Download date: 14.03.2013

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MANDATORY
SERVICE
BULLETIN

MANDATORY BULLETIN Z 126, Z 226/34a-Rev. 1
Z 326/87a-Rev. 1
Z 526/70a-Rev. 1
Z 726/20a-Rev. 1

Supersedes the Mandatory Bulletin Z 126,226/34a, Z 326/87a, Z 526/70a, Z 726/20a

Technical aspect are CAA approved

1. DATE: 30.5. 2001

2. MODEL AFFECTED: All aircraft Z 126, Z 126 T,
Z 226 B, Z 226 T, Z 226 M, Z 226 MS, Z 226 A,
Z 226 AS, Z 226 SL
Z 326, Z 326 A, Z 326 M, Z 326 MF,
Z 526, Z 526 A, Z 526 M, Z 526 F, Z 526 AS,
Z 526 ASM, Z 526 AF, Z 526 L, Z 526 ML,
Z 526 AFS, Z 526 AFS-V,
Z 726, Z 726K.

3. SUBJECT: Aircraft maintenance and service life

4. CORRECTION:
a) Revision of prescribed work at aircraft periodic inspection.
b) Revision of service life limitation.
c) Revision of aircraft maintenance system.
d) Corresponding supplements of accompanying technical documentation.

5. TIME OF COMPLIANCE: Immediately receipt of this bulletin.

6. CORRECTION PERFORMED BY: User.

7. EXPENSES COVERED BY: No expenses arise.

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8. PROCEDURE:

a) To perform overhauls or airframe technical inspection at intervals determined in Enclosure No. 1 of this bulleti.

b) To perform inspections within the range of 25 hour, 50 hour, 100 hour/1year inspection in accordance with the survey of prescribed works in Enclosure No. 2 and in accompanying documentations accordance in Enclosure No. 3 of this bulletin.

c) Insert Enclosures No. 1, 2 and 3 of this bulletin into the appropriate maintenance manual. Information, direction and limitations included in these enclosures supersedes corresponding parts in current accompanying document.

9. NECESSARY MATERIAL:

No necessary

10. ENCLOSURE:

1) Survey of aircraft overhauls and general overhaul performing and technical inspectins.

2) Survey of works at periodical inspections of the Z 26 series aircraft.

3) Survey of accompanying technical documentation of the Z 26 series aircraft.

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Ing. Dušan Totek
Chief designer

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SURVEY OF AIRCRAFT OVERHAULS AND GENERAL OVERHAULS PERFORMING AND TECHNICAL INSPECTIONS

1. Z 126,Z 126T Aircraft

Refer to the aircraft that have flown 3200 flight hours in "A" category and further will be operated under the overhaul system of airframe maintenance.

Interval of operational hours	Repair	Number of operational hours	Note
1000 + 25	General repair	3200 4600	a) b)

2. Z 226T,Z 226A,Z 226AS Aircraft

Refer to the aircraft that have flown 3200 flight hours in "A" category and further will be operated under the overhaul system of airframe maintenance.

Interval of operational hours	Repair	Number of operational hours	Note
1000 + 25	General repair	3200 4600	a) b)

3. Z 126,Z 126T,Z 226B,Z 226T,Z 226A,Z 226AS,Z 226M,Z 226MS,Z 226 SL Aircraft

Refer to the aircraft that have flown 2300 flight hours in "A" category and further will be operated under the overhaul system of airframe maintenance.

Interval of operational hours	Repair	Number of operational hours	Note
1000 + 25	General repair	2300 5500	a) b)

NOTES: a) The aircraft must be transfered to "N" category at this number of operational hours at latest.
b) Total service life.

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4. Z 326,Z 526,Z 526F,Z 526L,Z 526AF,Z 526ASM Aircraft

Refer to the aircraft that have flown 3200 flight hours in "A" category and further will be operated under the overhaul system of airframe maintenance.

Interval of operational hours	Repair	Number of operational hours	Note
1000 + 25	General repair	3200 4600	a) b)

5. Z 326,Z 326M,Z 326MF,Z 526,Z 526AS,Z 526M,Z 526ASM,Z 526ML,Z 526F, Z 526L Aircraft

Refer to the aircraft that have flown 2300 flight hours in "A" category and further will be operated under the overhaul system of airframe maintenance.

Interval of operational hours	Repair	Number of operational hours	Note
1000 + 25	General repair	2300 5500	a) b)

6.Z 326A,Z 526A Aircraft

Interval of operational hours	Repair	Number of operational hours	Note
800 + 25	General repair	1600	a)
1000 + 25	General repair	3600	b)

NOTES: a) The aircraft must be transfered to "N" category at this number of operational hours at latest.
b) Total service life.

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7. Z 526 AFS,Z 526 AFS-V Aircraft

Refer to the aircraft that are operated under the overhaul system of airframe maintenance.

Interval of operational hours	Repair	Number of operational hours	Note
500 + 25	General repair	1000	a)
1000 + 25	General repair	4600	b)

8. Z 726,Z 726K Aircraft

Refer to the aircraft that are operated under the overhaul system of airframe maintenance.

Interval of operational hours	Repair	Number of operational hours	Note
1200 + 25	General repair	2400	
1000 + 25	General repair	3400 5000	a) b)

NOTES: a) The aircraft must be transfered to "N" category at this number of operational hours at latest.
b) Total service life.

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CAUTIONS:

1. The aircraft transfered to "N" (normal) category can be operated under the system of **technical inspections** up to the reaching the stated technical life (i.e. total number of operational hours).
   1.1. First technical inspection must be performed at reaching the interval of operational hours for overhaul from the last overhaul at latest.
   1.2. Time of validity for technical inspection is determined on 200 flight hours and/or 2 years as maximum.
   1.3. In case of aircraft condition when the Technical Commission direct performing the overhaul, further technical inspection will be carried out at stated interval of operational hours for overhaul of the aircraft type from that overhaul.
   1.4. Technical Inspection can be performed by:
   - the Manufacturer Technical Commission approved by the Czech CAA. the Inspection Record on performed inspection shall be passed to the user. Technical Inspection can be ordered at: MORAVAN-AEROPLANES Inc. 765 81 OTROKOVICE
     Technical Inspection can be performed at the manufacturer s plant or at operator s field.
   - other Repair/Maintenance shop approved by the CAA of the user s country and by the manufacturer, MORAVAN-AEROPLANES Inc. This workshop must be demonstrably acquainted with the Maintenance and Repair procedure of the type. The Inspection Record on performed inspection shall be passed to the user and the copy to the manufacturer, MORAVAN-AEROPLANES Inc. Otrokovice, Czech Republic.

2. Operation in "N" (normal) category of the Z 26 aircraft series with retractable landing gear is conditional on installation of audio stall warning and retracted undercarriage signalling.

3. The inspection or partial repair must be performed on all aircraft, which were out of operation more than 2 years and 100-hour inspection were not performed before returning into operation. The partial repair consist of:
   - Check plays in all parts in assemblies, check for corrosion.
   - Remowal of wings, tail surfaces, engine, instruments, aggregates, ruber hoses, landing gear, canopy.
   - Ream over worn holes of the wing, tail surfaces, engine bed hinges. Use new bolts and pins. Perform this in case of increased plays.
   - Replace all worn and corroded parts. Replace all damaged rubber part i.e. instrument panel and engine bed silent blocks, rubber cords of seats, dusters, bushing and others. Replace out of service life or damaged hoses.
   - The fabric covering of fuselage, elevator or rudder shall be replace as required according to technical conditions unless made from new syntetic materials with long service life.
   - Check the instruments and aggregates for operational values at approved laboratory.

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SURVEY OF WORKS AT PERIODICAL INSPECTIONS OF THE Z 26 AIRCRAFT SERIES

Aircr. type	Serial Number	Registration mark	Flight h. Total	Number of take-off	Date of inspection

Type of inspection: 50 100 1 year

(Delete what is not applicable)

Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
1. PREPANATORY WORK						
1.1 Documentation: check records in Aircraft Log book, Engine log book, Propeller log book, execution of bulletins and AD s		o	o			
1.2 Cleannes: wash the cockpit and aircraft surface, clean the engine, check of loose items blocking controls	o	o	o			
1.3 Disassembly of covers: side, lower and upper fuselage covers, tail landing gear cover, wing covers	o	o	o			
1.4 Disassembly of covers: engine cowlings, cockpit canopy, fuel tanks covers		o	o			
1.5 Jacking: before landing gear check		o	o			
2. COCKPIT						
2.1 Canopy emergency release: function, condition, adjustment, lubricating		o	o			
2.2 Opening and locking mechanism of the cockpit canopy: function, condition, adjustment, lubricating		o	o			
2.3 Seat adjusting: function, adjustment, condition		o	o			

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Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
2.4 Rudder control adjusting: function	o	o	o			
2.5 Safety seat belts: condition, attachment	o	o	o			
2.6 Inside covers and floors: condition, attachment	o	o	o			
2.7 Controls: function, free movement, ply, damage	o	o	o			
2.8 Dampers of board panels: condition		o	o			
2.9 Instrument: condition, attachment		o	o			
2.10 Engine instruments: function check, condition and connecting of conductors		o	o			
2.11 Signalling: function check		o	o			If installed
2.12 Compass: execution of compass compensation			o			
2.13 Placards and colour marking of instrument: completeness and no damage		o	o			
2.14 Cockpit canopy glasing: crack and damage		o	o			
3. FUSELAGE						
3.1 Fuselage frame: check of tubes mainly in the vicinity of hinges -cracks, deformation, corrosion		o	o			
3.2 Hinges: of wings, horizontal and vertical tail surfaces, main landing gear and tail wheel, engine bed and towing gear holder-cracks, deformations, corrosion		o	o			
3.3 Fabric skin: condition, damage	o	o	o			
3.4 Pressure probe of wing center section spar: pressure, attachment, locking	o	o	o			

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Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
3.5 Drive of wing flaps: condition and play		o	o			Only aircraft equipped with wing flaps
4. WINGS						
4.1 Leading edge, skin, wing tips, ailerons, wing flaps: damage, deformation, loose rivets		o	o			
4.2 Wing hinges: play in hinges, cracks, scratching, corrosion, check of cut bushing proper position, check of pins slipping-out (tightening at need), check of rear hinge support boxes, locking	o	o	o			
4.3 Ailerons: play in hinges, locking of hinges, cracks, attachment of aileron mass-balance-cracks	o	o	o			
4.4 Wing flaps: play in hinges (admissible difference between left and right wing flap 1^{o}/5,5 mm, measured at the middle hinge at full extend)		o	o			Only aircraft equipped with wing flaps
4.5 Foot board rubber: condition		o	o			
5. EMPENNAGE						
5.1 Leading edge, skin, wing tips: damage, deformation, loose rivets		o	o			
5.2 Hinges of horizontal and vertical fin: play in hinges, locking, cracks, corrosion	o	o	o			
5.3 Elevator and rudder hinges: play in hinges, locking, cracks, corrosion	o	o	o			
5.4 Trim tabs: condition, play in hinges		o	o			
5.5 Elevator countershaft: cracks		o	o			

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Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
6. CONTROLS						
6.1 Hand control: play at blocked control surfaces (max. ±3 mm transversally and longitudinaly, measured at the end of the stick handle), check of marginal positions, max. elevator and ailerons deflections, condition of pull rods-damage, deformation, locking of joints		o	o			
6.1.1 Stops: condition, cracks	o	o	o			
6.2 Rudder control: play at blocked rudder (max. ± 3mm - measured at the end of pedals), check of marginal positions and rudder max. deflection		o	o			
6.2.1 Rudder and tail wheel control cables: wear, tension, tightenes-locking	o	o	o			
6.2.2 Control pulleys: wear, seating, motion		o	o			
6.2.3 Stops: condition, cracks	o	o	o			
6.3 Elevator and rudder trim tab: check of max. deflections, motion , strings of trim-tension, damage, corrosion, tighteners-locking		o	o			Rudder trim tab if installed
6.4 Wing flap control: play at full extend (max. 2^{o}/11 mm, measured at outer wing flap at middle hinge, motion, function		o	o			Only aircraft equipped with wing flaps
6.5 Towing gear release: function, condition		o	o			Only aircraft equipped with towing gear
7. LANDING GEAR						
7.1 Main landing gear: a) Aircraft with fixed landing gear - cracks on cone, play in torque links, cracks, locking	o	o	o			

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Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
b) Aircraft with retractable landing gear - cracks and play at landing gear suspension bracket and at breakstruts, play in torque links, cracks, locking condition and suspension of springs	o	o	o			
7.1.1 Landing gear shock absorber: pressure and tightness, attachment, locking, condition, corrosion	o	o	o			
7.1.2 Landing gear extending and retracting: adjustment in locks, pull-rod and switch on the left shock absorber-check		o	o			Only aircraft equipped with retractable landing gear
7.1.3 Emergency release: check, adjustment		o	o			Only aircraft equipped with retractable landing gear
7.2 Tail wheel: play in attachment locking, function of tail wheel release mechanism	o	o	o			
7.3 Tail wheel shock absorber: pressure and tightness, condition, corrosion	o	o	o			
7.4 Shock absorber function check: main landing gear - incline by the wing tail wheel-push by the fuselage	o	o	o			
7.5 Landing gear wheels: disassembly, check of bearings, cleaning of bearings, lubricating, condition of castings-cracks		o	o			
7.6 Tires: wear, damage, compliance of paint markings on tire and rim, tire pressure	o	o	o			
7.7 Brakes: function, condition, brake control-function, condition, adjustment of brake shoe plays - 0,3 mm, cleaning, lubricating of moveable parts		o	o			Check of cables and bowdens at aircraft with mechanical brakes

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Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
7.8 Brake piping and hoses: leakage, condition, attachment, service life		o	o			Only aircraft equipped with mechanical brakes
8. FUEL SYSTEM						
8.1 Joints in the system: leakage, locking		o	o			
8.2 Fuel filter/Hand pump: condition, function, leakage, cleaness-blow out with air, attachment		o	o			
8.3 Hoses: service life, leakage, attachment	o	o	o			
8.4 Fuel tanks: condition, corrosion, leakage, attachment, attaching belts-corrosion, damage, cracks, locking the tightening screws		o	o			
8.5 Venting: check of free passage (by pressure air max. 1,5 atp at open tank fillers)		o	o			
9. OIL SYSTEM						
9.1 Joints in the system: leakage, locking		o	o			
9.2 Hoses: service life, leakage, attachment	o	o	o			
9.3 Oil tank: condition, corrosion, attachment, attaching belts-corrosion, damage, cracks, locking the tightening screws, rinse the tank with pure gasoline		o	o			
9.4 Drop valve: disassembly, cleaning		o	o			
9.5 Oil cooler: condition, leakage, cleaness	o	o	o			Only aircraft equipped with oil cooler
9.6 Venting: check of free passage		o	o			

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Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
10. FIRE EXTINGUISHER SYSTEM						
10.1 Fire extinguisher: condition, prescribed pressure		o	o			
10.2 Piping: condition, attachment, cleaness of nozzles		o	o			
10.3 Control mechanism: condition, greasing	o	o	o			
11. ENGINE INSTALLATION						
11.1 Engine cowlings: surface condition, damage, cracks, condition and function of locks	o	o	o			
11.2 Internal engine covers: condition, damage, cracks	o	o	o			
11.3 Engine bed: play in suspensions, locking, damage, cracks, deformations, corrosion	o	o	o			
11.4 Vibration dampers: cracking, deformations	o	o	o			
11.5 Exhaust manifold: attachment, cracks, deformation, corrosion	o	o	o			
11.6 Control of engine/propeller: function, motion, play, wear, locking	o	o	o			
11.7 Engine accessories: check of aggregates on the firewall		o	o			
12. ENGINE 12.1 Ispection after first 10 hours of operation 12.2 Inspections after 50/100 hours of operation	o	o	o			System of maintenance is given in accompanying engine documentation of the corresponding engine type - see Enclosure No. 3 of this bulletin

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Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
13. WOODEN PROPELLER						
13.1 Propeller: condition of lamellas-cracks, damage of blade sheating, bandage, pint coat, tightening and locking the screws	o	o	o			Only aircraft equipped with wooden propeller
13.2 Spinner: condition, damage, cracks, tightening the screws	o	o	o			
14. METAL PROPELLER						System of maintenance is given in accompanying propeller documentation of the corresponding propeller type - See Enclosure No. 3 of this bulletin
14.1 Inspection after first 10 hours of operation						
14.2 Inspections after 100/200 hours of operation		o	o			
15. ELECTRICAL SYSTEM						
15.1 Conductors: condition, attachment, damage		o	o			
15.2 Battery: cover cleanesss, check of venting, corrosion capacity check, maintenance and charging, attachment, locking	o	o	o			Perform the capacity check at 1 year inspection
15.3 Earthing: condition		o	o			
15.4 Electrical aggregates: condition, function, attachment, cables attachment		o	o			
15.5 Lightning: function, condition		o	o			If installed
15.6 Dischargers of static electricity: condition, attachment			o			
15.7 COMM/NAV equipment: condition, function, attachment			o			
15.8 Ground strap of antenna coaxial cabel: corrosion			o			

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Check of work	Interval of oper. hours			Performed	Checked by:	Note
	50	100	R			
16. PITOT-STATIC SYSTEM						
16.1 Pitot tupe: attachment, damage, cleaness	o	o	o			
16.2 Hoses and tubes: damage, attachment, service life		o	o			
16.3 Drain sumps: damage, cleaness		o	o			
16.4 Check of Pitot-static system			o			
17. FINAL WORK						
17.1 Lubrication: lubricate the aircraft according to Lubrication chart	o	o	o			
17.2 Locking: check of all accesible locking	o	o	o			
17.3 Disassembled covers: conditions, damage, cracks, back assembly	o	o	o			
17.4 Performed work: make entries into appropriate aircraft documentation	o	o	o			

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At periodical inspections of the engines and propellers at aircraft Z 26 series proceed you according to undermentioned accompanying documentation

AIRCRAFT MODEL	ENGINE TYPE	ACCOMPANYING DOCUMENTATION OF ENGINE MANUFACTURER IN VALIDITY VERSION	PROPELLER TYPE	ACCOMPANYING DOCUMENTATION OF PROPELLER MANUFACTURER OF VALIDITY VERSION
Z 126 Z 126 T	WM4-III	Aero engine WALTER MINOR 4-III 105 Hp Technical description service instructions control and maintenance	V 126 L26.1.8100.5	is given in the aircraft accompanying documentation
Z 226 B Z 226 T Z 226 A	WM6-III	Aero engine WALTER MINOR 6-III 160 Hp Technical description service instructions control and maintenance	Z226.640 Z226.641 Z226.641.2	
Z 226 AS			V 503	Aircraft propeller V 503 AUTOMATIC Technical description and operational instruction
Z 226 M	M 137 A	Technical description and engine maintenance manual M 337A, AK, M 332A, AK, M 137A, AZ, M 132A, AK	Z42.6411/13	is given in the aircraft accompanying documentation
Z 226 MS			V 503 A	Aircraft propeller V 503 A AUTOMATIC Technical description and operational instruction
Z 226 SL	LYCOMING AEIO-540 D4B5	Operator's manual Textron Lycoming aircraft engines series AEIO	HO-V 123-K-V/200 AH	Owner's manual for constant speed propeller models HO-V 123
Z 326 Z 326 A	WM6-III	Aero engine WALTER MINOR 6-III 160 Hp Technical description service instructions control and maintenance	Z326.641	is given in the aircraft accompanying documentation
Z 326 M	M 137 A	Technical description and engine maintenance manual M 337A, AK, M 332A, AK, M 137A, AZ, M 132A, AK	Z42.6411/13	
Z 326 MF			V 503 A	Aircraft propeller V 503 A AUTOMATIC Technical description and operational instruction
Z 526 Z 526 A Z 526 AS	WM6-III	Aero engine WALTER MINOR 6-III 160 Hp Technical description service instructions control and maintenance	V 503	Aircraft propeller V 503 AUTOMATIC Technical description and operational instruction

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AIRCRAFT MODEL	ENGINE TYPE	ACCOMPANYING DOCUMENTATION OF ENGINE MANUFACTURER IN VALIDITY VERSION	PROPELLER TYPE	ACCOMPANYING DOCUMENTATION OF PROPELLER MANUFACTURER OF VALIDITY VERSION
Z 526 M	M 137 A	Technical description and engine maintenance manual M 337A, AK, M 332A, AK, M 137A, AZ, M 132A, AK	V 503 / V 503 A	Aircraft propeller V 503 / V 503 A AUTOMATIC Technical description and operational instruction
Z 526 F Z 526 AF Z 526 AFS Z 526 AFS-V Z 526 ASM	M 137 A	Technical description and engine maintenance manual M 337A, AK, M 332A, AK, M 137A, AZ, M 132A, AK	V 503 A	Aircraft propeller V 503 A AUTOMATIC Technical description and operational instruction
Z 526 L	LYCOMING AIO-360 B1B	Operator's manual Textron Lycoming aircraft engines series AIO	HC-C3YK-4/C 7666 A2	Propeller owner's manual & log book, installation, operation service
Z 526 ML	LYCOMING AEIO-540 D4B5	Operator's manual Textron Lycoming aircraft engines series AEIO	HO-V 123-K-V/200 AH	Owner's manual for constant speed propeller models HO-V 123
Z 726	M 137 AZ	Technical description and engine maintenance manual M 337A, AK, M 332A, AK, M 137A, AZ, M 132A, AK	V 503 A	Aircraft propeller V 503 A AUTOMATIC Technical description and operational instruction
Z 726 K	M 337 AK		V 500 A	Operator's manual for the V 500 A propeller