replenishing hydraulic fluid in the hydraulic fluid reservoir;

(e) small simple repairs to fairings, non-structural cover plates and cowlings by means of stop drilling cracks and fitting small patches or reinforcements which will not change contours or interfere with proper airflow;

(f) replacing side windows where such work does not interfere with the primary system;

(g) replacing safety belts;

(h) replacing seats or seat parts where such work does not involve any removal, dismantling or interference with a primary structure system;

(i) replacing pre-fabricated fuel and oil lines, provided that a fuel flow check is carried out in accordance with TS 43.02.6, Section A.2(6) "fuel flow checks";

(j) replacing any electrical bulb, reflector, lens or fuse of navigation and landing lights;

(k) replacing or cleaning spark plugs and setting spark plug gaps;

(l) cleaning fuel and oil strainers;

(m) replacing batteries and checking fluid level and specific gravity;

(n) replacing tail wheels and tail-wheel springs;

(o) changing engine oil;

(p) removing and installing such dual controls as is designed for easy removal and installation;

(q) replacing the following instruments by others of the same type which have such markings as may be indicated in the appropriate owners manual:

(i) airspeed indicator;

(ii) altimeter;

(iii) engine speed indicator for each engine;

(iv) oil pressure gauge for each engine; and

(v) fuel contents gauge.

provided that a pitot static check is carried out in accordance with TS 43.02.7 for subparagraphs (i) and (ii) above;

(2) Whenever it is necessary to carry out maintenance of this nature, the pilot must –

(a) notify the aircraft maintenance organisation or aircraft maintenance engineer normally responsible for the maintenance of the aircraft to assist in –

(i) supplying parts, if required;

(ii) giving technical advice;

(iii) supplying maintenance publications, where required; and

(b) ensure that any maintenance work done, is correctly recorded in the aircraft flight folio, including particulars of –

(i) maintenance publications referred to;

(ii) parts replaced (serial numbers where applicable);

(iii) parts repaired; and

(iv) tests carried out (if applicable).

(3) Entries in the aircraft flight folio must be accompanied by the pilot's signature, licence number and the date of entry.

(4) Unless the pilot is the holder of an aircraft maintenance engineer licence with an appropriate rating, such pilots may on no account sign an aircraft logbook in the column intended for the signature of the holder of an aircraft maintenance engineer licence or aircraft maintenance organisation approval.

43.03.4 MAINTENANCE FOR IFR OPERATIONS

1. Inspections

Whenever an inspection or maintenance is carried out on communication, navigation and surveillance equipment in an aircraft, required for use under IFR, the inspection or maintenance shall include the following items:

(a) Examine the maintenance records for service history and compliance with the applicable maintenance rules.

(b) Inspect and test the bonding of mounting racks and shock mounts for a maximum resistance of 0.05 ohms.

(c) Check the VSWR of the transmission lines and aerials of the following:

(i) VHF Comm;

(ii) HF Comm (T/R to antenna coupler).

Note: VSWR less than 1.5:1 is desirable but must not exceed 3:1.

(d) Inspect and test the ADF sense antenna for insulation resistance.

(e) Ensure antenna coax cable of the proper length.

(f) Inspect and test the HF antenna for integrity and insulation resistance.

(g) Inspect and test the operation of ILS receivers with an approved ramp test set, including –

(i) testing flag warnings for modulation failure, centre line accuracy, sense and course widths;

(ii) testing the audio function; and

(iii) carrying out ± 1° test for freedom of meter movement, sense and course width.

(h) Inspect and test the operation of VOR with an approved ramp test set, including –

(i) testing flag warnings for modulation failure;

(ii) omni-radial resolving, and radio magnetic indicators, accuracy at 30° intervals; and

(iii) testing the audio function.

(i) Inspect and test the operation of marker receiver with an approved ramp test set including–

(i) testing operations of 400, 1 300 and 3 000 Hz tones and associated lamps; and

(ii) where fitted, operation of hi/lo sensitivity.

(j) Inspect and test the operation of DME with an approved ramp test set, including –

(i) testing range accuracy, ground speed reading, if applicable; and

(ii) testing the audio function.

(k) Inspect and test the operation of transponder in accordance with the requirements of this schedule.

(l) Carry out a full functional check of the ground proximity warning system (GPWS), if applicable.

(m) Check all other communication, navigation and surveillance equipment installed on the aircraft, not mentioned above, in accordance with the aircraft manufacturer's or equipment manufacturer's requirements or with any other approved data, to ensure that safety standards are not compromised.

43.03.5 TESTS AND INSPECTIONS

1. Mandatory periodic inspections;

The Mandatory Periodic Inspection referred to in Regulation 43.02.5, is the one presented in TS 43.02.6.

2. Altimeter tests and inspections;

The Altimeter tests and inspections referred to in Regulation 43.02.5, is the one presented in TS 43.02.7.

3. ATC transponder tests and inspections;

The ATC transponder tests and inspections referred to in Regulation 43.02.5, is the one presented in TS 43.02.8.

4. Emergency Locator Tests and inspections.

The Emergency Locator Tests and inspections referred to in Regulation 43.02.5, is the one presented in TS 43.02.9.

43.03.6 MANDATORY PERIODIC INSPECTIONS

The Mandatory Periodic Inspection referred to in Regulation 43.02.6, shall be made in accordance with the procedures outlined in the Annexure A.

43.03.7 ALTIMETER SYSTEMS TESTS AND INSPECTIONS

1. Tests and inspections

The tests and inspections referred to in Regulation 43.02.7 (a) are the following:

(1) ***The pitot static pressure system test to be performed annually***

(a) Ensure freedom from entrapped moisture and restrictions.

(b) Ensure the leakage is within the following established tolerances:

(i) For unpressurised aeroplanes, evacuate the pitot static pressure system to a pressure differential of approximately 1 inch of mercury or to a reading, on the altimeter, 1 000 feet above the aircraft elevation at the time of the test. Without additional application of pressure, the loss of indicated altitude must not exceed 100 feet on the altimeter over a period of 1 minute.

(ii) for pressurised aeroplanes, evacuate the pitot static pressure system until a pressure differential equivalent of the maximum cabin differential for which the aeroplane is type certificated is achieved. Without additional application of pressure, the loss of indicated altitude must not exceed 2 per cent of the equivalent altitude of the maximum cabin differential pressure or 100 feet, whichever is the greater, over a period of 1 minute.

(c) Determine that the pitot head/s and static ports heater/s, if installed, are operative.

(d) Ensure that no alterations or deformations of the airframe surface have been made that would affect the relationship between air pressure in the pitot head/s, static pressure system and true ambient static air pressure for any flight condition.

(2) ***The airspeed indicator(s) and altimeter(s) tests to be performed annually***

(a) When tests are conducted with the temperature substantially different from an ambient temperature of approximately 25 degrees Celsius, allowance must be made for the variation from the specified condition.

(b) Airspeed indicator/s and Altimeter/s tests must be carried out by an appropriately rated aircraft maintenance organisation, approved under Part 145, in accordance with the following:

(i) Airspeed indicators:

(aa) For aircraft flown under IFR, pitot system tests for the airspeed indicator must be tested in accordance with the manufacturer's instructions.

(bb) For aircraft flown under VFR only, pitot system tests for the airspeed indicator must be tested in accordance with the manufacturer's instructions, if available, or otherwise as follows:

- Apply sufficient pressure to an annually calibrated airspeed indicator test box at the pitot head to cause the airspeed indicator to indicate 150 knots, or up to the maximum air speed red line for aircraft that cannot reach 150 knots airspeed.

- After one minute, the leakage should not exceed 10 knots, or 7% of the lower speed tested.

- Should the aircraft's speed indicator not read the same airspeed as the airspeed indicator in the test box, the allowable tolerance to ensure that the aircraft's airspeed indicator is accurate is indicated in table 5 below.

Warning: Do not apply suction to the pitot head.

(ii) Altimeters:

(aa) Scale Error

The altimeter must, with the barometric pressure scale at 1013,25 millibars (1 Hecto Pascal = 1 millibar), be subjected successively to pressures corresponding to the altitude listed in Table 1 up to the maximum normally expected operating altitude of the aircraft in which the altimeter is to be installed. The reduction in pressure must be made at a rate not exceeding 2 000 feet per minute to within approximately 200 feet of the test point. The test point must be approached at a rate compatible with the test equipment. The altimeter must be kept at the pressure corresponding to each test point for at least 1 minute, but not more than 10 minutes, before a reading is taken. The error at all test points must not exceed the tolerances listed in Table 1.

(bb) Hysteresis

The hysteresis test must begin not more than 15 minutes after the altimeter's initial exposure to the pressure corresponding to the upper limit of the scale error tests prescribed in subparagraph (2)(a) and the hysteresis test must commence while the altimeter is at this pressure. Pressure must be increased at a rate simulating a descent in altitude at the rate of 500 to 2 000 feet per minute until within 3 000 feet of the first test point (50 percent of maximum altitude). The test point must then be approached at a rate of approximately 3 000 feet per minute. The altimeter must be kept at this pressure for at least 5 minutes, but not more than 15 minutes, before the test reading is taken. After the reading has been taken, the pressure must be increased further, in the same manner as before, until the pressure corresponding to the second test point (40 percent of maximum altitude) is reached. The altimeter must be kept at this pressure for at least 1 minute, but not more than 10 minutes, before the test reading is taken. After the reading has been taken, the pressure must be increased further, in the same manner as before, until atmospheric pressure is reached. The reading of the altimeter

at either of the two test points may not differ by more than the tolerance specified in Table 2 from the reading of the altimeter for the corresponding altitude recorded during the scale error test prescribed in subparagraph (b)(i).

(cc) After effect

Not more than 5 minutes after the completion of the hysteresis test prescribed in subparagraph (b)(ii), the reading of the altimeter, corrected for any change in atmospheric pressure, may not differ from the original atmospheric pressure reading by more than the tolerance specified in Table 2.

(dd) Friction

The altimeter must be subjected to a steady rate of decrease of pressure approximating 750 feet per minute. At each altitude listed in Table 3, the change in reading of the pointers after vibration may not exceed the corresponding tolerance listed in Table 3.

(ee) Case Leak

The leakage of the altimeter case, when the pressure within it corresponds to an altitude of 18 000 feet, may not change the altimeter reading by more than the tolerance shown in Table 2 during an interval of 1 minute.

(ff) Barometric Scale Error

At constant atmospheric pressure, the barometric pressure scale must be set at each of the pressures, falling within its range of adjustment that are listed in Table 4, and must cause the pointer to indicate the equivalent altitude shown in Table 4 with a tolerance of 25 feet.

(iii) Airspeed indicators and altimeters which are of the air data computer type with associated computing systems, or which incorporate air data correction internally, may be tested in a manner and to specifications developed by the manufacturer that are acceptable to IACM .

(3) ***The automatic pressure altitude reporting equipment and ATC transponder system integration test***

(a) Conduct each test in accordance with paragraph (b).

(b) Measure the automatic pressure altitude at the output of the installed ATC transponder when interrogated on Mode C at a sufficient number of test points to ensure that the altitude reporting equipment altimeters and ATC transponders perform their intended functions as installed in the aircraft.

(c) The difference between the automatic reporting output and the altitude displayed at the altimeter may not exceed 125 feet.

(d) All mercury barometers used for the testing of altimeters are to be periodically checked/calibrated as often as deemed necessary by the manufacturer, or every 2 years by ICAO standards, whichever is shorter, or as required by IACM.

Table 1: Scale error

Altitude	Equivalent pressure (millibars)	Tolerance ± (feet)	Altitude	Equivalent Pressure (millibars)	Tolerance ± (feet)
-1 000	1050.36	20	14 000	595.21	100
0	1013.25	20	16 000	549.12	110
500	995.06	20	18 000	505.98	120
1 000	977.15	20	20 000	465.62	130
1 500	959.51	25	22 000	427.89	140
2 000	942.10	30	25 000	376.01	155
3 000	908.10	30	30 000	300.87	180
4 000	875.09	35	35 000	238.43	205
6 000	811.97	40	40 000	187.53	230
8 000	752.61	60	45 000	147.47	255
10 000	696.12	80	50 000	115.98	280
12 000	644.38	90			

Table 2: Test tolerances

Test	Tolerance ± (feet)
Case Leak Test	100
Hysteresis Test First test point (50% of maximum altitude)	75
Second test point (40% of maximum altitude)	75
After effect test	30

Table 3: Friction

Altitude ((feet)	Tolerance ±	Altitude (feet)	Tolerance
1 000	70	20 000	100
2 000	70	25 000	120
3 000	70	30 000	140
5 000	70	35 000	160
10 000	80	40 000	180
15 000	90	50 000	250

Table 4: Pressure altitude

Pressure in Millibars	Altitude (feet)
951.55	– 1 727
965.10	– 1 340
982.03	– 863
998.96	– 392
1013.25	0
1032.82	+ 531
1046.37	+ 893
1049.41	+ 974

Table 5: Airspeed indicator scale tolerance & friction

AIRSPEED INDICATION KNOT / MILES PER HOUR	SCALE ERROR TOLERANCES (KTS / MPH)	FRICTION TOLERANCE (KTS / MPH)
40	± 2,5	± 3
60	± 2,5	± 3
80	± 2,5	± 3
100	± 2,5	± 3
120	± 2,5	± 3
140	± 2,5	± 3
160	+ 2,5 / – 3,5	± 3
180	+ 2,5 / – 3,5	± 3
200	+ 2,5 / – 3,5	± 3
220	+ 2,5 / – 3,5	± 3
250	+ 2,5 / – 3,5	± 3
270	+ 2,5 / – 3,5	± 3
300	+ 3 / – 4	± 3
320	+ 3 / – 4	± 3
350	+ 3 / – 4	± 3
370	+ 3 / – 4	± 3
400	+ 4 / – 5	± 3
430	+ 4 / – 5	± 3
450	+ 4 / – 5	± 3

43.03.8 ATC TRANSPONDER TESTS AND INSPECTIONS

1. Tests and inspections

(1) ***General***

(a) In this technical standard, ATCRBS means air traffic control radio beacon system.

(b) The ATC transponder functional tests must be conducted annually using either a bench check or portable test equipment.

(c) If portable test equipment with appropriate coupling to the aircraft antenna system is used, operate the test equipment for ATCRBS transponders at a nominal rate of 235 interrogations per second to avoid possible ATCRBS interference.

(d) For Mode S, operate the test equipment at a nominal rate of 50 Mode S interrogations per second.

(e) An additional 3 dB loss is allowed to compensate for antenna coupling errors during receiver sensitivity measurements conducted in accordance with paragraph (4) below when using portable test equipment.

(2) ***Radio reply frequency test***

(a) For all classes of ATCRBS transponders, interrogate the transponder and verify that the reply frequency is 1 090 ± 3 MHz.

(b) For classes 1B, 2B and 3B Mode S transponders, interrogate the transponder and verify that the reply frequency is 1 090 ± 3 MHz.

(c) For classes 1B, 2B and 3B Mode transponders that incorporate the optional 1 090 ± 1 MHz reply frequency, interrogate the transponder and verify that the reply frequency is correct.

(d) For classes 1A, 2A, 3A and 4 Mode S transponders, interrogate the transponder and verify that the reply frequency is 1 090 ± 1 MHz.

(3) ***Suppression test***

When Classes 1B, 2B ATCRBS transponders, or classes 1B, 2B and 3B Mode S transponders are interrogated at a rate between 230 and 1 000 Mode 3/A interrogations per second or when Classes 1A and 2A ATCRBS Transponders, or Classes 1, 2A, 3A and 4 Mode S transponders are interrogated at a rate between 230 and 1 200 Mode 3/A interrogations per second .

(a) verify that the transponder does not respond to more than 1 percent of ATCRBS interrogations when the amplitude of P2 pulse is equal to the P1 pulse; and

(b) verify that the transponder replies to at least 90 percent of ATCRBS interrogations when the amplitude of the P2 pulse is 9 dB less than the P1 pulse. If the test is conducted with a radiated test signal, the interrogation rate shall be 235 ± 5 interrogations per second unless a higher rate has been approved for the test equipment used at that location.

(4) ***Receiver sensitivity test***

(a) Verify that, for any class of ATCRBS Transponder, the minimum triggering level of the receiver for the system is - 73 ± 4 dbm, or that for any class of Mode S transponder, the minimum triggering level of the receiver for Mode S format (P6 type) interrogations is - 74 ± 3 dbm by use of a test set –

(i) connected to the antenna end of the transmission line; or

(ii) connected to the antenna terminal of the transponder with a correction for Transmission line loss; or

(iii) utilising radiated signals.

(b) Verify that the difference in Mode 3/A and Mode C receiver sensitivity does not exceed 1 db for either any class of ATCRBS transponder or any class of Mode S transponder.

(5) ***RF peak output power test***

Verify that the transponder RF output power is within the following specifications for the class of transponder using the conditions prescribed in paragraph (4)(a):

(a) for class 1A and 2A ATCRBS transponders, the minimum RF peak output power is at least 21.0 dbw (125 watts);

(b) for class 1B and 2B ATCRBS transponders, the minimum RF peak output power is at least 18.5 dbw (70 watts);

(c) for class 1A, 2A, 3A and 4 and those Class 1B, 2B and 3B Mode S transponders that include the optional high RF peak output power, the minimum RF peak output power is at least 21.0 dbs (125 watts);

(d) for class 1B, 2B and 3B Mode S transponders, the minimum RF peak output power is at least 18.5 dbw (70 watts);

(e) for any class of ATCRBS or any class of Mode S transponders, the maximum RF peak output power does not exceed 27.0 dbw (500 watts).

(6) ***Mode S diversity transmission channel isolation test***

For any class of Mode S transponder that incorporates diversity operation, verify that the RF peak output power transmitted from the selected antenna exceeds the power transmitted from the non-selected antenna by at least 20 db.

(7) ***Mode S address test***

Interrogate the Mode S transponder using the correct address and at least two incorrect addresses and making the interrogations at a nominal rate of 50 interrogations per second and verify that it replies only to its assigned address.

(8) ***Mode S formats test***

Interrogate the Mode S transponder with UF for which it is equipped and verify that the replies are made in the correct format using the surveillance formats UF=4 and 5. Verify that the altitude reported in the replies to UF=4 are the same as that reported in a valid ATCRBS Mode C reply. Verify that the identity reported in the replies to UF=5 are the same as that reported in a valid ATCRBS Mode 3/A reply, if the transponder is so equipped, using the communication formats UF=20, 21 and 24.

(9) ***Mode S all-call interrogations test***

Interrogate the Mode S transponder with the Mode S-only all-call format UF=11, and the ATCRBS/Mode S all-call formats (1,6 microsecond P4 pulse) and verify that the correct address and capability are reported in the replies (downlink format DF=11).

(10) ***ATCRBS-only all-call interrogation test***

Interrogate the Mode S transponder with the ATCRBS-only all-call interrogation (0.8 microsecond P4 pulse) and verify that no reply is generated.

(11) ***Squitter test***

Verify that the Mode S transponder generates a correct squitter approximately once per second.

Note: The tests in paragraphs (6) to (11) inclusive, apply only to Mode S transponders.

43.03.9 EMERGENCY LOCATOR TRANSMITTER TESTS AND INSPECTIONS

1. Tests and inspections

The tests and inspections prescribed in Regulation 43.02.09 are the following:

(1) ***Tests after installation***

After installation, the emergency locator beacon must be tested in accordance with the manufacturer's instructions.

(2) ***Maintenance tests***

(a) Tests shall be conducted only within the first five minutes of the hour and then only for a maximum of three audio sweeps of the transmitter. Outside this time framework, tests must be coordinated with the nearest ATS unit. A VHF receiver tuned to 121,5 MHz should be used to monitor the tests. The unit is tested by placing the ELT switch in the ON position. The emergency tone will be heard when the ELT is operating. Immediately after the test the ELT switch must be returned to the AUTO or OFF position, as required.

(b) If fitted, the ELT remote control should be switched through each mode of operation to determine that the equipment is operating according to the manufacturer's instructions.

(c) With the aircraft's engine/s off and the ELT transmitting, the aural monitor, if fitted, should be heard. If a visual monitor is provided, it should be visible from the pilot's normal seated position.

(d) To ensure that the ELT is not susceptible to inadvertent activation by conducted or radiated interference, tests should be conducted with all avionics equipment powered by the aircraft electrical power-generating system operating. The tests should be carried out with the ELT armed and monitored on 121,5 MHz and include the following steps:

(i) individually operate each item of electrical equipment and each system, except VHF/UHF communication transmitters, and evaluate all reasonable combinations of control settings and operating modes;

(ii) individually operate installed VHF/UHF transmitters on various frequencies over their frequency range;

(iii) repeat the step under (ii) with all electronic equipment operating collectively, evaluating reasonable combinations of control settings and operating modes.

(3) ***Maintenance requirements***

(a) Scheduled maintenance:

At intervals not exceeding twelve months, an installed ELT shall undergo an operational check, including the following items:

(i) ELT and antenna installation security;

(ii) antenna coaxial cable for corrosion, security and slack;

(iii) remote-switch wiring for condition and security;

(iv) battery corrosion;

(v) operation of the controls; and

(vi) placards for legibility.

(b) Batteries are required to be changed, or charged if applicable –

(i) when the transmitter has been in use for more than one cumulative hour;

(ii) when 50% of their useful life, or for rechargeable batteries 50% of their useful life of charge, as established by the transmitter's manufacturer under its approval, has expired: Provided that batteries (such as water-activated batteries), that are essentially unaffected during probable storing intervals, are exempted from this latter requirement; and

(iii) on or before their expiration date.

(c) Manufacturers of ELTs are required to mark the expiration date of the battery on the outside of the transmitter. If a battery is replaced, the date stamped on the replacement battery serves as the new expiration date and must be marked on the outside of the ELT.

(d) At two-yearly intervals, the ELT must be removed for bench testing in accordance with the manufacturer's instructions. Such tests should include the impact switch operation and the transmitter output. Testing should only be conducted in a screened room, with the transmitter connected to a dummy load to limit radiation.

(4) ***Temporary removal of ELT***

43.03.11 NON DESTRUCTIVE TESTING

1. Personnel Qualifications Standards

(1) NDT qualification levels 1, 2 and 3

(a) *Level 1*

Reference to NDT Level 1 staff means such staff should be able, using written instructions and guidance as necessary from NDT level 2 or 3 staff to –

(i) set up and calibrate the equipment;

(ii) perform the specific NDT;

(iii) interpret and evaluate for acceptance or rejection only in the case where the written instructions contain interpretative criteria; and

(iv) report on the results.

(b) *Level 2*

Reference to NDT Level 2 staff means such staff should be able to –

(i) assume NDT technical responsibility for an NDT organisation or section within a Part 145 approved organisation;

(ii) carry out the level 1 duties without the limitations of paragraph (1)(a)(iii);

(iii) understand the NDT standards and specifications and be able to translate them into practical NDT instructions, adapted to the actual working conditions;

(iv) choose the technique for the NDT method to be used;

(v) interpret and evaluate results according to applicable standards and specifications;

(vi) prepare written instructions;

(vii) supervise all level 1 duties;

(viii) organise and report the results of NDT;

(ix) compile and certify a Certificate Relating to Maintenance (CRM) after satisfactory testing has been carried out; and furthermore –

(x) be thoroughly familiar with the scope and limitation of the NDT method;

(xi) have a basic knowledge of product technology.

(c) *Level 3*

Reference to NDT Level 3 staff means such staff should be able to –

(i) establish and organise methods, techniques, written instructions and procedures;

(ii) interpret standards, specifications and procedures;

(iii) assist in establishing NDT methods to be used, including acceptance and rejection criteria;

(iv) audit any Part 145 approved organisation to ensure it meets the required NDT standards;

(v) train and examine NDT Level 1 and 2 qualified staff; and furthermore –

(vi) should have sufficient knowledge in all NDT methods associated with the overall NDT responsibility and recognise the appropriate use thereof.

(d) *Standards*

(i) NDT Level 1, 2 and 3 standards are detailed in specification NAS-410 or its equivalent.

(ii) Other acceptable standards include:

- EN 473
- ISO 9712
- ATA 105
- PCN/GEN/92
- any approved by IACM .

(e) *Training Authorities*

The training authorities that are qualified to train NDT *personnel* to NAS-410 Level 3 are:

(i) the British Authority of NDT;

(ii) the American Society for NDT;
(iii) any other international organisation which holds equivalent standards to (i) and (ii) above.

Note: "NAS" stands for 'National Aerospace Standard' as issued by the US Aerospace Industries Association.

2. NDT testing standard practices

(1) The non-destructive testing standard practices acceptable to IACM are:

(a) Magnetic Particle Inspection: the manufacturer's instructions and specification ASTM-E-1444 or its equivalent;

(b) Fluoresant Penetrant Inspection: the manufacturer's instructions and specification ASTM-E-1417 or its equivalent;

(c) Radiographic Inspection: the manufacturer's instructions and specification ASTM-E-1742 or its equivalent;

(d) Eddy Current Inspection: the manufacturer's instructions or ADs, SBs, SLs and SIs;

(e) Ultra Sonic Inspection: the manufacturer's instructions or ADs, SBs, SLs and SIs.

43.03.15 RECORDING OF MAJOR REPAIRS AND MODIFICATIONS

1. Manner of recording overhaul

The manner in which overhauls, repairs, processes and modifications related to a major repair or overhaul of an aircraft part or component shall be recorded in the applicable aircraft, engine or propeller logbook or on a certificate of release to service as detailed in Form Moz-43-03

2. Processing

Copies of the recorded entries, referred to in section 1 above, shall be forwarded to IACM within fourteen days from the completion date of the maintenance in question.

43.03.17 TEMPORARY AND PERMANENT REPAIRS AFTER ACCIDENTS OR INCIDENTS

1. Requirements

The following procedures must be followed whenever temporary or permanent repairs become necessary after an accident or incident, irrespective of the extent of the damage to a Class I product:

(1) Once it has been established that the aircraft must be repaired after an accident, the owner or operator of the aircraft must supply IACM with the following:

(a) the aircraft's nationality and registration marks and its location;

(b) the extent of the reported damage;

(c) a copy of all proposed repairs obtained from the AMO, AME or approved repair facility concerned prior to commencing the repairs; and

(d) a detailed schedule of all the repairs to be performed by the AMO, AME or approved repair facility.

(2) When all the repairs have been completed the owner or operator shall advise IACM accordingly and arrange for an inspection by an airworthiness inspector or an approved person.

(3) The owner or operator of an aircraft may arrange for an AMO, AME or an approved repair facility to act on his or her behalf and recover and return the aircraft to service. In this case he or she shall ensure that IACM is advised of his or her arrangement with the AMO, AME or approved repair facility. The AMO, AME or approved repair facility shall comply with the contents of paragraphs (1) and (2) in addition to the requirements prescribed in paragraph (4).

(4) The aircraft maintenance organisation (AMO), approved repair facility, or aircraft maintenance engineer (AME) concerned must –

(a) submit to IACM –

(i) the name(s) of valid type-rated AMEs who will be responsible for the carrying out of the repairs;

(ii) a detailed description of the manner in which the repairs are to be effected; and

(iii) a detailed specification of all the repairs to be made in order to fly the aircraft safely to a base where it can be permanently repaired;

(b) certify the temporary or permanent repairs in the appropriate logbook(s) or flight folio, and forward copies of such certification or Certificates Relating to

Maintenance of an Aircraft to IACM ;

(c) ensure that only an appropriately licensed and rated person, as prescribed in Regulation 43.03.7, certifies the duplicate inspection on all controls when temporary repairs are made to an aircraft;

(d) supply the area airworthiness inspector with copies of the documentation, referred to in paragraph (a);

(e) after certifying the aircraft as safe for flight, obtain from IACM an authority to fly the aircraft (which authority is valid for flight within the borders of Mozambique); and

(f) advise IACM in writing when the flight has been completed.

(5) Those responsible for temporary repairs shall ensure that such repairs are carried out in accordance with standard aviation practices or in a reasonable manner.

43.03.18 AIRCRAFT COMPASS REQUIREMENTS

1. Compass swing requirements

(1) All compasses fitted to Mozambican registered aircraft must be swung as follows:

(a) On installation.

(b) At 12 monthly intervals thereafter: Provided that where other independent direction-indicating systems are in use, the interval may be extended to 24 months. In such a case, the compass(es) shall be checked during each flight against such directing-indicating system. Should deviation exceed 5º, the compass shall be swung.

Note: Whilst under the most favourable conditions an annual check is sufficient, it is recommended that owners of aircraft carry out a check swing every six months.

(c) Before a newly registered aircraft is placed into service in the country.

(d) Immediately after material or equipment that may effect the compass is installed, removed or replaced.

(e) After an aircraft has been struck by lightning.

(f) After each engine change, except where it has been established that non-compliance with this requirement will not affect the compass readings. IACM must be advised accordingly.

(g) In the case of “cargo only” aircraft, whenever cargo which is likely to affect the compass reading is carried. In such cases a check must be made on the cardinal headings and headings to be flown and a temporary deviation card installed. The temporary card must be replaced when such cargo is unloaded.

(h) In the case of any primary compass, the compass swing shall be carried out with all common electrical equipment “ON”.

(i) In the case of any stand-by compass, the compass swing shall be carried out with all electrical equipment “OFF”.

2. Deviation cards

(1) A deviation card must be installed on or in close proximity to each compass or, for remote-reading compasses, the main indicator or repeaters and must contain the following information:

(a) The readings at intervals not greater than 45 degrees.

(b) Whether the compass was swung with electrical equipment switched on or off as applicable. The space marked A as shown on the examples of the deviation cards referred to in subparagraph (f) below, may be used for this purpose.

Note: Under certain conditions radio contact must be maintained with one aeronautical station at all times and if the radio receiver affects the compass, it will be necessary to install a card which will indicate the readings with such receiver switched on.

(c) The signature and licence number of the person responsible for the swing and the date it was carried out.

(d) After a magnetic compass has been compensated the reading must be such that the residual deviation in level flight does not exceed 5 degrees on any heading.

(e) Remote-reading compasses must be adjusted to obtain minimum deviations, but where the construction of the compasses is such that all deviation can be adjusted for, no deviation card will be necessary.

(f) The compass deviation card must be completed in a manner similar to the examples shown below:

Aircraft:				**Electrical equipment ON/OFF ***				
FOR	000	045	090	135	180	225	270	315
STEER	001	046	090	134	179	225	272	316

Aircraft:		**Electrical equipment ON/OFF ***	
FOR	**STEER**	**FOR**	**STEER**
000	001	180	179
045	046	225	225
090	090	270	272
135	134	315	316

* delete as applicable.

(g) Deviation cards must be placed in holders provided for this purpose.

3. Logbook entries

The date on which the compass was swung must be entered in the airframe logbook and certified by an appropriately licensed and rated aircraft maintenance engineer, or the holder of a commercial pilot or airline transport pilot licence.

4. Compass swing areas and equipment

(1) Before any compass is swung it must be established that the swinging area is free from unwanted magnetic effects and that the landing compass is serviceable.

(2) Where the landing compass is replaced by a permanent base it must be borne in mind that the magnetic north on the base is not a fixed point but is a point which moves due to local magnetic variations. The magnetic bearings of the compass base must therefore be checked at periods not exceeding 4 years.

5. Qualifying experience for compensation of compasses

(1) In terms of MOZ-CATS-AMEL, applicants for the issue or addition to a licence under Category “X” (Compasses) shall have had recent general practical experience satisfactory to IACM .

(2) In the pursuance of this technical standard the minimum practical experience acceptable to IACM shall consist of the satisfactory carrying out of the compensation in aircraft, including the compilation of the final deviation cards, of a least three compasses of the type on which the applicant desires to be licensed. Such experience shall have been gained during the six months immediately preceding the application for the issue of or addition to a licence.

(3) Compensation of compasses for the required practical experience is to be done under the supervision of the holders of appropriately rated aircraft maintenance engineers, commercial pilots or airline transport pilot licences.

(4) Application for the issue of or addition to a licence under Category “X” for the compensation of compasses in aircraft must be accompanied by certificates from the persons supervising the compensations done for the required practical experience. Such certificates must indicate whether or not the compensations, including the compilation of the final deviation card, were satisfactorily carried out and also indicate the dates and aircraft registrations on which the compensations were made.

43.03.3 CERTIFYING AFTER INSPECTION

1. Statement

The statement to be entered in the appropriate logbook or other maintenance record approved by IACM, as prescribed in Regulation 43.03.3, is the following:

(1) ***After a progressive inspection:***

"I certify that Phase _____ of the progressive inspection programme of aircraft _____(description)_____ was performed in accordance with its progressive inspection programme and in accordance with the Civil Aviation Regulations and is fit for release to service. A list of discrepancies and non-airworthy items dated _____(date)_____ has been submitted to the aircraft owner or operator and the Civil Aviation Authority responsible for continuous airworthiness records." or

(2) ***After any other inspection:***

"I certify that _____(description)_____ has been inspected in accordance _____(identify inspection)_____ inspection and in accordance with the Civil Aviation Regulations and is fit for release to service."

43.03.4 CERTIFYING AFTER MAINTENANCE

1. Statement

The statement to be entered in the appropriate logbook or other maintenance record approved by IACM, as prescribed in Regulation 43.03.4, is the following:

"The work recorded above has been carried out in accordance with the Civil Aviation Regulations and in respect of that work the aircraft is fit for release to service.
Signature: _____
Licence / authorisation number: _____
Date of entry: _____"

2. Form of certificate of release to service

The forms referred to in Regulation 43.03.4, in which the release to service of an aircraft or aircraft component is certified, are the Form Moz-43-01 and Moz-43-02.

43.03.5 DISCREPANCIES

1. Statement

The statement to be entered in the appropriate logbook or flight folio, as prescribed in Regulation 43.03.5, is the following:

(1) ***After a progressive inspection:***

"I certify that Phase _____ of the progressive inspection programme of aircraft _____(description)_____ was performed in accordance with its progressive inspection programme and is not released to service. A list of discrepancies and non-airworthy items dated _____(date)_____ has been submitted to the aircraft owner or operator and the Civil Aviation Authority responsible for continuous airworthiness records.";

Or

(2) ***After any other inspection:***

"I certify that aircraft _____(description)_____ has been inspected in accordance with a _____(identify inspection)_____ inspection and is not released to service. A list of discrepancies and non-airworthy items dated _____(date)_____ has been submitted to the aircraft owner or operator."

43.04.1 CERTIFYING REVIEW

1. Statement

The statement referred to in 43.04.1 (a) is as follows:

"I hereby certify that a review of maintenance has been carried out and that the requirements of Part 91 (General Operating and Flight Rules) and Part 43 (General Maintenance Rules) of the Civil Aviation Regulations have been complied with."

ANNEXURE A

This Technical Standard comprises the following Sections and Parts:

Section A: General

1. General Instructions
2. Inspections
3. Associated Documents

Section B: Maintenance Schedule for Aeroplanes with an MCM of 5 700 kg or less

Section C: Maintenance Schedule for Helicopters with an MCM of 3 175 kg or less

Section D: Maintenance Schedule for Aeroplanes with an MCM in excess of 5 700 kg and Maintenance Schedule for Helicopters with an MCM in excess of 3 175 kg

Part 1. Approval and General Instructions

1. Approval
2. Abbreviations
3. Definitions
4. General instructions
5. Scheduled and unscheduled maintenance inspections
6. Overhaul or substitution
7. Mandatory modification and special inspections
8. Certificates of release to service
9. Avionics, Instrumentation and Electrical
10. Amendments
11. Aircraft inspection report
12. Duplicate inspections
13. Rectification of unsatisfactory items
14. Associated documents

SECTION A: GENERAL

1. General instructions

(1) Unless IACM has granted written exemption from compliance with any of the requirements contained in its maintenance schedule, no aircraft may be flown unless it is airworthy and all the mandatory maintenance required by its maintenance schedule and by the manufacturer has been carried out when due and has been certified by an appropriately rated licence holder, persons authorised in terms of Part 145, or such other person approved by IACM .

(2) The onus for ensuring that an aircraft is kept airworthy rests on the registered owner or operator of the aircraft. Maintenance schedules are prepared to assist him or her in ensuring that, as far as possible in the light of available information and experience, the aircraft is maintained in an airworthy condition by scheduling the required maintenance through a programme of inspections and overhauls based on the intended operational usage of the aircraft. Such programme may be calendar-hours-flown or cycles-based.

(3) The maintenance requirements contained in an aircraft's maintenance schedule constitute the minimum requirements considered necessary for the satisfactory maintenance of the aircraft to which the schedule applies. However, in the performing of maintenance on an individual aircraft, due regard must be given to its age, type of operations, climatic and housing conditions and any other factors which may affect the airworthiness of such an aircraft. Consequently, a maintenance schedule must not be construed as absolving the owner, the licensed aircraft maintenance engineer or the approved aircraft maintenance organisation from ensuring that any additional maintenance found to be necessary or as required by IACM is carried out.

(4) Nothing in a maintenance schedule is to be construed as relieving the pilot-in-command of an aircraft from his or her responsibility regarding flight preparation as prescribed in Regulation 91.02.7. It is the duty and responsibility of the pilot-in-command to ensure that unusual occurrences, defects or suspected faults, coming to his or her notice during operations and which affect or may affect the serviceability and safety of the aircraft, are recorded in the aircraft's flight folio as and when they occur and are reported to the appropriate maintenance personnel for investigation or rectification. Any defects shall be cleared prior to further flight. When away from base, instructions regarding rectification and certification must be sought and recorded. All rectification away from base must be entered and certified in the aircraft's flight folio and transferred in the appropriate logbook(s) within 48 hours after the aircraft returns to base.

(5) Maintenance required to be carried out in accordance with the provisions of a maintenance schedule must be accomplished under such working conditions and with the use of such tools, equipment, test apparatus and technical information as will ensure completion to standards acceptable to IACM. Where the use of special equipment or test apparatus is recommended by the manufacturer of the products involved, such equipment or apparatus, or an acceptable approved equivalent method is to be used. Whenever the tools, equipment or test apparatus referred to in this paragraph are used, it must be ensured that they are in good working order and condition and that the person using them is familiar with their use. Precision measuring tools, equipment, test apparatus and items such as gauges and indicators must be checked annually or as often as deemed necessary by the manufacturer or as required by IACM. Such equipment shall be checked for accuracy and correct calibration. Where the security or tightness of nuts, unions and

other fasteners is required to be checked, such checking must be done with the aid of the appropriate calibrated tools, where required, and to approved standards.

(6) Maintenance away from base may only be performed at an approved AMO or at a facility approved by IACM where equipment, test facilities and spares for the type of maintenance to be undertaken are available. All the necessary manuals and catalogues for the particular aircraft shall be available. Prior to the commencement of such maintenance, the AMO or facility shall advise IACM of its intention to carry out the maintenance and supply the following information:

(a) Aircraft registration.

(b) Name of the organisation to carry out the maintenance, and approvals held.

(c) Location where the intended maintenance is to be performed.

(d) Type of maintenance to be carried out.

(e) Name and licence or approval number(s) of the person(s) responsible for the maintenance.

(7) When mandatory inspections are to be carried out away from base, the Accountable Manager referred to in Part 145 shall indicate what tools, spares and documentation have to be on hand to satisfactorily carry out the work on the aircraft.

Note: When an aircraft maintenance organisation holds only one set of tools or manuals, and these tools or manuals are sent away to the facility where the above referred-to away-from-base maintenance is to be performed, the relevant privileges granted to the organisation may not be exercised at its approved main base of operation until such time as the tools and necessary manuals have been returned.

(8) Failure to comply with any applicable mandatory requirement or part of a maintenance schedule invalidates the validity of the aircraft's certificate of airworthiness unless exemption has been obtained from IACM in terms of Part 11 of the CAR.

(9) The applicable aircraft logbooks must be available when scheduled maintenance is carried out. Should the aircraft logbooks not be available for perusal and completion, the aircraft may not be released to service.

2. Inspections

(1) Types of inspections
Inspections consist of the following:

(a) Inspections as recommended by the manufacturer.

(b) Mandatory periodic inspections.

(c) Progressive inspections.

(d) Block inspections.

(e) Other inspections.

(2) Recommended inspections

The inspections referred to in paragraph (1)(a) are recommended. However, when the contents of the recommended inspection indicate that the airworthiness of the aircraft may be affected, they must be complied with in respect of aircraft utilised in commercial air transport operations, and in the case of other aircraft whenever so directed by IACM.

(3) Mandatory Inspections

(a) The inspections referred to in paragraph (1) (b) and (c) must be accomplished in order to validate or revalidate the Certificate of Airworthiness –

(i) on all aircraft imported into Mozambique for the purpose of obtaining a certificate of registration before such aircraft may be put into service;

(ii) on new aircraft built in Mozambique;

(iii) when an aircraft has sustained damage;

(iv) at any time before the next routine inspection is due, should circumstances warrant such action: thus more than once annually or at frequencies less than 100 hours of flight time, should circumstances so dictate.

(b) Mandatory Periodic Inspections (MPI)

(i) A mandatory periodic inspection must be carried out at 100-hours of flight time intervals since the last MPI or within a 12-month period, whichever comes first. (This means that if an aircraft is operated for less than 100 hours of flight time per annum, it will undergo an MPI once within a 12-month period regardless of hours flown.)

(ii) In carrying out an MPI, the following requirements must be observed:

(aa) No MPI may be attempted without the use of an individualised check-list conforming in all essential respects to the manufacturer's requirements, and supplemented by the requirements addressed in Sections B or C, as applicable. Such check-list may be one compiled by the aircraft manufacturer, provided it is sufficiently comprehensive to cover the complete aircraft and installed equipment. The check-list, used during any inspection, must be retained by the certifying licence holder for the appropriate period as prescribed in the CAR.

(bb) All relevant logbooks must be on hand during an MPI.

(cc) Before commencing an inspection, the relevant areas must be exposed to assess the condition of the areas under inspection.

(dd) Serviceability of the aircraft must be determined by a thorough inspection in accordance with the manufacturer's recommendations

and standard inspection practices and procedures.

(ee) It must be ascertained that the requirements of all mandatory repairs, modifications and special inspections have been met and that the mandatory replacement of components and parts has been carried out.

(ff) An aircraft inspection report Moz 43-04 (“Aeroplanes”) or Moz-43-05 (‘Helicopters’) must be completed and together with a copy of the certificate of release to service of an aircraft (Form Moz-43-01) forwarded to IACM within 48 hours after completion of the MPI.

(iii) No extension is to be granted in respect of calendar times. Thus: an aircraft operating on an annual limit may not be flown after the 12-month period of validity has lapsed. In such a case a special flight permit is to be requested from IACM to fly the aircraft to a base where the required inspection can be carried out.

(c) Progressive inspections

(i) An owner or operator may request permission from IACM to introduce a system of progressive inspections to replace the 100-hours mandatory periodic inspection. Such programme of progressive inspections must have been extracted from approved data and ensure that the work required by the mandatory periodic inspection is spread over the approved intervals between successive inspections. The owner or operator must obtain written approval from IACM for approval to maintain the aircraft on such a particular programme. Full details of the manner in which he or she proposes to implement the programme, together with all relevant data to substantiate the request, must be accompany the request.

(ii) Inspections on aircraft that are on an approved progressive inspection program must be carried out at the intervals prescribed by such programme, provided that, if the programme has not been completed within a 12 months period, the aircraft shall undergo the remainder of its progressive inspection programme before it is being released to service. (This means that the aircraft shall complete its progressive inspection programme always within a 12-months period, if not in a lesser period.)

(iii) An aircraft inspection report form Moz-43-04 “Aeroplanes” or Moz-43-05 “Helicopters” must be completed and forwarded annually on the anniversary of the date on which the programme commenced, together with a copy of the certificate of release to service (Moz-43-01) to IACM .

(iv) The provisions of paragraph (b) shall apply *mutatis mutandis*.

(4) Block inspections

(a) Aeroplanes with a maximum certificated mass in excess of 5 700 kg, and helicopters with a maximum certificated mass in excess of 3 700 kg, may be inspected and maintained in accordance with an approved maintenance schedule divided in blocks.

(b) Where the maintenance schedule shows only the items to be inspected at each check, without detailing for what aspect or condition these items are to be inspected, the user of the maintenance schedule shall compile check sheets from approved data, which sheets shall indicate in detail the inspection requirements.

(c) Scheduled and unscheduled maintenance inspections shall be carried out in accordance with the provisions of Section C.

(5) Other inspections

(a) Duplicate inspection

A duplicate inspection of all control systems must be carried out after the initial assembly and at any time the systems are disturbed in any way. The purpose of the duplicate inspection is to verify that the manufacturer's specifications and requirements have been met in detail.

An initial inspection of the control system must be made and certified immediately after the maintenance is completed. A duplicate inspection of the controls being worked on must be made by a person referred to in Regulation 43.03.1 prior to further flight. See also Regulation 43.03.7 "Duplicate Inspection of Controls".

(b) Non-scheduled maintenance inspections

(i) During operations an aircraft may be subject to -

(aa) hard/overweight landings;

(bb) operations outside the normal flight envelope e.g. - exceeding placarded speed for flaps or landing gear, exceeding aircraft design speeds and loads, etc.;

(cc) severe air turbulence or severe manoeuvres;

(dd) lightning strikes;

(ee) foreign-object damage;

(ff) unconfined engine failures;

(gg) towing - involving high drag/side loads due to ground handling; or

(hh) any manoeuvre not catered for in the aeroplane flight manual.

(ii) If any of the foregoing occur, the manufacturer's recommendations must be followed. If no specific procedures are prescribed for a particular aircraft, IACM must be approached for guidance.

(c) Propeller and rotor blade strikes

(i) Following any propeller strike, whether rotating or as prescribed in the

manufacturer's recommendations, a complete propeller and engine disassembly and shock load inspection is mandatory and must be accomplished prior to further flight. All propeller, engine and applicable exhaust-driven Class II products, such as but not restricted to magnetos, propeller governors, alternators, generators, hydraulic pumps, turbochargers, fuel pumps and vacuum pumps for which there are overhaul instructions available, shall be inspected internally and externally in accordance with the manufacturer's requirements, and to the extent necessary, to ensure continued safe operation of the propeller, engine and component parts. The organisation responsible for the above mentioned inspections shall also ensure that the required testing, as prescribed by the manufacturer of the propeller, engine or component involved, is carried out in accordance with such requirements.

(ii) All procedures and parts as detailed in the relevant engine, propeller and component overhaul/repair manuals, IPCs, ADs, SBs, SLs and SIs shall be adhered to. Reference shall also be made to the relevant AICs.

(iii) The following shall be substituted when executing a shock-load inspection:

(aa) All propeller parts as detailed in the overhaul/repair manuals and IPCs.

(bb) All engine gaskets, seals, induction and rocker drain hoses, or any other hose that has become brittle, and all locking devices.

(cc) All crankshaft bearing or bearing inserts (main and connecting rods), and reduction gear shaft bearing or bearing inserts, where applicable.

(dd) All connecting rod bolts and nuts.

(ee) All counterweight retention parts (for counterweight-equipped engines).

(ff) All piston rings.

(gg) All shock absorbing rubbers (magneto and alternator drives).

(hh) All stressed bolts, such as crankshaft gear attaching bolts, camshaft gear attaching bolts, crankshaft alternator drive gear attachment bolts (where applicable), stationary drive gear bolts (reduction gear train), and all other parts that do not meet the manufacturer's service limitation requirements, as well as any incorrect or unapproved parts.

(ii) All engine mounting rubbers and the engine mounting(s) and attachments shall be x-ray, magnaflux or dye-penetrant inspected and replaced as required.

(jj) In the case of a turbine engine, any additional recommendations by the manufacturer to the foregoing shall be met.

(d) In the event of a helicopter rotor strike, the manufacturer's recommendations are to be met.

(6) Fuel-flow checks

Fuel flow checks must be carried out and the results recorded in the maintenance records as follows:

(a) At each MI on all aircraft with gravity-feed fuel tank systems.

(b) After any maintenance performed on the fuel system, including the replacement of fuel lines, components or tanks.

(c) At any time the operator encounters fuel system starvation problems.

3. Associated documents

(1) During the maintenance of aircraft due regard must be given to –

(a) the contents, recommendations or requirements of the relevant manuals, IPCs, ADs, SBs, SLs, SIs or other similar technical information produced by the manufacturers of the airframe, engine, propeller and installed equipment; and

(b) additional requirements issued by IACM , including those contained in Aeronautical Information Circulars and in any publications, issued by the State of manufacture or State of type design of the aircraft, which may prescribe or amplify techniques to be followed in the maintenance of aircraft; e.g. British Civil Aircraft Inspection Procedures and United States of America Federal Aviation Administration handbooks AC-43-13-1 (Acceptable Methods, Techniques and Practices) and AC-43-13-2 (Acceptable methods Techniques and Practices - Aircraft Alterations) or their successor publications.

(2) All relevant information and requirements referred to in paragraph (1) must be either contained in, listed, or otherwise associated with the check-list required to be used in terms of paragraph 2(3)(b)(ii)(aa) for each specific aircraft.

(3) In the event of any conflict between the requirements or instructions issued by a manufacturer and those by IACM, the provisions of the latter shall prevail.

(4) It is a requirement that all relevant aircraft documents be available, at the time of inspection and that such documents be current and up to date, and that no inspection may be certified unless requirements in respect thereof have been satisfied.

(5) The registered owner or operator shall ensure that a control system is in place ensuring that the requirements of all applicable ADs, as well as any SBs, SLs, SIs or other service information classified as mandatory, are complied with as specified in each directive before the aircraft is released to service.

(a) "Mandatory" in this context means:

(i) the airworthiness directive (AD) is issued by either IACM or by appropriate

authority, as referred to in 21.01.3;

(ii) IACM instructs that a SB, SL, SI or other service information, issued by a manufacturer shall be complied with;

(iii) IACM instructs that a SB, SL, SI or other service information, relating to the safety of the aircraft, shall be complied with in respect of an aircraft, including its components or parts, that is operated in terms of an air service licence or is utilised for the provision of flying training (other than the training of its registered owner).

(b) In respect of an aircraft that is not used for the provision of a commercial air transport operation or in flying training (other than for the training of its registered owner), compliance with any SB, SL, SI or other service information, issued by a manufacturer, shall be at the discretion of the aircraft's owner, in which case he or she shall comply with the provisions of sub-regulation (c).

(c) Whenever an owner, referred to in subregulation (c), decides not to comply with a particular SB, SL, SI or other service information, issued by a manufacturer in respect of his or her aircraft, this shall be recorded in the appropriate logbook as "SB (etc.) No. ___ NOT COMPLIED WITH".

(6) Requirements quoted in ADs are periodically revised. Each person carrying out mandatory maintenance shall ensure that such publications are up to date when used, and shall also ensure that any retrospective action required by any publication revision is complied with as and when required.

(7) Modifications and special inspections shall be accomplished not later than the time or date specified against each item. Should the certifying person find that, due to circumstances beyond his or her control, he or she is unable to comply with the manufacturer's instructions regarding the specified time or date, written exemption from compliance must be requested and an acceptable alternate means of compliance must be submitted to IACM for consideration together with all substantiating data. Such approval must be obtained prior to further flight.

(8) Deferred modifications or special inspections shall be accomplished as soon as the circumstances requiring the postponement no longer exist, but in any event not later than the written extension granted by IACM. An alternate method of compliance may be considered by IACM upon submission of acceptable substantiating data.

(9) Modifications and special inspections required by the manufacturer of the airframe, engine, propeller, component or installed equipment are made known by way of SBs, SLs, SIs, modification bulletins or other similar technical information. Such information is generally classified by the manufacturer to indicate the degree of essentiality. Licence holders or authorised persons who certify the inspections are to ensure that their organisation possesses and keep up-to-date all such information that is to be brought to the notice of the aircraft owner or operator. No aircraft may be released to service if not all applicable Airworthiness Directives have been complied with as yet.

(10) Where applicable in terms of subparagraph (5)(b)(ii), modifications and special inspections, classified by a manufacturer as mandatory, shall be carried out in accordance with the manufacturer's instructions not later than the time or date specified by them, but in

the event of any difficulties in complying therewith, the provisions of paragraph (7) above shall apply *mutatis mutandis*.

(11) The accomplishment of any modification or special inspection is to be recorded in the appropriate logbook on the page provided for and to be certified by the licensed or authorized person who performed the maintenance. See also paragraph (5)(d) above in respect of any non-compliance.

SECTION B: MAINTENANCE SCHEDULE FOR AEROPLANES WITH AN MCM OF 5 700 KG OR LESS (MINIMUM REQUIREMENTS)

Provided the Maintenance Schedule is drawn up in accordance with this Technical Standard, it serves as the approved aircraft maintenance schedule for the particular aeroplane, without the need to forward it to IACM for his or her approval. However, any deviation from the provisions of this Technical Standard shall require the prior approval of IACM.

MPI MINIMUM CHECK-LIST

Note: Only the minimum requirements for an MPI are listed. The manufacturer's check sheets must be integrated in the appropriate places for the check-list to be acceptable as an approved aircraft maintenance schedule for a particular make and type of aircraft.

See Form Moz-43-CL1

SECTION C: MAINTENANCE SCHEDULE FOR HELICOPTERS WITH AN MCM OF 3 175 KG OR LESS (MINIMUM REQUIREMENTS)

Provided the Maintenance Schedule has been drawn up in accordance with this Technical Standard it serves as the approved Aircraft Maintenance Schedule for the particular helicopter, without the need to forward it to IACM for his or her approval. However, any deviation from the provisions of this Technical Standard shall require the prior approval of IACM .

MPI MINIMUM CHECK-LIST

Note: Only the minimum requirements for an MPI are listed. The manufacturer's check sheets must be integrated in the appropriate places for the check-list to be acceptable as an approved aircraft maintenance schedule for a particular make and type of aircraft.

See Form Moz-43-CL2

SECTION D:
MAINTENANCE SCHEDULE FOR AEROPLANES WITH AN MCM IN EXCESS OF 5 700 KG, AND HELICOPTERS WITH AN MCM IN EXCESS OF 3 175 KG (MINIMUM REQUIREMENTS)

PART 1 - APPROVAL AND GENERAL INSTRUCTIONS

1. General

This maintenance schedule contains the minimum requirements in respect of the maintenance and inspections prescribed aeroplanes with an MCM of 5 700 kg or less and for helicopters with an MCM of 3 275 kg respectively, utilised in commercial air transport operations.

2. Approval

(1) This schedule becomes effective on the date specified by IACM and supersedes any previously approved maintenance schedule for the aircraft concerned, if any.

(2) Any amendment to this maintenance schedule shall require the prior approval of IACM .

2. Abbreviations

AD	Airworthiness Directive
AIC	Aeronautical Information Circular
AME	Aircraft Maintenance Engineer
AMO	Aircraft Maintenance Organisation
AMS	Approved Maintenance Schedule
BCAR	British Civil Aviation Requirements
CAR	Civil Aviation Regulations of 1997, as amended
CATS	Civil Aviation Technical Standards
CD	Compact Disc
CDL	Configuration Deviation List
C of A	Certificate of Airworthiness
C of R –	Certificate of Registration
CRS	Certificate of Release to Service
CPCP	Corrosion Prevention Control Programme
CRM	Certificate Relating to Maintenance
DDM	Dispatch Deviation Manual

DGAC	Direction Generale de l'Avaition Civile
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
HRS	Hour
IPC	Illustrated Parts Catalogue
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirements
MCM	Maximum Certificated Mass
MCM	Maintenance Control Manual
MEL	Minimum Equipment List
MMEL	Master Minimum Equipment List
MPD	Maintenance Planning Document
MTM	Maximum Certificated Take Off Mass
PI	Progressive Inspection
P/N	Part Number
RVSM	Reduced Vertical Separation Minimum
IACM	Mozambique Civil Aviation Authority
SB	Service Bulletin
SI	Service Instruction
SL	Service Letter
S/N	Serial Number
SRM	Structural Repair Manual
TBO	Time Between Overhaul

3. Definitions

In this Schedule, unless inconsistent with the context, the following terms shall have the meanings of descriptions assigned to them (see also Part 1 of the CAR):

"Aircraft"	means an aircraft as defined in the Regulations, including its engines, propellers, rotors, components, parts, equipment instruments, accessories and materials.
"Airworthy"	means, when used in relation to an aircraft, that the aircraft is serviceable and meets all the requirements prescribed for the issuing of a certificate of airworthiness and such other requirements as have been prescribed for the continuing validity of such a certificate.
"Approved Maintenance Schedule"	means a document compiled by an owner or operator and approved by IACM that defines the procedures for ensuring the sustained airworthiness of the aircraft to which it relates, its components, installed systems and equipment.
"Check ..... for condition"	means that the products, component/part or other item referred to must be inspected for cleanliness, corrosion, wear, deterioration, delimitation, cracks, dents, scores, cuts, scratches, distortion, bowing, evidence of overheating, freedom from obstruction, fouling, leaks, correct locking and any other unacceptable feature not specifically mentioned herein. "Inspect ..... for condition" and "Examine ..... for condition" have corresponding meanings.
"Direct supervision"	means, in relation to the maintenance of an aircraft, that the person exercising the supervision personally maintains such surveillance of all maintenance being performed, as is necessary to ensure that it is being properly carried out, and that this person is readily available in person for consultation with the person doing the work.
"Large aeroplane"	means an aeroplane with an MCM in excess of 5 700 kg.
"Large helicopter"	means a helicopter with an MCM in excess of 3 175 kg.
"Maintenance"	means all work carried out in accordance with manufacturers' recommendations and approved maintenance schedules and includes inspection, adjustment, substitution, rectification, repair, modification, overhaul and testing.

"Progressive inspection"	means the continuous airworthiness inspection of an aircraft at scheduled intervals in accordance with procedures approved by IACM.
"Serviceable"	means, when used in relation to an aircraft, that the aircraft has been maintained and inspected in accordance with the requirements of the approved maintenance schedule and that all adjustments and rectification's, found to be necessary, have been satisfactorily made.
"Serious defect"	means a defect that would result in the aircraft becoming unserviceable, due to damage to its major primary structure, and no longer meeting its type certification basis.

4. General instructions

(1) The onus for ensuring that an aircraft is kept airworthy rests on the registered owner/operator of the aircraft. This maintenance schedule has been prepared to ensure that, as far as possible in the light of information and experience available, the aircraft to which it refers is effectively maintained in an airworthy condition by scheduling the required maintenance during its operational life with a programme of inspections and overhauls, based on normal operational usage of the aircraft.

(2) The routine maintenance, scheduled inspections, structural integrity inspections, overhaul, modification, major repairs and structural repairs on the aircraft to which this maintenance schedule refers shall be undertaken and certified by an appropriately rated approved Aircraft Maintenance Organisation (AMO) only.

(3) It is the duty and responsibility of the flight crew operating the aircraft to ensure that unusual occurrences, defects or suspected faults, coming to their notice and that may affect the serviceability and safety of the aircraft, are recorded in the flight folio as and when they occur, and are reported to an appropriately approved Aircraft Maintenance Organisation for investigation or rectification. When away from base, instructions regarding their rectification and certification must be sought and recorded.

(4) All rectification carried out away from base must be entered and certified in the aircraft's flight folio and transferred into the aircraft's logbook/s within 48 hours after the aircraft returns to base.

(5) A defect, allowable in terms of the MEL, DDM or CDL, must be entered in the flight folio and the aircraft may continue to operate if the defect is not considered to have an adverse affect on the safety of the aircraft. Repetitive entries in the flight folio shall give the reason for the deferment and shall be certified by the holder of valid type certification issued by an approved Aircraft Maintenance Organisation.

(6) The AMO responsible for the maintenance of the aircraft, to which this schedule relates, will drawn up a maintenance planning document (MPD) to ensure compliance with:

(a) all information issued by the manufacturers of the aircraft, its engines, propellers, instruments and installed equipment relating to the maintenance, inspection, repair, modification and overhaul of these items;

(b) any requirements, including those contained in Airworthiness Directives and such SBs, SLs and SIs classified mandatory by the manufacturer or IACM , and Aeronautical Information Circulars (AICs), issued by IACM ; and

(c) the Civil Aviation Regulations, as amended.

In the unlikely event of the aircraft is not utilised in commercial air transport operations or for the provision of flight training, the provision of subparagraph 3(5)(c) in Section A of Technical Standard 43.02.6 applies.

(7) The terms “check”, “inspect” and “examine for condition”, where used in this maintenance schedule, shall mean that the part, component or item referred to is required to be inspected for cleanliness, corrosion, wear, deterioration, cracks, dents, scores, cuts, scratches, distortion, bowing, evidence of overheating, freedom from obstruction, fouling, leaks, security, correct locking and any other unacceptable feature not specifically mentioned herein, as applicable, and to an extent considered to be commensurate with its known condition at the last inspection and with the known usage or abuse it has undergone since then.

(8) Any part, component or item, found to be adversely affected, shall be rendered serviceable or substituted by such rectification as is necessary, and no check required by this maintenance schedule shall be considered to be complete until all items found unsatisfactory have been effectively rectified.

(9) Nothing in this maintenance schedule shall be construed as:

(a) absolving the owner or operator or the AMO from ensuring that any additional maintenance found necessary for the continued airworthiness of the aircraft is carried out; or

(b) relieving the pilot-in-command of the aircraft from complying with the requirements of this schedule that are applicable to him or her.

5. Scheduled and unscheduled maintenance inspections

(1) Scheduled and unscheduled maintenance inspections shall be carried out in accordance with the requirements of Part 2 of this maintenance schedule.

(2) Where Part 2 of this maintenance schedule shows only the items to be inspected at each check, without detailing what they are to be inspected for, the user of the maintenance schedule shall compile check sheets from approved data which shall indicate in detail the inspection requirements.

(3) Amendments to this maintenance schedule must be submitted for approval by the aircraft owner or operator of the aircraft to which the schedule refers. Therefore, maintenance organisations are not entitled to request any changes to this maintenance schedule unless such request is accompanied by written authority from the owner or operator, as the case may be.

(4) If the aircraft, to which this maintenance schedule relates, sustains a serious defect, its certificate of airworthiness shall automatically become invalid. The certificate will be revalidated once an inspection and repair of the aircraft has been performed to the satisfaction of IACM by a person or body of persons acceptable to him or her, and IACM has satisfied himself or herself that the aircraft can once again be operated safely.

6. Overhaul or substitution

(1) The aircraft and its components or installed equipment shall be overhauled or substituted in accordance with current instructions prescribed in paragraph 4(6) of Part 1 of this schedule and at such times as is prescribed in Part 3.

(2) If IACM considers it necessary, in the interests of safety, to prescribe a TBO for items for which the manufacturer has not prescribed an overhaul life, such life limitation shall be recorded in Part 3 of this Schedule.

(3) If the owner of the aircraft, to which this maintenance schedule refers, wishes to extend any TBO specified in Part 3 of this Schedule, he or she shall apply in writing for the temporary amendment of this Schedule. Such application must be supported by adequate information substantiating the temporary amendment applied for.

(4) In addition to the aircraft logbooks or approved recording system, a separate record of life-limited and TBO items shall be kept, to ensure that limitations are not exceeded. This record shall be updated within 48 hours of any component having been overhauled, replaced or substituted.

(5) The record. specified in paragraph (4) above, shall include a section to indicate compliance with any recurring ADs, manufacturer's mandatory requirements, such as SBs, SIs and SLs, and applicable structural integrity inspections, corrosion prevention control programme (CPCP), or any other requirement called out in a maintenance planning document (MPD). See also subparagraph 3(5)(d) of Section A of Technical Standard 43.02.6.

(6) Whenever a record system is introduced, it shall be subject to acceptance by IACM, and no procedural changes that affect the validity of this Schedule shall be made to the system without the prior approval of IACM.

(7) No calendar and cycle limitations imposed by the manufacturer may be extended without prior approval of IACM.

(8) The recording system, to be used to ensure compliance with this Schedule, shall be fully indicated.

7. Mandatory modification and special inspections

(1) Unless IACM has approved an amendment to this Schedule, compliance with all modifications or special inspections that the manufacturer of the aircraft, its engines, propellers, instruments and installed equipment considers mandatory by a certain date or time shall be met by that date or time. Failure to comply with the aforementioned requirements will invalidate the C of A. See also sub-paragraphs 3(5)(c) and (d) of Section A of Technical Standard 43.02.6.

(2) Part 4 of this Maintenance Schedule may contain a list of modifications and special inspections, hereinafter referred to as Airworthiness Directives (ADs) that are issued in accordance with 21.01.3. These may include some of the modifications and inspections referred to in paragraph (1) above, or may be additional thereto. Compliance shall be met in accordance with the requirements contained in the applicable AD and not later than the time stated therein. In the event of any conflict between the modifications and special inspections classified as essential and mandatory by the manufacturer or ADs issued by IACM, the provisions of the latter shall prevail.

(3) Revisions, cancellations or additions to the Part, referred to in subparagraph (2) above, will be issued as necessary. The requirements shall be complied with not later than the time or date specified. In the event where compliance cannot be met, the requirements of paragraph (2) above shall apply *mutatis mutandis*.

8. Certificates of release to service

(1) A Certificate of Release to Service, as prescribed in Part 5 of this Schedule and issued in accordance with the requirements of the Civil Aviation Regulations, as amended, shall be valid for the interval between any successive checks or on completion of an inspection cycle required by this Maintenance Schedule

(2) When a Certificate of Release to Service becomes invalid due to an aircraft sustaining a defect, its validity will be restored when the defect, that caused it to become invalid, is rectified and such rectification has been certified by a person authorised in terms of Regulation 43.03.1, and IACM has satisfied himself or herself that the aircraft can be operated safely.

(3) When compliance with any Scheduled check is extended in terms of paragraph 2 of Part 2 of this Schedule, the person(s) extending the check shall issue a new Certificate of Release to Service valid only for the extended period.

(4) Should the aircraft sustain a serious defect, the Certificate of Release to Service ceases to be valid as such. The Certificate of Airworthiness issued for the aircraft also ceases to be valid.

(5) An aircraft may not be released to service with any unsatisfactory items or deferred defects without approval from IACM.

9. Avionics, instrumentation and electrical

(1) The routine maintenance, overhaul, modification and repair of avionics, instrumentation and electrical equipment shall be performed only under the direct supervision of, and be certified by, a person holding an appropriately rated certificate of approval issued by the holder of an approved Aircraft Maintenance Organisation.

10. Amendments

(1) This maintenance schedule specifies the minimum maintenance considered necessary to maintain the aircraft to which it refers in an airworthy condition. No amendment to this maintenance schedule may be made without the prior written approval of IACM.

(2) Subparagraph (1) is not to be construed as prohibiting any additional maintenance, not specifically mentioned in this schedule that may be required to ensure that the aircraft can be operated safely. Such maintenance may be undertaken without the approval of IACM, provided the latter is advised of such requirement and an application for the amendment of this maintenance schedule is made accordingly. IACM may wave the amendment requirement.

(3) Amendments to this Maintenance Schedule shall become effective on the date of approval by IACM or otherwise as indicated in subparagraph 1(5) of Part 1 of this Schedule.

(4) The user of this Maintenance Schedule shall, prior to use, ensure that it has been amended to date.

11. Aircraft inspection report

An aircraft inspection report form Moz-43-04 shall be submitted at intervals not exceeding 12 months, commencing on the date of validation of the C of A. If the aircraft is unserviceable at the time when the applicable form should be completed and submitted, the interval may be extended until the aircraft is airworthy again.

12. Duplicate inspections

(1) A duplicate inspection of all engine and flight control systems shall be carried out after initial assembly and at any time the systems have been disturbed in any way. The purpose of the duplicate inspection is to verify that the manufacturer's specifications and requirements have been met in full.

(2) An initial inspection of the control system shall be made and certified by a person in possession of a valid Aircraft Maintenance Engineer's (AME) licence, or who has been approved by IACM as an Inspector in an organisation, or holds company certification as prescribed in Part 145 of the Civil Aviation Regulations, as amended, immediately after the maintenance is completed and before the aircraft is flown. Persons qualified to perform and certify duplicate inspections are:

(a) A type-rated AME or person holding valid company certification in terms of Part 145 of the Civil Aviation Regulations, as amended.

(b) An AME, holding a valid licence for the particular category, but not type-rated.

(c) The holder of valid company certification on a similar type.

(d) The holder of a valid airline transport pilot licence rated on the type concerned, if the persons referred to in subparagraphs (a), (b) or (c) are not available.

13. Rectification of unsatisfactory items

(1) When during any inspection or at any other time any part, product, component or item is found to be unserviceable or, in the opinion of the supervising licensed aircraft maintenance organisation is unlikely to remain serviceable under normal operating conditions during the period preceding the next scheduled inspection, such rectification action as the supervising person considers to be necessary shall be taken to restore or extend the serviceability of the part, component or item prior to returning the aircraft to service.

(2) All deferred defects shall be transferred from the flight folio and all work involved in restoring the serviceability of any part, component or item shall be clearly recorded in the relevant logbook or other approved recording system and be certified by an appropriately rated person or certificate holder.

(3) Where aircraft are operating away from base for any length of time, copies of the above mentioned flight folios shall be submitted every seven (7) days to the base in the Republic where the records are normally kept.

(4) The Certificate of Airworthiness is invalid until the unsatisfactory items have been rectified or the items have been deferred in accordance with the approved MEL, DDM or CDL requirements.

14. Associated documents

(1) During the maintenance of the aircraft to which this schedule applies due regard shall be given to:

(a) the contents, recommendations or requirements of the relevant manuals, SBs, SLs, SIs or other similar technical information produced by the manufacturer and, where applicable, the engine, propeller and installed equipment; and

(b) additional requirements issued by IACM , including those contained in MOZ-CATS-GMR, AICs and in any publication issued by the authorities of the country of the type certificate holder that may prescribe or amplify techniques to be followed in the maintenance of aircraft, such as but not limited to British Civil Aircraft Inspection Procedures and United States of America Federal Aviation Administration handbooks AC. 43.13-1 (Acceptable Methods, Techniques and Practices - Aircraft Alternations), or their successor publications, Ageing Aircraft Programme, Corrosion Prevention Control Programme, and the Aircraft's Structural Repair Manual (SRM).

Note: All relevant information and requirements, referred to in subparagraphs (a) and (b) above, must be either contained in, listed, or otherwise associated with the check-list required to be used for the aircraft.

(2) In the event of any conflict between the requirements or instructions issued by a manufacturer and those of IACM , the provisions of the latter shall prevail.

(3) It is a requirement that all relevant aircraft documents be available at the time of inspection and that such documents are current and amended to date. No inspection is to be certified unless all requirements in respect thereof have been satisfied.

(4) The following is a list of documents which are to be valid, current or amended to date, as the case may be, and shall be checked prior to the aircraft being released to service:

(a) Certificate of Registration No. .....

(b) Certificate of Airworthiness No. .....
Currency date .....

(c) Radio Station Licence No. .....
Currency date .....

(d) Certificate of Release to Service

(e) Approved Flight Manual

(f) Mass and Balance and Equipment List data

(g) Flight Folio

(h) MEL

(i) Aircraft logbook/s

(j) Reduced Vertical Separation Minimum (RSVM) certificate (if applicable)

(k) Noise certificate (if applicable)

(l) Approved Maintenance Schedule

PART 2 - SCHEDULED AND UNSCHEDULED INSPECTIONS

1. The complete periodic inspection cycle of time-limited and maintenance checks shall be as follows:

Check to be done at intervals not exceeding (*Specify*)

2. Notwithstanding the requirements contained in paragraph 1, it shall be permissible under this schedule for an appropriately certificated person nominated by the Accountable Manager of an approved aircraft maintenance organisation, as referred to in Part 145, to

extend any scheduled check by not more than ten per cent where the aircraft manufacturer or type certificate holder has approved such an extension: Provided that –

(a) the person has inspected the aircraft and satisfied himself or herself that the aircraft can be operated safely for the extended period;

(b) his or authority for the extension is entered in the aircraft logbook prior to the aircraft being operated for the extended period;

(c) a certificate of release to service has been made out and certified in the correct manner; and

(d) the number of hours extended is deducted from the next scheduled inspection period by an equal amount.

3. During the extended period all other scheduled checks and inspections falling due must be carried out within the times specified in paragraph 1, but these may also be extended subject to the above requirements having been satisfied.

4. IACM may extend any scheduled inspection by a further 2% if the operator has an acceptable reliability programme in place and the operator can prove that safety will not be jeopardised.

5. No extension may be granted in respect of calendar times. Thus, an aircraft may not be flown without written approval from IACM after a calendar period of validity has lapsed.

6. During operations an aircraft may be subjected to –

(a) hard or overweight landings;

(b) operations outside the normal flight envelope; i.e. aircraft design speed or placarded speed of flaps or landing gear;

(c) severe air turbulence or severe manoeuvres;

(d) lightning strikes;

(e) foreign-object damage;

(f) propeller strikes;

(g) towing - including high drag or side loads due to ground handling.

If any of the foregoing occurs, the manufacturer's recommendations shall be followed. If no specific procedures are prescribed for the particular type of aircraft, IACM must be consulted, and an alternate method of compliance be submitted for approval, based on approved data from a person or body of persons responsible for the continued airworthiness of the aircraft.

7. Fuel flow checks are to be carried out in accordance with the aircraft's maintenance manual and the results recorded:

(a) at any time the fuel system has been worked on; and

(b) at any time the operator encounters fuel system starvation problems.

8. Installed avionics equipment shall be checked for proper operation. See also TS 43.02.4, TS 43.02.8 and TS 43.02.9.

PART 3 - OVERHAULS AND SUBSTITUTION OF CLASS I AND II PRODUCTS

1. Listed in Table 1 are extension intervals that IACM allows to be granted to the Time Between Overhauls in respect of the aircraft and installed equipment. These extension periods may NOT be granted, if the manufacturer has stipulated an escalation programme approved by IACM. Escalation programmes do not qualify for these extensions.

2. An appropriately certified person nominated by the Accountable Manager of an approved aircraft maintenance organisation may extend any TBO listed in Table 1 as follows:

Table 1

Prescribed TBOs		Maximum extension period permitted, unless IACM approves otherwise
(i)	Up to 3 000 hours	100 hours
(ii)	3 001 to 6 000 hours	200 hours
(iii)	6 001 to 9 000 hours	300 hours
(iv)	9 001 to 12 000 hours	400 hours

Provided that he or she has satisfied himself or herself from the performance, condition and recorded history and approved data for the component concerned that it can be operated safely for the extended period and that his or her authority for the extension is entered, in accordance with paragraph 3 below in the appropriate logbook or other appropriate approved record prior to the component concerned is operated for the extended period.

3. On each occasion that an extension is granted in terms of paragraph 2 above, the person authorising the extension shall certify the following entry in the appropriate logbook:

"I hereby certify that I have satisfied myself, after consulting approved data and historical records of its performance since new or last overhaul, and the condition of (name the product or component concerned giving a description and quoting part and serial number), the latter is such that it can be operated safely for a further hours of flight time. I hereby authorise such extension.

The current total airframe hours are .....
Signature .....
Approval/Licence No. ..... .Date .....".

4. The current status of life-limited products and parts, whether it be hours, cycles or calendar time must be available.

5. No calendar and cycle limitations imposed by a manufacturer may be extended without prior approval of IACM.

6. A copy of TBO components must be attached to this Part.

PART 4 - AIRWORTHINESS DIRECTIVES AND OTHER SERVICE INFORMATION

1. Airworthiness Directives (ADs) which concern the aircraft to which this maintenance schedule applies (including installed equipment) are dealt with in this Part.

2. The registered owner or operator shall ensure that a system is in place ensuring that the requirements of all applicable ADs, as well as any SBs, SLs, SIs or other service information classified by the manufacturer as mandatory, are complied with as specified in each directive before an aircraft is released to service.

3. "Mandatory" in this context means:

   (a) the airworthiness directive (AD) is issued by either IACM or by the appropriate authority as referred to in 21.01.3;

   (b) IACM instructs that a SB, SL, SI or other service information, issued by a manufacturer shall be complied with;

   (c) in respect of an aircraft, including its components or parts, operated in terms of an air service licence or utilised for the provision of flying training (other than the training of its registered owner), any SB, SL, SI or other service information enhancing the safety of the aircraft (whether classified by the manufacturer as mandatory or not);

   (d) in respect of aircraft that are not used for the provision of a commercial air transport operation or in flying training (other than for the training of its registered owner), compliance with any SB, SL, SI or other service information, issued by a manufacturer, shall be at the discretion of the aircraft's owner;

   (e) whenever an owner decides not to comply with a particular SB, SL, SI or other service information, issued by a manufacturer in respect of his or her aircraft, this shall be recorded in the appropriate logbook as "SB (etc.) No. …… NOT COMPLIED WITH".

4. Requirements quoted in ADs are periodically revised. Each user of this schedule shall ensure that such publications are up to date when used, and shall also ensure that any retrospective action required by any publication revision is complied with as and when required.

5. Modifications and special inspections shall be accomplished not later than the time or date specified against each item. Should the certifying person find that, due to circumstances beyond his or her control, he or she is unable to comply with the manufacturer's instructions regarding the specified time or date, written exemption from compliance must be requested and an acceptable alternate means of compliance must be submitted to

IACM for consideration together with all substantiating data. Such approval must be obtained prior to further flight.

6. Deferred modifications or special inspections shall be accomplished as soon as the circumstances requiring the postponement no longer exist, but in any event not later than the written extension granted by IACM. An alternate method of compliance may be considered by IACM upon submission of acceptable substantiating data.

7. Modifications and special inspections required by the manufacturer of the airframe, engine, propeller, component or installed equipment are made known by way of SBs, SLs, SIs, modification bulletins or other similar technical information. Such information is generally classified by the manufacturer to indicate the degree of essentiality. Licence holders or authorised persons who certify the inspections required by this schedule are to ensure that their organisation possesses and keeps up to-date all such information that is to be brought to the notice of the aircraft owner or operator. No aircraft may be released to service with Airworthiness Directives that have not been complied with as yet.

8. All modifications and special inspections classified by the manufacturers as mandatory shall be carried out in accordance with the manufacturer's instructions not later than the time or date specified by them, but in the event of any difficulties in complying therewith, the provisions of paragraph 5 above shall apply *mutatis mutandis*.

9. The accomplishment of any modification or special inspection is to be recorded on the page provided for in the appropriate logbook and certified by the licensed or authorised person who performed the maintenance.

PART 5 - DOCUMENTATION

Insert copy of Certificate of Release to Service for aeroplanes with an MCM in excess of 5 700 kg and helicopters with an MCM in excess of 3 175 kg, as prescribed in Form Moz-43-02, and amended to reflect the details of the issuing AMO.