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# TYPE-CERTIFICATE DATA SHEET

**NO. EASA.A.445**

**for**

**Type Certificate Holder**  
AGROAIR, spol. s.r.o.

Štěpánkova 86  
537 01 Chrudim  
CZECH REPUBLIC

For models: Z - 37  
Z - 37 - 2  
Z - 37A  
Z - 37A - 2



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## **SECTION A: Z - 37**

### **A.I. General**

- |   |  |
|---|--|
| 1. Type/ Model/ Variant                     |  |
| 1.1 Type                                    | Z – 37   |
| 1.2 Model                                   | Z – 37   |
| 2. Airworthiness Category                   | Restricted Category (see Note 1)   |
| 3. Manufacturer                             | From S/N 00-01 to S/N 27-19<br>LET, n.p.<br>686 04 Kunovice 1177<br>CZECH REPUBLIC |
| 4. EASA Type Certification Application Date | 25-Jul-1966  |
- Note: State of Design Authority certification application date for grandfathered products*
- |  |                |
|--|----------------|
| 5. State of Design Authority                       | CZECH REPUBLIC |
| 6. State of Design Authority Type Certificate Date | 25-Jul-1966    |
| 7. EASA Type Certification Date                    | 27-Mar-2007    |
- EASA Type Certificate replaces Czech Type Certificate No. 66-05

### **A.II. EASA Certification Basis**

- |   |   |
|---|---|
| 1. Reference Date for determining the applicable requirements | -   |
| 2. Airworthiness Requirements                                 | British Civil Airworthiness Requirements BCAR, Section D, valid to 01.12.1963   |
| 3. Special Conditions   | None  |
| 4. Exemptions   | D2-7 5.1 The side component of the wind at which the directional controllability at taxiing complies with regulation is not determined.<br>D2-8 5.4.1 Longitudinal control forces change caused by concurrent increase of engine power and flaps retraction is 16 to 19 daN<br>D2-9 2.1.3 Non-compliance with requirement for control force balancing at aft position of center of gravity, maximum continuous power of the engine and maximum take-off weight at 0.9 v <sub>NO</sub><br>D2-9 2.1.6 Non-compliance with requirement for control force balancing at forward position of center of gravity at descent flight with engine idle in the speed range from 1.2 to 1.4 v <sub>SO</sub><br>D5-5 3.3 Supplement - not installed emergency heating of suction air for carburetor<br>D5-8 7 Fuel and oil piping in the engine space is not fire-resistant<br>D5-8 2.1. Oil tank, its installation and attachment is not fireproof |



D6-1 4.2.1 e) Not installed flight indicator of oil quantity that is required with regard to the engine oil usage for the setting of propeller blades

D6-7 8.1 Non-compliant color of position lights

D6-7 5.2 Non-compliant intensity of position lights

D6-7 5.3 Non-compliant intensity of position lights

- 5. (Reserved) Deviations None
- 6. Equivalent Safety Findings None
- 7. Environmental Protection None
- 8. Interpretative Material and Means of Compliance



### A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	Specification Sheet , drawing No. Z37.0000-00/1
2. Description	Z - 37 aircraft is single-engine, low-wing aircraft of compound design with usage of metal and fabric materials.
3. Equipment	Flight and navigation instruments: Magnetic compass LUN 1221 Altimeter LUN 1121 Airspeed indicator with over-pulling indication LUN 1107 Vertical speed indicator LUN 1147 Turn indicator LUN 1213 Stall warning indication light CHS – 39 Engine instruments: RPM indicator LUN 1341 Blower pressure gauge LUN 1401 Quadruplicate indicator of engine parameters LUN 1527 Thermometer of cylinder heads LUN 1380 Volt-ammeter LUN 2715 Warning light of engine fire SLC - 51 Inlet air temperature indicator TUE – 48 Airframe and systems instruments: Pneumatic system pressure gauge MA-100 Earlier MV-80-100 Chemical pressure gauge AP-6 Chemical weight indicator AP-6 Dual fuel quantity indicator LUN 1626 Warning remaining fuel light SLC - 51
4. Dimensions	Wing Span: 12.224 m Length: 8.550 m Height: 2.898 m Wing Area: 23.8 sq.m
5. Engine	
5.1. Model	M 462 R F
5.2 Type Certificate	EASA approved (CAA CZ TC No. 66-04) (see Note 2)
5.3 Limitations	Maximum take-off power Power 315 HP Speed 2450 RPM Maximum continuous (nominal) power: Power 280 HP Speed 2200 RPM Maximum cruise power:



	Power	195 HP		
	Speed	1900-1950 RPM		
6. Load factors	Aerial works	+ 3.5 g - 1.4 g		
	Cargo	+ 3.8 g - 1.52 g		
7. Propeller				
7.1 Model	V 520 /7/			
7.2 Type Certificate	EASA approved (CAA CZ TC No. 66-01) (see Note 3)			
7.3 Number of blades	2			
7.4 Diameter	2700 mm			
7.5 Sense of Rotation	Anticlockwise in the view of the flight direction			
8. Fluids				
8.1 Fuel	Jet fuel ESSO ICP 80 SHELL Avgas 80 SHELL Avgas 100 LL BP 100 L BL 78 according to ČSN 65 6510			
8.2 Oil	AEROSHELL Oil W 100, 120 ELF Aviation AD 100 MOBIL Aero D 100 BP Aero Oil 100 CASTROL Aero AD 100 TOTAL Aero D 100			
8.3 Coolant	None			
9. Fluid capacities				
9.1 Fuel	Total:			
	Main Fuel Tank	127 liters		
	Auxiliary Fuel Tank	127 liters		
	Usable:			
	Main Fuel Tank	126.5 liters		
	Auxiliary Fuel Tank	126.5 liters		
9.2 Oil	17.3 liters			
9.3 Coolant system capacity				
10. Air Speeds	Never exceeding speed	V <sub>NE</sub>	270 km/h IAS	
	Maximum speed for normal manoeuvres	V <sub>NO</sub>	175 km/h IAS	
	Design manoeuvring speed	V <sub>A</sub>	170 km/h IAS	
	Maximum flaps extended speed	V <sub>FE</sub>	150 km/h IAS	
11. Maximum Operating Altitude	Without agricultural equipment	4000 m		
	With agricultural equipment	3670 m		
12. Approved Operations Capability	VFR-Day operations			
13. Maximum Masses	for aerial works	1850 kg		
	cargo	1725 kg		



14. Centre of Gravity Range	23 - 31 % MAC		
15. Datum	Fuselage System frame No. 1 (firewall)		
16. Mean Aerodynamic Chord (MAC)	2.0 m		
17. Levelling Means	Identical with the basic fuselage level – see the Aircraft Maintenance Manual		
18. Minimum Flight Crew	1		
19. Maximum Passenger Seating Capacity	2 including the pilot seat, category for aerial works only		
20. Baggage/ Cargo Compartments	for aerial works, (in chemical tank, 650 l volume) 600 kg for cargo 490 kg		
21. Wheels and Tyres	Main landing gear wheel K 560.3-00-7 with tyre 556 x 163 mm Model 2 Rear landing gear wheel K 290-00-7 with tyre 290 x 110 mm Ant shimmy		
22. Control surface deflections:	Ailerons	up	+26° ±1°
		down	-18,5° ±1°
	Elevator	up	+35°- 0° +2°
		down	-20°- 0°+2°
	Rudder		±26° + 2°-1°
	Inner flaps	retracted	8.5°
		take-off	18.5°
		landing	53.5°
	Outer flaps	retracted	5°
		take-off	15°
		landing	50°
23. (Reserved)			





## **A.IV. Operating and Service Instructions**

### 1. Flight Manual

-In Czech language: Letová příručka pro letoun Z – 37 Do-Z37-1010.0

### 2. Maintenance Manual

-In Czech language: Technický popis letounu Z – 37 Do-Z37-1023.0

-In Czech language: Příručka pro obsluhu a údržbu letounu Z – 37 Do-Z37-1031.0

-In Czech language: Technický popis a návod k obsluze násypného zařízení LN 2-00  
Do-Z37-1042.0

-In Czech language: Popis a návod k obsluze nádrže mechanického náhonu  
Do-Z37-1045.0

-In Czech language: Popis a návod k obsluze rozmetacího a poprašovacího zařízení  
Do-Z37-1040.0

-In Czech language: Popis a návod k obsluze postřikovacího zařízení, vodní trysky, olejové trysky Do-Z37-1041.0

### 3. Operational manuals for engine and propeller:

-In Czech language: Příručka: Letecký motor M 462 RF - technický popis a návod k obsluze

-In Czech language: Technický popis a provozní instrukce vrtule V 520



#### **A.V. Notes**

- Note 1: No general restrictions applicable. Any restrictions necessary for a single airplane to be listed in the Certificate of Airworthiness of the affected airplane
- Note 2: The EASA type certification standard includes that of CAA Cz TC No. 66-04 based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.
- Note 3: The EASA type certification standard includes that of CAA Cz TC No. 66-01 based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.
- Note 4: Transfer of the TCDS EASA.A.445 from Aircraft Industries, a.s. (former name: LET, n.p.) to Agroair, spol.s.r.o. on 22-May-2024.



**SECTION B: Z - 37 - 2**

**B.I. General**

1. Type/ Model/ Variant

1.1 Type Z – 37

1.2 Model Z - 37 - 2

2. Airworthiness Category Restricted Category (see Note 1)

3. Manufacturer From S/N 00-10  
LET, n.p.  
686 04 Kunovice 1177  
CZECH REPUBLIC

4. EASA Type Certification Application Date 07-May-1967

*Note: State of Design Authority certification application date for grandfathered products*

5. State of Design Authority CZECH REPUBLIC

6. State of Design Authority Type Certificate Date 07-May-1967

7. EASA Type Certification Date 27-Mar-2007

EASA Type Certificate replaces Czech Type Certificate No. 66-05

**B.II. EASA Certification Basis**

1. Reference Date for determining the applicable requirements -

2. Airworthiness Requirements British Civil Airworthiness Requirements BCAR, Section D, valid to 01.12.1963

3. Special Conditions None

4. Exemptions D2-7 5.1 The side component of the wind at which the directional controllability at taxiing complies with regulation is not determined.

D2-8 5.4.1 Longitudinal control forces change caused by concurrent increase of engine power and flaps retraction is 16 to 19 daN

D2-9 2.1.3 Non-compliance with requirement for control force balancing at aft position of center of gravity, maximum continuous power of the engine and maximum take-off weight at  $0.9 v_{NO}$

D2-9 2.1.6 Non-compliance with requirement for control force balancing at forward position of center of gravity at descent flight with engine idle in the speed range from 1.2 to 1.4  $v_{SO}$

D5-5 3.3 Supplement - not installed emergency heating of suction air for carburetor

D5-8 7 Fuel and oil piping in the engine space is not fire-resistant

D5-8 2.1. Oil tank, its installation and attachment is not fireproof



D6-1 4.2.1 e) Not installed flight indicator of oil quantity that is required with regard to the engine oil usage for the setting of propeller blades

D6-7 8.1 Non-compliant color of position lights

D6-7 5.2 Non-compliant intensity of position lights

D6-7 5.3 Non-compliant intensity of position lights

- |  |      |
|--|------|
| 5. (Reserved) Deviations                           | None |
| 6. Equivalent Safety Findings                      | None |
| 7. Environmental Protection                        | None |
| 8. Interpretative Material and Means of Compliance |      |



### **B.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition	Specification Sheet , drawing No. Z37.0000-00/1
2. Description	Z - 37 aircraft is single-engine, low-wing aircraft of compound design with usage of metal and fabric materials.
3. Equipment	Flight and navigation instruments: Magnetic compass LUN 1221 Altimeter LUN 1121 Airspeed indicator with over-pulling indication LUN 1107 Vertical speed indicator LUN 1147 Turn indicator LUN 1213 Stall warning indication light CHS – 39 Engine instruments: RPM indicator LUN 1312 Blower pressure gauge LUN 1401 Quadruplicate indicator of engine parameters LUN 1527 Cylinder heads thermometer LUN 1380 Volt-ammeter LUN 2715 from 3-rd series or VA 240 to 2-nd series Warning light of engine fire SLC - 51 Inlet air temperature indicator TUE - 48 Dynamo warning light SLC – 51 Airframe and systems instruments: Pneumatic system thermometer MV-80 Fuel indicator LUN 1626 Remaining fuel warning light SLC – 51 Standard equipment of the rear cockpit: Flight and navigation instruments: Altimeter LUN 1121 Airspeed indicator LUN 1106 Vertical speed indicator LUN 1147 Turn indicator LUN 1213 Engine instruments: RPM indicator LUN 1312 Blower pressure gauge LUN 1401 Quadruple indicator of engine parameters LUN 1527 Warning light of engine fire SLC - 51 Inlet air temperature indicator TUE - 48 Dynamo warning light SLC - 51 Push-button for over-switching of indicators A 09-9430-64



Airframe and systems instruments:

Fuel cock position warning light SLC - 51  
Mechanical indicator of the elevator trim tab position  
Z37.4411-00  
Mechanical indicator of the oil cooler flap position Z237.8230-00  
Mechanical indicator of the sun-blind position Z237.7360-00

4. Dimensions

Wing Span: 12.224 m  
Length: 8.550 m  
Height: 2.898 m  
Wing Area: 23.8 sq.m

5. Engine

5.1. Model M 462 R F  
5.2 Type Certificate EASA approved (CAA CZ TC No. 66-04) (see Note 2)  
5.3 Limitations  
Maximum take-off power  
Power 315 HP  
Speed 2450 RPM  
Maximum continuous (nominal) power:  
Power 280 HP  
Speed 2200 RPM  
Maximum cruise power:  
Power 195 HP  
Speed 1900-1950 RPM

6. Load factors

Limit load factor + 3.8 g - 1.4 g

7. Propeller

7.1 Model V 520 /7/  
7.2 Type Certificate EASA approved (CAA CZ TC No. 66-01) (see Note 3)  
7.3 Number of blades 2  
7.4 Diameter 2700 mm  
7.5 Sense of Rotation Anticlockwise in the view of the flight direction

8. Fluids

8.1 Fuel Jet fuel ESSO ICP 80  
SHELL Avgas 80  
SHELL Avgas 100 LL  
BP 100 L  
BL 78 according to ČSN 65 6510  
8.2 Oil AEROSHELL Oil W 100, 120  
ELF Aviation AD 100  
MOBIL Aero D 100  
BP Aero Oil 100



	CASTROL Aero AD 100		
	TOTAL Aero D 100		
8.3 Coolant	None		
9. Fluid capacities			
9.1 Fuel	Total:		
	Main Fuel Tank	127 liters	
	Auxiliary Fuel Tank	127 liters	
	Usable:		
	Main Fuel Tank	126.5 liters	
	Auxiliary Fuel Tank	126.5 liters	
9.2 Oil	17.3 liters		
9.3 Coolant system capacity			
10. Air Speeds	Never exceeding speed	V <sub>NE</sub>	270 km/h IAS
	Maximum speed for normal manoeuvres	V <sub>NO</sub>	175 km/h IAS
	Design manoeuvring speed	V <sub>A</sub>	170 km/h IAS
	Maximum flaps extended speed	V <sub>FE</sub>	150 km/h IAS
11. Maximum Operating Altitude	3785 m (only without agricultural equipment)		
12. Approved Operations Capability	VFR-Day operations		
13. Maximum Masses	Maximum take-off weight	1600 kg	
14. Centre of Gravity Range		23 - 31 % MAC	
15. Datum	Fuselage System frame No. 1 (firewall)		
16. Mean Aerodynamic Chord (MAC)	2.0 m		
17. Levelling Means	Identical with the basic fuselage level – see the Aircraft Maintenance Manual		
18. Minimum Flight Crew	1		
19. Maximum Passenger Seating Capacity	2 including the pilot seat		
20. Baggage/ Cargo Compartments	38 kg		
21. Wheels and Tyres	Main landing gear wheel K 560.3-00-7 with tyre 556 x 163 mm Model 2		
	Rear landing gear wheel K 290-00-7 with tyre 290 x 110 mm Ant shimmy		
22. Control surface deflections:	Ailerons	up	+26° ±1°
		down	-18,5° ±1°
	Elevator	up	+35°- 0° +2°
		down	-20°- 0°+2°
	Rudder		±26° + 2°-1°
	Inner flaps	retracted	8.5°
		take-off	18.5°
		landing	53.5°
	Outer flaps	retracted	5°
		take-off	15°
		landing	50°



23. (Reserved)





## **B.IV. Operating and Service Instructions**

### 1. Flight Manual

- In Czech language: Letová příručka pro letoun Z – 37 Do-Z37-1010.0
- In Czech language: Doplněk k letové příručce pro letoun Z - 37 – 2 Do-Z37-3022.0

### 2. Maintenance Manual

- In Czech language: Technický popis letounu Z – 37 Do-Z37-1023.0
  - In Czech language: Doplněk k technickému popisu pro letoun Z-37-2 Do-Z37-3022.0
  - In Czech language: Příručka pro obsluhu a údržbu letounu Z – 37 Do-Z37-1031.0
  - In Czech language: Doplněk k příručce pro obsluhu a údržbu letounu Z - 37 – 2  
Do-Z37-3022.0
  - In Czech language: Palubní a elektrické přístroje použité na letounu Z – 37 Do-Z37-3311.0
- ### 3. Operational manuals for engine and propeller:
- In Czech language: Příručka: Letecký motor M 462 RF - technický popis a návod k obsluze
  - In Czech language: Technický popis a provozní instrukce vrtule V 520



## **B.V. Notes**

- Note 1: No general restrictions applicable. Any restrictions necessary for a single airplane to be listed in the Certificate of Airworthiness of the affected airplane
- Note 2: The EASA type certification standard includes that of CAA Cz TC No. 66-04 based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.
- Note 3: The EASA type certification standard includes that of CAA Cz TC No. 66-01 based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.
- Note 4: Transfer of the TCDS EASA.A.445 from Aircraft Industries, a.s. (former name: LET, n.p.) to Agroair, spol.s.r.o. on 22-May-2024.



## **SECTION C: Z - 37A**

### **C.I. General**

1. Type/ Model/ Variant
    - 1.1 Type Z – 37
    - 1.2 Model Z – 37A
  2. Airworthiness Category Restricted Category (see Note 1)
  3. Manufacturer From S/N 01-05 to S/N 25-38  
LET, n.p.  
686 04 Kunovice 1177  
CZECH REPUBLIC
  4. EASA Type Certification Application Date 03-Jan-1971
- Note: State of Design Authority certification application date for grandfathered products*
5. State of Design Authority CZECH REPUBLIC
  6. State of Design Authority Type Certificate Date 03-Jan-1971
  7. EASA Type Certification Date 27-Mar-2007
- EASA Type Certificate replaces Czech Type Certificate No. 66-05

### **C.II. EASA Certification Basis**

1. Reference Date for determining the applicable requirements -
2. Airworthiness Requirements British Civil Airworthiness Requirements BCAR, Section D, valid to 01.12.1963
3. Special Conditions None
4. Exemptions
  - D2-7 5.1 The side component of the wind at which the directional controllability at taxiing complies with regulation is not determined.
  - D2-8 5.4.1 Longitudinal control forces change caused by concurrent increase of engine power and flaps retraction is 16 to 19 daN
  - D2-9 2.1.3 Non-compliance with requirement for control force balancing at aft position of center of gravity, maximum continuous power of the engine and maximum take-off weight at 0.9  $v_{NO}$
  - D2-9 2.1.6 Non-compliance with requirement for control force balancing at forward position of center of gravity at descent flight with engine idle in the speed range from 1.2 to 1.4  $v_{SO}$
  - D5-5 3.3 Supplement - not installed emergency heating of suction air for carburetor
  - D5-8 7 Fuel and oil piping in the engine space is not fire-resistant
  - D5-8 2.1. Oil tank, its installation and attachment is not fireproof



D6-1 4.2.1 e) Not installed flight indicator of oil quantity that is required with regard to the engine oil usage for the setting of propeller blades

D6-7 8.1 Non-compliant color of position lights

D6-7 5.2 Non-compliant intensity of position lights

D6-7 5.3 Non-compliant intensity of position lights

- 5. (Reserved) Deviations None
- 6. Equivalent Safety Findings None
- 7. Environmental Protection None
- 8. Interpretative Material and Means of Compliance



### C.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	Specification Sheet , drawing No. Z37.0000-00/1
2. Description	Z - 37 aircraft is single-engine, low-wing aircraft of compound design with usage of metal and fabric materials.
3. Equipment	Aircraft up to S/N 01-05 Flight and navigation instruments: Magnetic compass LUN 1221-8 Altimeter LUN 1121.02-8 Airspeed indicator with over-pulling indication LUN 1107-8 Vertical speed indicator LUN 1147.10-8 Turn indicator LUN 1213-8 Stall warning indication light CHS – 39 Engine instruments: RPM indicator LUN 1341-48 Blower pressure gauge LUN 1401-8 Quadruplicate indicator of engine parameters LUN 1527-8 Heads temperature thermometer LUN 1380-8 Volt-ammeter LUN 2715-8 Warning light of engine fire SLC - 51 Inlet air temperature indicator TUE – 48 Dynamo warning light SLC – 51 Airframe and systems instruments: Pneumatic system thermometer MA-100 Chemical pressure gauge AP-6 Chemical weight indicator LUN-1472-8 Fuelmeter LUN 1626-8 Warning light of remaining fuel SLC – 51
4. Dimensions	Wing Span: 12.224 m Length: 8.550 m Height: 2.898 m Wing Area: 23.8 sq.m
5. Engine	
5.1. Model	M 462 R F
5.2 Type Certificate	EASA approved (CAA CZ TC No. 66-04) (see Note 2)
5.3 Limitations	Maximum take-off power Power 315 HP Speed 2450 RPM Maximum continuous (nominal) power: Power 280 HP



	Speed	2200 RPM		
	Maximum cruise power:			
	Power	195 HP		
	Speed	1900-1950 RPM		
6. Load factors	For aerial works	+ 3.5 g - 1.4 g		
	Cargo	+ 3.8 g - 1.52	7. Propeller	
7.1 Model	V 520 /7/			
7.2 Type Certificate	EASA approved (CAA CZ TC No. 66-01)	(see Note 3)		
7.3 Number of blades	2			
7.4 Diameter	2700 mm			
7.5 Sense of Rotation	Anticlockwise in the view of the flight direction			
8. Fluids				
8.1 Fuel	Jet fuel ESSO ICP 80			
	SHELL Avgas 80			
	SHELL Avgas 100 LL			
	BP 100 L			
	BL 78 according to ČSN 65 6510			
8.2 Oil	AEROSHELL Oil W 100, 120			
	ELF Aviation AD 100			
	MOBIL Aero D 100			
	BP Aero Oil 100			
	CASTROL Aero AD 100			
	TOTAL Aero D 100			
8.3 Coolant	None			
9. Fluid capacities				
9.1 Fuel	Total:			
	Main Fuel Tank	127 liters		
	Auxiliary Fuel Tank	127 liters		
	Usable:			
	Main Fuel Tank	126.5 liters		
	Auxiliary Fuel Tank	126.5 liters		
9.2 Oil	17.3 liters			
9.3 Coolant system capacity				
10. Air Speeds	Never exceeding speed	V <sub>NE</sub>	270 km/h IAS	
	Maximum speed for normal manoeuvres	V <sub>NO</sub>	175 km/h IAS	
	Design manoeuvring speed	V <sub>A</sub>	170 km/h IAS	
	Maximum flaps extended speed	V <sub>FE</sub>	150 km/h IAS	
11. Maximum Operating Altitude	Without agricultural equipment		4000 m	
	With agricultural equipment		3670 m	
12. Approved Operations Capability	VFR-Day operations			



13. Maximum Masses	Maximum take-off weight:		
	- for aerial works		1850 kg
	- cargo		1725 kg
14. Centre of Gravity Range	23 - 31 % MAC		
15. Datum	Fuselage System frame No. 1 (firewall)		
16. Mean Aerodynamic Chord (MAC)	2.0 m		
17. Levelling Means	Identical with the basic fuselage level – see the Aircraft Maintenance Manual		
18. Minimum Flight Crew	1		
19. Maximum Passenger Seating Capacity	2 including the pilot seat		
20. Baggage/ Cargo Compartments	for aerial works, (in chemical tank, 650 l volume)		600 kg
	for cargo		490 kg
21. Wheels and Tyres	Main landing gear wheel K 560.3-00-7 with tyre 556 x 163 mm Model 2		
	Rear landing gear wheel K 290-00-7 with tyre 290 x 110 mm Ant shimmy		
22. Control surface deflections:	Ailerons	up	+26° ±1°
		down	-18,5° ±1°
	Elevator	up	+35°- 0° +2°
		down	-20°- 0°+2°
	Rudder		±26° + 2°-1°
	Inner flaps	retracted	8.5°
		take-off	18.5°
		landing	53.5°
	Outer flaps	retracted	5°
		take-off	15°
		landing	50°
23. (Reserved)			



## **C.IV. Operating and Service Instructions**

### 1. Flight Manual

- In Czech language: Letová příručka pro letoun Z - 37A Do-Z37-1011.1

### 2. Maintenance Manual

-In Czech language: Technický popis letounu Z - 37A Do-Z37-1021.1

-In Czech language: Příručka pro obsluhu a údržbu letounu Z - 37A Do-Z37-1031.0

-In Czech language: Technický popis a návod k obsluze násypného zařízení LN 2-00  
Do-Z37-1042.0

-In Czech language: Popis a návod k obsluze nádrže mechanického náhonu  
Do-Z37-1045.0

-In Czech language: Popis a návod k obsluze rozmetacího a poprašovacího zařízení  
Do-Z37-1040.0

-In Czech language: Popis a návod k obsluze postřikovacího zařízení, vodní trysky, olejové trysky  
Do-Z37-1041.0

### 3. Operational manuals for engine and propeller:

-In Czech language: Příručka: Letecký motor M 462 RF - technický popis a návod k obsluze

-In Czech language: Technický popis a provozní instrukce vrtule V 520





## **C.V. Notes**

- Note 1: No general restrictions applicable. Any restrictions necessary for a single airplane to be listed in the Certificate of Airworthiness of the affected airplane
- Note 2: The EASA type certification standard includes that of CAA Cz TC No. 66-04 based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.
- Note 3: The EASA type certification standard includes that of CAA Cz TC No. 66-01 based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.
- Note 4: Transfer of the TCDS EASA.A.445 from Aircraft Industries, a.s. (former name: LET, n.p.) to Agroair, spol.s.r.o. on 22-May-2024.



## **SECTION D: Z - 37A - 2**

### **D.I. General**

#### 1. Type/ Model/ Variant

1.1 Type Z – 37

1.2 Model Z – 37A - 2

2. Airworthiness Category Restricted Category (see Note 1)

3. Manufacturer From S/N 05-17

LET, n.p.

686 04 Kunovice 1177

CZECH REPUBLIC

4. EASA Type Certification Application Date 03-Jan-1971

*Note: State of Design Authority certification application date for grandfathered products*

5. State of Design Authority CZECH REPUBLIC

6. State of Design Authority Type Certificate Date 03-Jan-1971

7. EASA Type Certification Date 27-Mar-2007

EASA Type Certificate replaces Czech Type Certificate No. 66-05

### **D.II. EASA Certification Basis**

1. Reference Date for determining the applicable requirements -

2. Airworthiness Requirements British Civil Airworthiness Requirements BCAR, Section D, valid to 01.12.1963

3. Special Conditions None

4. Exemptions D2-7 5.1 The side component of the wind at which the directional controllability at taxiing complies with regulation is not determined.

D2-8 5.4.1 Longitudinal control forces change caused by concurrent increase of engine power and flaps retraction is 16 to 19 daN

D2-9 2.1.3 Non-compliance with requirement for control force balancing at aft position of center of gravity, maximum continuous power of the engine and maximum take-off weight at 0.9  $v_{NO}$

D2-9 2.1.6 Non-compliance with requirement for control force balancing at forward position of center of gravity at descent flight with engine idle in the speed range from 1.2 to 1.4  $v_{SO}$

D5-5 3.3 Supplement - not installed emergency heating of suction air for carburetor

D5-8 7 Fuel and oil piping in the engine space is not fire-resistant

D5-8 2.1. Oil tank, its installation and attachment is not fireproof



D6-1 4.2.1 e) Not installed flight indicator of oil quantity that is required with regard to the engine oil usage for the setting of propeller blades

D6-7 8.1 Non-compliant color of position lights

D6-7 5.2 Non-compliant intensity of position lights

D6-7 5.3 Non-compliant intensity of position lights

- |  |      |
|--|------|
| 5. (Reserved) Deviations                           | None |
| 6. Equivalent Safety Findings                      | None |
| 7. Environmental Protection                        | None |
| 8. Interpretative Material and Means of Compliance |      |



### D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	Specification Sheet , drawing No. Z37.0000-00/1
2. Description	Z - 37 aircraft is single-engine, low-wing aircraft of compound design with usage of metal and fabric materials.
3. Equipment	Aircraft up to S/N 01-05
	Flight and navigation instruments:
	Magnetic compass LUN 1221
	Altimeter LUN 1121
	Airspeed indicator with over-pulling indication LUN 1107
	Vertical speed indicator LUN 1147
	Turn indicator LUN 1213
	Stall warning indication light CHS - 39
	Engine instruments:
	RPM indicator LUN 1312
	Blower pressure gauge LUN 1401
	Quadruplicate indicator of engine parameters LUN 1527
	Cylinder heads thermometer LUN 1380
	Volt-ammeter LUN 2715
	from 3-rd series
	or VA 240
	to 2-nd series
	Warning light of engine fire SLC - 51
	Inlet air temperature indicator TUE - 48
	Dynamo warning light SLC – 51
	Airframe and systems instruments:
	Pneumatic system thermometer MV-80
	Fuel indicator LUN 1626
	Remaining fuel warning light SLC – 51
	Standard equipment of the rear cockpit:
	Flight and navigation instruments:
	Altimeter LUN 1121
	Airspeed indicator LUN 1106
	Vertical speed indicator LUN 1147
	Turn indicator LUN 1213
	Engine instruments:
	RPM indicator LUN 1312
	Fan pressure gauge LUN 1401
	Quadruple indicator of engine parameters LUN 1527
	Warning light of engine fire SLC - 51
	Inlet air temperature indicator TUE - 48



Dynamo warning light SLC - 51  
Push-button for over-switching of indicators A 09-9430-64

Airframe and systems instruments:

Fuel cock position warning light SLC - 51  
Mechanical indicator of the elevator trim tab position  
Z37.4411-00  
Mechanical indicator of the oil cooler flap position Z237.8230-00  
Mechanical indicator of the sun-blind position Z237.7360-00

4. Dimensions

Wing Span: 12.224 m  
Length: 8.550 m  
Height: 2.898 m  
Wing Area: 23.8 sq.m

5. Engine

5.1. Model M 462 R F  
5.2 Type Certificate EASA approved (CAA CZ TC No. 66-04) (see Note 2)  
5.3 Limitations  
Maximum take-off power  
Power 315 HP  
Speed 2450 RPM  
Maximum continuous (nominal) power:  
Power 280 HP  
Speed 2200 RPM  
Maximum cruise power:  
Power 195 HP  
Speed 1900-1950 RPM

6. Load factors

+ 3.8 g - 1.4 g

7.1 Model V 520 /7/  
7.2 Type Certificate EASA approved (CAA CZ TC No. 66-01) (see Note 3)  
7.3 Number of blades 2  
7.4 Diameter 2700 mm  
7.5 Sense of Rotation Anticlockwise in the view of the flight direction

8. Fluids

8.1 Fuel  
Jet fuel ESSO ICP 80  
SHELL Avgas 80  
SHELL Avgas 100 LL  
BP 100 L  
BL 78 according to ČSN 65 6510  
8.2 Oil  
AEROSHELL Oil W 100, 120  
ELF Aviation AD 100  
MOBIL Aero D 100  
BP Aero Oil 100



	CASTROL Aero AD 100		
	TOTAL Aero D 100		
8.3 Coolant	None		
9. Fluid capacities			
9.1 Fuel	Total:		
	Main Fuel Tank	127 liters	
	Auxiliary Fuel Tank	127 liters	
	Usable:		
	Main Fuel Tank	126.5 liters	
	Auxiliary Fuel Tank	126.5 liters	
9.2 Oil	17.3 liters		
9.3 Coolant system capacity			
10. Air Speeds	Never exceeding speed	V <sub>NE</sub>	270 km/h IAS
	Maximum speed for normal manoeuvres	V <sub>NO</sub>	175 km/h IAS
	Design manoeuvring speed	V <sub>A</sub>	170 km/h IAS
	Maximum flaps extended speed	V <sub>FE</sub>	150 km/h IAS
11. Maximum Operating Altitude	Without agricultural equipment		3785 m
12. Approved Operations Capability	VFR-Day operations		
13. Maximum Masses	Maximum take-off weight:		1600 kg
14. Centre of Gravity Range	23 - 31 % MAC		
15. Datum	Fuselage System frame No. 1 (firewall)		
16. Mean Aerodynamic Chord (MAC)			2.0 m
17. Levelling Means	Identical with the basic fuselage level – see the Aircraft Maintenance Manual		
18. Minimum Flight Crew	1		
19. Maximum Passenger Seating Capacity	2 including the pilot seat		
20. Baggage/ Cargo Compartments	38 kg		
21. Wheels and Tyres	Main landing gear wheel K 560.3-00-7 with tyre 556 x 163 mm Model 2		
	Rear landing gear wheel K 290-00-7 with tyre 290 x 110 mm Ant shimmy		
22. Control surface deflections:	Ailerons	up	+26° ±1°
		down	-18,5° ±1°
	Elevator	up	+35°- 0° +2°
		down	-20°- 0°+2°
	Rudder		±26° + 2°-1°
	Inner flaps retracted		8.5°
	take-off		18.5°
	landing		53.5°
	Outer flaps retracted		5°
	take-off		15°
	landing		50°



23. (Reserved)



## **D.IV. Operating and Service Instructions**

### **1. Flight Manual**

- In Czech language: Letová příručka pro letoun Z – 37A Do-Z37-1011.1
- In Czech language: Letová příručka pro letoun Z-37A-Čmelák modifikace C2,C3  
Do-Z37-1012.1

### **2. Maintenance Manual**

- In Czech language: Technický popis letounu Z – 37A Do-Z37-1021.1
- In Czech language: Doplněk k technickému popisu pro letoun Z-37A-2  
Do-Z37-3022.0
- In Czech language: Příručka pro obsluhu a údržbu letounu Z – 37A  
Do-Z37-1031.0
- In Czech language: Doplněk k příručce pro obsluhu a údržbu letounu Z – 37A – 2  
Do-Z37-3022.0
- In Czech language: Palubní a elektrické přístroje použité na letounu Z – 37A  
Do-Z37-3311.0

### **3. Operational manuals for engine and propeller:**

- In Czech language: Příručka: Letecký motor M 462 RF - technický popis a návod k obsluze
- In Czech language: Technický popis a provozní instrukce vrtule V 520





#### **D.V. Notes**

- Note 1: No general restrictions applicable. Any restrictions necessary for a single airplane to be listed in the Certificate of Airworthiness of the affected airplane
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- Note 3: The EASA type certification standard includes that of CAA Cz TC No. 66-01 based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.
- Note 4: Transfer of the TCDS EASA.A.445 from Aircraft Industries, a.s. (former name: LET, n.p.) to Agroair, spol.s.r.o. on 22-May-2024.



## SECTION ADMINISTRATIVE

### I. Acronyms & Abbreviations

[insert list or table]

### II. Type Certificate Holder Record

TC Holder	Period
Aircraft Industries, a.s. Na Záhonech 1177 68604 Kunovice CZECH REPUBLIC EASA.21J.119	27 March 2007 – 21 May 2024
Agroair s.r.o. Štěpánkova 86 537 01 Chrudim CZECH REPUBLIC	Since 22 May 2024
Contracted DOA Holder based on 21.A.2:  Aircraft Industries, a.s. Na Záhonech 1177 68604 Kunovice CZECH REPUBLIC EASA.21J.119	Since 22 May 2024

### III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 1	27-Mar-2007	Transfer of Z-37 Type Design to EASA	Initial Issue, 27-Mar-2007
Issue 2	22-May-2024	Transfer of Certificate from Aircraft Industries, a.s. to Agroair, spol. s.r.o.	Issue 1, 22-May-2024
Issue 3	07-April 2025	Implementation of Section Administrative and new TCDS template	Issue 1, 22-May-2024

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