CIVIL AVIATION AUTHORITY
OF THE CZECH REPUBLIC

71-04
Revision 6
Aircraft Industries, a.s..
L - 410 Turbolet
L - 410 A Turbolet
L - 410 M Turbolet
L 410 UVP – Turbolet
L 410 UVP-LW
L - 410 UVP – E
L 410 UVP-E-LW
L 410 UVP - E9
L 410 UVP-E20
L-420
11.04.2007

TYPE CERTIFICATE DATA SHEET No. 71-04

This data sheet which is a part of Type Certificate No. 71-04 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Czech Republic.

Model	Application Date	Certification Date
L - 410 Turbolet	-	31.03.1971
L - 410 A Turbolet	-	20.03.1972
L - 410 M Turbolet	-	28.08.1975
L - 410 UVP - Turbolet	1974	10.07.1979
L - 410 UVP - E	1981	30.01.1986
L 410 UVP - E9	-	22.03.1988
L 410 UVP-E20	-	30.10.1990
L-420	-	11.03.1998
L 410 UVP-LW	-	08.03.2005
L 410 UVP-E-LW	-	05.09.2005

Page No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Rev. No.	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Page No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Rev. No.	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Page No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Rev. No.	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Page No.	46	47	48	49	50	51	52	53	54	55	56	67	68	69	60
Rev. No.	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Page No.	61	62	63	64	65	66	67	68							
Rev. No.	6	6	6	6	6	6	6	6							

Model L – 410 Turbolet

I. General

1.	Data Sheet No.:	71–04
2.	Model	L - 410 Turbolet
3.	Airworthiness category:	Passenger
4.	Type Certificate Holder:	Aircraft Industries, a.s. Kunovice 1177, 686 04 Kunovice
5.	Manufacturer:	LET, n.p. 686 04 Kunovice 1177
6.	Application Date:	-
7.	Certificate Date:	31.03.1971

II. Certification Basis

1.	Certification Basis:	– British Civil Airworthiness Requirements, BCAR Section K, Issue 3, 01.10.1969 and BLUE PAPERS No. 377, 402, 452, 497, 503 – British Civil Airworthiness Requirements, BCAR Section R, Issue 3, 01.06.1969 – British Civil Airworthiness Requirements, BCAR Section J, Issue 3, 15.09.1966
2.	Special Conditions:	None
3.	Exemptions:	Refer to Supplement No. 3.
4.	Equivalent Safety Findings:	For those exemptions specified in item 3 above appropriate measures were accepted showing, as a minimum, the same level of safety. These measures form parts of the certification data.
5.	Environmental Standards:	L16/I, Part II, Chapter 5

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Specification sheet B 500 106 X (top) - L - 410 Turbolet

2. Description: Self-supporting, upper-wing, all-metal design. Powered by two turboprop engines. Control system is performed for two pilots. Landing gear consists of main and nose landing gear.

3. Equipment: The list of approved equipment is shown in the document Do-L410-3200.0
List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

4. Dimensions:

Wing span:	17.478 m
Length:	13.605 m
Height:	5.646 m
Wing area:	32.865 m^2

5. Engine:

5.1. Model: PT6A-27

5.2. Type Certificate: E 4 EA, FAA issued

5.3. Limitations:

Take-off power:	
Maximum gas generator speed	101,5 %
Maximum propeller speed	2200 1/min
Maximum ITT	725 °C
Maximum climb and maximum cruise power:	
Maximum gas generator speed	101,5 %
Maximum propeller speed	2000 1/min
Maximum ITT	675 °C
Cruise power:	
Maximum gas generator speed	101,5 %
Maximum propeller speed	1800 1/min
Maximum ITT	675 °C
Maximum reverse power:	
Maximum gas generator speed	101,5 %
Maximum propeller speed	2068 1/min
Maximum ITT	725 °C

6. Propeller:

6.1. Model: HAMILTON 23LF-343

6.2. Type Certificate: P 26 EA, FAA issued

6.3. Number of blades: 3

6.4. Diameter:	2.6 m	
6.5. Sense of Rotation:	Clockwise in view of flight direction	
7. Fuel:	T1 according to ST SEV 5024-85, or GOST 10227-86	
	TS 1 according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520	
	RT according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520	
	PL 6 according to PND 25005-76	
	PL 7 according to PND 25005-92	
	JET A according to ASTMD 1655-89	
	JET A-1 according to ASTMD 1655-89, or DERD 2494	
	PSM 2 according to PN-86/C-96026	
8. Oil:	Castrol 98	
	Esso Extra Turbo Oil 274	
	Oils conforming to UACL Service Bulletin No. 1	
9. Air Speeds:	Never exceeding speed v_{NE}	420 km/h IAS
	Maximum cruising speed v_{NO}	360 km/h IAS
	Maneuvering speed v_A	270 km/h IAS
	Maximum flaps extended speed v_{FE}	230 km/h IAS
	Maximum LG extended speed v_{LE}	240 km/h IAS
	Maximum 15 m/s gust speed	365 km/h IAS
	Minimum control speed at take-off in calm atmosphere v_{MCA}	170 km/h IAS
	Maximum taxiing speed at nose LG servo-control switched on	80 km/h
10. Load factors:	Maximum positive limit load factor	
	- with wing flaps extended	2.0
	- with wing flaps retracted	3.2
	Maximum negative limit load factor	- 1.28
11. Maximum Operating Altitude:	6100 m	
12. Weights:	Maximum take-off weight	5700 kg
	Maximum landing weight	5500 kg
	Maximum zero-fuel weight	5150 kg
13. Center of Gravity Range:	Forward c.g. limit	24 % MAC
	Aft c.g. limit	31 % MAC
14. Datum:	Datum point is the leveling point No. 2 on the fuselage, located 2.730 m aft of the fuselage nose tip.	

15. Mean Aerodynamic Chord	1.970 m		
16. Leveling Means:	In longitudinal direction, the leveling plane is defined by leveling points No. 3, 5, 6, in lateral direction by leveling points No. 19L and 19P.		
17. Minimum Flight Crew:	2		
18. Number of seats:	19 pax		
19. Baggage/Cargo Compartments:	Maximum baggage load front baggage compartment rear baggage compartment		 140 kg 150 kg
20. Control surface deflections:	Elevator	up down	26° ± 1° 21° 30’ ± 1°
	Rudder	left and right	20° ± 1°
	Aileron	up down	27° ± 1° 14° ± 1°
	Wing flap inner	take-off position landing position	18° 41.5 °
	Wing flap outer	take-off position landing position	15° ± 1° 33.5 – 0,5°
	Left aileron trim tab	up down	20° ± 2° 20° ± 2°
	Elevator trim tab	up down	10° ± 1° 16° ± 1°
	Rudder trim tab	left right	20° ± 1° 20° ± 1°
21. Wheels and Tyres:	Nose wheel K21-6000-7 with tyre 9.00-6(550 x 225) M4 Main wheel K20-6100-7 with tyre 12.50-10(720 x 310) M4		
22. Other Limitations:	– Flights in icing conditions at permanent de-icing of leading edges are permitted for 40 minutes at maximum. – The aircraft is approved for Day and Night VFR and IFR flights.		

IV. Operating and Service Instructions

Do not exist, only the L - 410 Turbolet prototypes were produced.

V. Notes

1. The model was approved by the original Type Certificate No. 71- 04 of 31.03.1971.

2. The list of models serial numbers and their variants is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

3. List of BCAR requirements for which exemptions were approved:
   - K2-7, 3.1 Handling on the ground – take-off
   - K2-8, 4.1 Minimum control speed
   - K2-8, 5.8 Landing without elevator control
   - K2-9, 2.1.3(a) Ability to trim
   - K3-13, 3.2 Taxiing downwind
   - K4-3, 6.1.2 Use of flame resistant materials
   - K4-5, 3.2.3 Braking efficiency
   - K4-6, 3.2.2 Bonding conductors
   - K4-8, 2.2.3(d) Indication of trim tab position
   - K5-1, 6.1 Inverted U-bends in fuel pipelines
   - K5-1, 8.5 Assembly of non-return valves in reverse sense
   - K5-2, 4.2.1 Fuel tanks-rocking test
   - K5-5, 2.2.1 Powerplant deicing equipment
   - K5-8, 9.1 Fire resistance of hoses
   - K6-1, 2.2 Equipment approval
   - K6-1, 2.10.2 Position error
   - K6-1, 2.11.3 Inside diameter of instrument hoses
   - K6-1, 2.12 Restriction of flammable fluid flow in the event of live failure
   - K6-1, 3.2.3(g) Installation of fuel flowmeter
   - K6-1, 5.11 Navigation lights
   - R2-1, 3.3 Misleading information and failures of navigation systems
   - R3-1, 2.3.2, R4-3, 1.1 Power supply for Collins equipment (26V, 400 Hz)
   - R3-2, 3.1.4 Indication of operational controls purpose
   - R3-3, 3.3, R4-4, 1(b) Interference between radio equipment
   - R4-1, 4.1 Mandatory radio equipment
   - R4-2, 6,3,1, R4-2, 6.3.3 Control device for transmission and intercommunication
   - R4-5, 2.2 Aerial down-lead
   - R4-6, 3.2.2 Engine interference received by radio equipment
   - J2-1, 9.6, R4-3, 2.3 Warning of electric power supply failure
   - J3-3, 6.1 Automatic isolation of electrical circuit in the event of a crash

Model L – 410 A Turbolet

I. General

1. Data Sheet No.:	71 - 04
2. Model	L-410 A Turbolet
3. Airworthiness category:	Passenger
4. Type Certificate Holder:	Aircraft Industries, a.s. Kunovice 1177, 686 04 Kunovice
5. Manufacturer:	LET, n.p. 686 04 Kunovice 1177
6. Application Date:	-
7. Certificate Date:	20. 03. 1972

II. Certification Basis

1. Certification Basis:	– British Civil Airworthiness Requirements, BCAR Section K, Issue 3, 01.10.1969 and BLUE PAPERS No. 377, 402, 452, 497, 503 – British Civil Airworthiness Requirements, BCAR Section R, Issue 3, 01.06.1969 – British Civil Airworthiness Requirements, BCAR Section J, Issue 3, 15.09.1966
2. Special Conditions:	None
3. Exemptions:	Refer to Supplement No. 3
4. Equivalent Safety Findings:	For those exemptions specified in item 3 above appropriate measures were accepted showing, as a minimum, the same level of safety. These measures form parts of the certification data.
5. Environmental Standards:	L16/I, Part II, Chapter 5

III. Technical Characteristics and Operational Limitations

1. Type Design Definition:	Specification sheet B 500 107 X - L - 410 A Turbolet		
2. Description:	Self-supporting, upper-wing, all-metal design. Powered by two turboprop engines. Control system is performed for two pilots. Landing gear consists of main and nose landing gear.		
3. Equipment:	The list of approved equipment is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.		
4. Dimensions:	Span:	17.478 m	
	Length:	13.605 m	
	Height:	5.646 m	
	Wing Area:	32.865 m^2	
5. Engine:			
5.1 Model:	PT6A-27		
5.2 Type Certificate:	E 4 EA, FAA issued		
5.3 Limitations:	Take-off power rating:		
	Max. gas generator speed	101,5%	
	Max. propeller speed	2200 rpm	
	Max. ITT	725°C	
	Maximum climb and max. cruise rating:		
	Max. gas generator speed	101,5%	
	Max. propeller speed	2200 rpm	
	Max. ITT	675°C	
	Cruise power rating:		
	Max. gas generator speed	101.5%	
	Max. propeller speed	1800 rpm	
	Max. ITT	675°C	
	Maximum reverse power rating		
	Max. gas generator speed	101.5%	
	Max. propeller speed	2068 rpm	
	Max. ITT	725 °C	
6. Propeller:			
6.1 Model:	HARTZELL HC-B3TN-3D/T10282 HB		
6.2 Type Certificate:	P 15 EA, FAA issued		
6.3 Number of blades:	3		

6.4 Diameter:	2.6 m	
6.5 Sense of Rotation:	Clockwise in view of flight direction	
7. Fuel:	T1 according to ST SEV 5024-85, or GOST 10227-86	
	TS 1 according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520	
	RT according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520	
	PL 6 according to PND 25005-76	
	PL 7 according to PND 25005-92	
	JET A according to ASTMD 1655-89	
	JET A-1 according to ASTMD 1655-89, or DERD 2494	
	PSM 2 according to PN-86/C-96026	
8. Oil:	Castrol 98	
	Esso Extra Turbo Oil 274	
	Oils conforming to UACL Service Bulletin No. 1	
9. Air Speeds:	Never exceed speed v_N	420 km/h IAS
	Normal operating limit speed v_{NO}	360 km/h IAS
	Design maneuvering speed v_A	270 km/h IAS
	Wing - flaps extended speed v_{FE}	240 km/h IAS
	Landing gear extended speed v_{LE}	270 km/h IAS
	Maximum speed at gusts of 15 m/s	365 km/h IAS
	Minimum control speed, take-off climb v_{MCA}	170 km/h IAS
	Maximum taxiing speed with nose wheel servo control on	80 km/h
10. Load factors:	Maximum positive limit load factor	
	with wing flaps extended	2.0
	with wing flaps retracted	3.2
	Maximum negative limit load factor	- 1.28
11. Maximum Operating Altitude:	6100 m	
12. Weights:	Maximum take-off weight	5700 kg
	Maximum landing weight	5500 kg
	Maximum zero-fuel weight	5150 kg
	Maximum zero fuel weight for AF and AS variants	5290 kg
13. Center of Gravity Range:	Forward c.g. limit	17 % MAC
	Aft c.g. limit	31 % MAC

14. Datum:	Datum point is the leveling point No. 2 on the fuselage (NIB 2) located 2.730 m aft of the fuselage nose tip.		
15. Mean Aerodynamic Cord	1.970 m		
16. Leveling Means:	In longitudinal direction, the leveling plane is defined by leveling points No. 3, 5, and 6 in spanwise direction by leveling points No. 19L and 19P.		
17. Minimum Flight Crew:	2		
18. Number of seats:	19 pax		
19. Baggage/Cargo Compartments:	Maximum baggage compartments load front baggage compartment rear baggage compartment		 140 kg 150 kg
20. Control surface deflections:	Elevator	up down	26° ± 1° 23° ± 1°
	Rudder	left and right	20° ± 1°
	Aileron	up down	27° ± 1° 14° ± 1°
	Wing flap inner		
		take-off position landing position	16° 30´ 39°
	Wing flap outer		
		take-off position landing position	15° ± 1° 35°
	Left aileron trim tab		
		up down	20° ± 2° 20° ± 2°
	Elevator trim tab		
		up down	10° ± 1° 16° ± 1°
	Rudder trim tab		
		left right	20° ± 1° 20° ± 1°
21. Wheels and Tyres:	Nose wheel K21-6000-7 with tyre 9.00-6(550 x 225) M4 Main wheel K20-6100-7 with tyre 12.50-10(720 x 310) M4		
22. Other Limitations:	– Flights in icing conditions, with leading edge deicing system continuously ON, are permitted for a period not exceeding 40 minutes. – The aircraft is approved for Day and Night VFR and IFR		

flights.

IV. Operating and maintenance manual

1. Flight Manual

– In Czech:

Do-L410.1017.3	Letová příručka pro letoun L 410 AS Turbolet
Do-L410.1015.1	Schválená letová příručka pro letoun L-410 A Turbolet (not valid for L 410 AS Turbolet a L 410 AF Turbolet)

– In Russian:

Do-L410.1017.2	Rukovodstvo po letnoj ekspluatacii samoleta L-410 AS Turbolet
Do-L410.1016.1	Utverždennoe rukovodstvo po letnoj ekspluatacii samoleta L-410 AF Turbolet

2. Maintenance Schedule:

– In Czech:

Do-L410.1058.1	Předpis pro údržbu letounů L 410 A, L 410 AB pro letouny v experimentálním provozu
Do-L410.1058.1	Předpis pro údržbu letounů L 410 A, AB
Do-L410-1058.2	Předpis pro údržbu letounů L 410 A, L 410 AB v experimentálním provozu bez generální opravy
Do-L410.1051.1	Předpis pro údržbu letounů L 410 A, AS
Do-L410.1055.1	Sloučený předpis pro údržbu letounů L 410 A, L 410 AS, L 410 M, L 410 MA, L 410 MU

– In Russian:

Do-L410.1055.1	Edinyj reglament techničeskogo obsluživanija samoleta L 410 A, AS, L 410 M, L 410 MA, L 410 MU

3. Maintenance Manual:

– In Czech:

Do-L410.1033.1 for	Technická příručka letounu L410 A Turbolet (not valid pro L 410 AS Turbolet a L 410 AF Turbolet)
Do-L410.1034.1	Technická příručka letounu L410 AF Turbolet
Do-L410.1035.2	Technická příručka letounu L-410 AS Turbolet

– In Russian:

Do-L410.1034.1	Techničeskoe rukovodstvo samoleta L 410 AF TURBOLET
Do-L410.1035.1	Rukovodstvo po techničeskoj ekspluatacii samoleta L 410 AS

4. Wiring Manual

– In Russian:

Do-L410.1063.1	Albom elektroschem samoletov L 410A, AS

5. Structural Repair Manual

– In Czech:

Do-L410.2021.1	Příručka pro opravu draku letounu L 410

– In Russian:

Do-L410.2021.1	Rukovodstvo po remontu planera samoleta L 410 v polevych uslovjach

6. Manual of production and operation tolerances

– In Czech:

Do-L410.2033.0	Album výrobních a přípustných provozních tolerancí letounu L 410 a L 410 A Turbolet
Do-L410.2030.0	Album výrobních a přípustných provozních tolerancí letounů L 410 A, L 410 AS, L 410 M, L 410 MA Turbolet

– In Russian:

Do-L410.2030.1	Albom osnovnych sočleněnij i remontnych dopuskov samoleta tipa L 410 A, L 410 AS, L 410 M

7. Illustrated Parts Catalogue

– In Czech:

Do-L410.1042.1	Kusovník letounu L 410 A/ L 410 AS Turbolet

8. List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment

– In Czech:

Do-L410-3200.0	Přehled modelů a jejich variant, výrobních čísel letounů řady L410/ L420 a jejich schváleného vybavení.

– In English:

Do-L410-3200.0	Survey of models, their variants, and serial numbers of the L 410/L 420 aircraft series and their approved eqipment

V. Notes

1. The model was approved by the original Type Certificate No. 72- 02 of 20.03.1972.

2. The list of models serial numbers and their variants is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

3. List of BCAR requirements for which exemptions have been approved:

– K2-8, 4.1	Minimum control speed
– K2-9, 2.1.3(a)	Ability to trim
– K4-3, 6.1.2	Use of flame resistant materials
– K4-8, 2.2.3(d)	Indication of trim tab position
– K5-1, 8.5	Assembly of non-return valves in reverse sense
– K5-8, 9.1	Fire resistance of hoses
– K6-1, 2.2	Equipment approval
– K6-1, 2.10.2	Position error
– K6-1, 2.11.3	Inside diameter of instrument hoses
– K6-3, 1.3, K6-6, 6.1	Permissible deviation of additional magnetic compass

- R2-1, 3.3 Misleading information and failures of navigation systems
- R3-2, 3.1.4 Indication of operational controls purpose
- R3-3, 3.3, R4-4, 1(b) Interference between radio equipment
- J2-1, 9.6, R4-3, 1.3 Warning of electric power supply failure

Model L - 410 M Turbolet

I. General

1. Data Sheet No.:	71 - 04
2. Model:	L - 410 M Turbolet
3. Airworthiness category:	Passenger
4. Type Certificate Holder:	Aircraft Industries, a.s. Kunovice 1177, 686 04 Kunovice
5. Manufacturer:	LET, n.p. 686 04 Kunovice 1177
6. Application Date:	-
7. Certificate Date:	28.08.1975

II. Certification Basis

1. Certification Basis:	- British Civil Airworthiness Requirements, BCAR Section K, Issue 5, 16.10.1972, - British Civil Airworthiness Requirements, BCAR Section R, Issue 4, 10.04.1974 - British Civil Airworthiness Requirements, BCAR Section J, Issue 3, 15.09.1966
2. Special Conditions:	None
3. Exemptions:	Refer to Supplement No. 3
4. Equivalent Safety Findings:	For those exemptions specified in item 3 above appropriate measures were accepted showing, as a minimum, the same level of safety. These measures form parts of the certification data.
5. Environmental Standards:	L16/I, Part II, Chapter 5

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Specification sheet B 500 108 X - L - 410 M Turbolet

2. Description: Self-supporting, upper-wing, all-metal design. Powered by two turboprop engines. Control system is performed for two pilots. Landing gear consists of main and nose landing gear.

3. Equipment: The list of approved equipment is shown in the document Do-L410-3200.0
List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

4. Dimensions:

Span:	17.478 m
Length:	13.605 m
Height:	5.646 m
Wing Area:	32.865 m^2

5. Engine:

5.1 Model: WALTER M 601 A

5.2 Type Certificate: 75 - 03, CAA CZ issued

5.3 Limitations:

Maximum take-off for 5 minutes power rating	
Gas generator speed	101.5 %
Propeller speed	2080 rpm
Maximum torque	100 %
Equivalent power	544 kW
Intermediate contingency power rating	
Gas generator speed	100.5 %
Propeller speed	1950 - 2080 rpm
Maximum torque	100 %
Equivalent power	507.5 kW
Maximum continuous power rating	
Gas generator speed	99 %
Propeller speed	1800 - 2080 rpm
Maximum torque	100 %
Equivalent power	478 kW

6. Propeller

6.5 Model: V508

6.2 Type Certificate: 91-01, CAA CZ issued

6.3 Number of blades: 3

6.4 Diameter: 2.5 m

6.5	Sense of Rotation:	Clockwise in view of flight direction	
7.	Fuel:	T1 according to ST SEV 5024-85, or GOST 10227-86	
		TS 1 according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520	
		RT according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520	
		PL 6 according to PND 25005-76	
		PL 7 according to PND 25005-92	
		JET A according to ASTMD 1655-89	
		JET A-1 according to ASTMD 1655-89, or DERD 2494	
		PSM 2 according to PN-86/C-96026	
8.	Oil:	Aero Shell Turbo Oil 500	
		Aero Shell Turbo Oil 555	
		Aero Shell Turbo Oil 560	
		Mobil Jet 0 II	
		B3V (Russian production)	
		Exon TO 2380	
		Castrol 599	
9.	Air Speeds:	Never exceed speed v_{NE}	405 km/h IAS
		Normal operating limit speed v_{NO}	350 km/h IAS
		Design maneuvering speed v_A	255 km/h IAS
		Wing - flaps extended speed v_{FE}	230 km/h IAS
		Landing gear extended speed v_{LE}	255 km/h IAS
		Maximum speed at gusts of 15 m/s	350 km/h IAS
		Minimum control speed, take-off climb v_{MCA}	153 km/h IAS
10.	Load factors:	Maximum positive limit load factor	
		- with wing flaps extended	2.0
		- with wing flaps retracted	3.16
		Maximum negative limit load factor	- 1.26
11.	Maximum Operating Altitude:	6000 m	
12.	Weights:	Maximum take-off weight	5700 kg
		Maximum landing weight	5500 kg
		Maximum zero-fuel weight	5290 kg
13.	Center of Gravity Range:	Forward c.g. limit	17 % MAC
		Aft c.g. limit	30 % MAC
		Aft c.g. limit for MA and MU variants	28.5 % MAC

14. Datum:	Datum point is the leveling point No. 2 on the fuselage, located 2.730 m aft of the fuselage nose tip.		
15. Mean Aerodynamic Chord (MAC):	1.970 m		
16. Leveling Means:	In longitudinal direction, the leveling plane is defined by leveling points No. 3, 5, 6 and in spanwise direction by leveling points No. 19L and 19P.		
17. Minimum Flight Crew:	2		
18. Number of seats:	19 pax		
19. Baggage/Cargo Compartments:	Maximum baggage compartments load		
	front baggage compartment		140 kg
	rear baggage compartment		150 kg
20. Control surface deflections:	Elevator	up	26° ± 1°
		down	21°30´ ± 1°
	Rudder	left and right	20° ± 1°
	Aileron	up	27° ± 1°
		down	14° ± 1°
	Wing flap inner		
		take-off position	18° (informative)
		landing position	41° + 30´ (informative)
	Wing flap outer		
		take-off position	15° ± 1°
		landing position	33°30´ - 30´
	Left aileron trim tab		
		up	20° ± 2°
		down	20° ± 2°
	Elevator trim tab		
		up	10° ± 1°
		down	16° ± 1°
	Rudder trim tab		
		left	20° ± 1°
		right	20° ± 1°

21. Wheels and Tyres:	Nose wheel K21-6000-7 with tyre 9.00-6(550 x 225) M4 Main wheel K20-6100-7 with tyre 12.50-10(720 x 310) M4
22. Other Limitations:	– Flights in icing conditions, with leading edge deicing system continuously ON, are permitted. – The aircraft is approved for Day and Night VFR and IFR flights.

IV. IV. Operating and Service Instructions

1. Flight Manual

– In Czech:

For S/N 750502 a 760503

Do-L410.1018.2	Letová příručka pro letoun L - 410 M Turbolet (not valid for L - 410 MA Turbolet and L - 410 MU Turbolet)
Do-L410.1018.3	Letová příručka pro letoun L - 410 M Turbolet (not valid for L - 410 MA Turbolet and L - 410 MU Turbolet)

For S/N 730207

Do-L410.1018.6	Letová příručka pro letoun L - 410 MA Turbolet

For S/N 7504020, 750403, 750404, 750405 and 750501

Do-L410.1018.7	Letová příručka pro letoun L - 410 MA Turbolet
Do-L410.1018.5	Letová příručka pro letoun L - 410 MU

– In Russian:

Do-L410.1018.3	Rukovodstvo po letnoj ekspluatacii samoleta L-410 M (not valid for L - 410 MA Turbolet and L - 410 MU Turbolet)
Do-L410.1018.4	Rukovodstvo po letnoj ekspluatacii samoleta L-410 MA
Do-L410.1018.5	Rukovodstvo po letnoj ekspluatacii samoleta L-410 MU TURBOLET

2. Maintenance Schedule:

– In Czech:

Do-L410.1052.1	Předpis pro údržbu letounu L 410 M (not valid for L - 410 MA Turbolet and L - 410 MU Turbolet)
Do-L410.1052.3	Předpis pro údržbu letounu L 410 MA

Pro letouny v experimentálním provozu bez generální opravy

Do-L410.1052.4	Předpis pro údržbu letounu L 410 MA

– In Russian:

Do-L410.1055.1	Edinyj reglament techničeskogo obsluživanija samoleta L 410A, AS, L 410 M, L 410 MA, L 410 MU

3. Maintenance Manual:

– In Czech:

Do-L410.1037.1 valid	Technická příručka letounu L - 410 M Turbolet (not for L - 410 MA Turbolet)
Do-L410.1039.1	Technická příručka letounu L 410 MA

– In Russian:

Do-L410.1036.2	Techničeskoe rukovodstvo samoleta L 410 M (not valid for L 410 MA Turbolet)
Do-L410.1039.2	Techničeskoe rukovodstvo samoleta L 410 MA

4. Wiring Manual

– In Czech:

Do-L410.1061.1	Album elektroschemat letounu L 410 M (not valid for L - 410 MA Turbolet and L - 410 MU Turbolet)
Do-L410.1069.1	Album elektroschemat letounu L - 410 MA
Do-L410.1068.1	Album elektroschemat letounu L 410 MU

– In Russian:

Do-L410.1061.2	Albom elektroschem samoleta L 410 M (not valid for L - 410 MA Turbolet and L - 410 MU Turbolet)
Do-L410.1069.2	Albom elektroschem samoleta L - 410 MA
Do-L410.1068.2	Albom elektroschem samoleta L 410 MU

5. Album of production, operation and repair tolerances

– In Czech:

Do-L410.2030.0	Album výrobních a přípustných provozních tolerancí letounů L 410 A, L 410 AS, L 410 M, L 410 MA TURBOLET

In Russian:

Do-L410.2030.1	Albom osnovnych sočlenenij i remontnych dopuskov samoleta tipa L 410 A, L 410 AS, L 410 M

6. Structural Repair Manual

– In Czech:

Do-L410-2021.1	Příručka pro opravu draku letounu L 410

– In Russian:

Do-L410.2021.1	Rukovodstvo po remontu planera samoleta L 410 v polevych uslovjach

7. Illustrated Parts Catalogue

– In Czech:

Do-L410.1043.1	Kusovník letounu L 410 M Turbolet

– In Russian:

Do-L410.1043.1	Katalog detalej i sboročnych jedinic samoleta L-410 M

8. List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

– In Czech:

Do-L410-3200.0	Přehled modelů a jejich variant, výrobních čísel letounů řady L410/ L420 a jejich schváleného vybavení.

– In English:

Do-L410-3200.0	Survey of models, their variants, and serial numbers of the L 410/L 420 aircraft series and their approved eqipment

V. Notes

1. The model was approval by the original Type Certificate 75-04 of 28.08.1975.

2. The list of models serial numbers and their variants is shown in the document Do-L410-3200.0. List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

3. List of BCAR requirements have been approved:
   - K2-4, 2.4 Final take-off climb
   - K2-9, 2.1.3(a) Ability to trim
   - K2-10, 5.1 Static lateral stability
   - K4-3, 6.1.2 Use of flame resistant materials
   - K4-8, 2.2.3(d) Indication of trim tab position
   - K-1, 8.5 Assembly of non-return valves in
   - K5-4, 1.1 to 4.2.5 Powerplant installation
   - K5-5, 2.2.2 De-icing and anti-icing precautions
   - K5-5, 2.2.3 Continuous and heavy icing
   - K5-8, 1.1, 7.2, 8, 9.1, 9.2, 11 Fire precautions
   - K6-1, 2.1 Equipment installation
   - K6-1, 2.2 Equipment approval
   - R1-1, 3.2 MESIT equipment stability
   - R1-1, 4.1 Flammability of radio equipment components
   - J2-3, 4.3.3 Types of circuit breakers used
   - J3-2, 5.1 Types of cables

4. EASA TC No. EASA.A.026 was issued for model L-410 M Turbolet aircraft on 28.03.2007.

Model L 410 UVP – Turbolet

I. General

1. Data Sheet No.:	71 - 04
2. Model	L 410 UVP – Turbolet
2.1 Variants	L 410 UVP – Turbolet L 410 UVP – LW (see note no.9)
3. Airworthiness category:	Passenger
4. Type Certificate Holder:	Aircraft Industries, a.s. Kunovice 1177, 686 04 Kunovice
5. Manufacturer:	LET, a.s. 686 04 Kunovice 1177
6. Application Date:	1974
7. Certificate Date:	10. 07. 1979

II. Certification Basis

1. Certification Basis:	- NLGS-2 Regulations, Issue 2, 1974, Chapters 2, 3, 4, 5 and 7, including Changes 1 to 6 - L8/C dated 29.03.1973 - L8/R dated 10.04.1974 - L8/J dated 01.01.1974 - L/16 dated 05.01.1972
2. Special Conditions:	None
3. Exemptions:	Refer to Supplement No. 3
4. Equivalent Safety Findings:	For those exemptions specified in item 3 above appropriate measures were accepted showing, as a minimum, the same level of safety. These measures form parts of the certification data.
5. Environmental Standards:	L16/I, Part II, Chapter 5

III. Technical Characteristics and Operational Limitations

1. Type Design Definition:	Specification sheet B 500 109 X - L 410 UVP - Turbolet	
2. Description:	Self-supporting, upper-wing, all-metal design. Powered by two turboprop engines. Control system is performed for two pilots. Landing gear consists of main and nose landing gear.	
3. Equipment:	The list of approved equipment is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.	
4. Dimensions:	Span:	19.479 m
	Length:	14.467 m
	Height:	5.829m
	Wing Area:	35.18 m^2
5. Engine:		
5.1.1. Model:	WALTER M - 601 B	
5.1.2. Type Certificate:	75-03, CAA CZ issued	
5.1.3. Limitations:	Maximum continuous power rating:	
	Maximum power	515 kW
	Max. gas generator speed	99 %
	Max. propeller speed	2080 rpm
	Max. ITT	690°C
	Take-off power rating:	
	Maximum power	515 kW
	Max. gas generator speed	101.5 %
	Max. propeller speed	2080 rpm
	Max. ITT	735 °C
	Take-off power rating with water injection:	
	Maximum power	515 kW
	Max. gas generator speed	101.5 %
	Max. propeller speed	2080 rpm
	Max. ITT	735°C
	Contingency power rating:	
	Maximum power	559 kW
	Max. gas generator speed	104 %
	Max. propeller speed	2080 rpm
	Max. ITT	780° C
	or	

5.2.1. Model: WALTER M - 601D

5.2.2. Type Certificate: 90-04, CAA CZ issued

5.2.3. Limitations: Standard L 410 UVP - Turbolet aircraft:

Maximum continuous power rating:

Maximum power	515 kW
Max. gas generator speed	99 %
Max. propeller speed	2080 rpm
Max. ITT	690°C

Take-off power rating:

Maximum power	515 kW
Max. gas generator speed	101.5 %
Max. propeller speed	2080 rpm
Max. ITT	735°C

Take-off power rating with water injection:

Maximum power	515 kW
Max. gas generator speed	101.5 %
Max. propeller speed	2080 rpm
Max. ITT	735 °C

L 410 UVP - Turbolet aircraft after Bull. IB L410UVP/084b performance - maximum take-off weight increase to 6000 kg:

Maximum continuous power rating:

Maximum power	515 kW
Max. gas generator speed	99 %
Max. propeller speed	2080 rpm
Max. ITT	690°C

Take-off power rating:

Maximum power	540 kW
Max. gas generator speed	101.5 %
Max. propeller speed	2080 rpm
Max. ITT	735°C

Take-off power rating with water injection:

Maximum power	540 kW
Max. gas generator speed	101.5 %
Max. propeller speed	2080 rpm
Max. ITT	735 °C

6. Propeller:

6.1.1 Model: V 508B

6.1.2 Type Certificate: 91-01, CAA CZ issued

6.1.3	Number of blades:	3
6.1.4	Diameter:	2500 mm maximum, 2498 mm minimum
6.1.5	Sense of Rotation:	Clockwise in view of flight direction
		or
6.2.1.	Model:	V 508D
6.2.2.	Type certificate:	91-01, CAA CZ issued
6.2.3.	Number of blades:	3
6.2.4.	Diameter:	500 mm maximum, 2498 mm minimum
6.2.5.	Sense of Rotation:	Clockwise in view of flight direction

7. Fuel:

T1 according to ST SEV 5024-85, or GOST 10227-86

TS 1 according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

RT according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

PL 6 according to PND 25005-76

PL 7 according to PND 25005-92

JET A according to ASTMD 1655-89

JET A-1 according to ASTMD 1655-89, or DERD 2494

PSM 2 according to PN-86/C-96026

8. Oil:

Aero Shell Turbo Oil 500

Aero Shell Turbo Oil 555

Aero Shell Turbo Oil 560

Mobil Jet 0 II

B3V (Russian production)

Exon TO 2380

Castrol 599

9. Air Speeds:

Maximum speed v_D	410 km/h IAS
Maximum operating speed v_{MO}	355 km/h IAS
Maximum flaps extended speed, landing configuration 35° v_{FE}	205 km/h IAS
Maximum flaps extended speed, take-off configuration 15° v_{FE}	250 km/h IAS
Maximum landing gear operating speed v_{LO}	250 km/h IAS
Maximum landing gear extended speed v_{LE}	250 km/h IAS

	Maximum spoiler operating speed v_{SP}	
	- for MTOW 5700 kg (see note no.4)	230 km/h IAS
	- for MTOW 5800 kg (see note no.7)	180 km/h IAS
	Minimum control speed on ground $v_{min\ ER}$	125 km/h IAS
	Minimum control speed, take-off $v_{min\ EV}$	130 km/h IAS
	Minimum control speed, balked landing $v_{min\ EK}$	125 km/h IAS
	Minimum control speed, landing $v_{min\ EP}$	120 km/h IAS
10. Load factors:	Maximum positive limit load factor	
	- with wing flaps extended	2.0
	- with wing flaps retracted	3.3
	Maximum negative limit load factor	- 1
11. Maximum Operating Altitude:	14000 ft	
12. Weights:	Maximum take-off weight (V_{SP}= 230 km/h) - (see note no.5)	5700 kg
	Maximum take-off weight (V_{SP}= 180 km/h) - (see note no.6)	5800 kg
	Maximum take-off weight- (see note no.8)	6000 kg
	Maximum take-off weight for L 410 UVP-LW - (see note no.9)	5700kg
	Maximum landing weight	5500 kg
	Maximum zero-fuel weight	5300 kg
13. Center of Gravity Range:	Forward c.g. limit	17% MAC
	Aft c.g. limit	28% MAC
14. Datum:	Datum point is the leveling point No. 2 (LP 2) on the fuselage, located 2.730 m aft of the fuselage nose tip.	
15. Mean Aerodynamic Chord (MAC):	1.918 m	
16. Leveling Means:	In longitudinal direction, leveling points No. 3, 5, 6 in spanwise direction define the leveling plane by leveling points No. 19L and 19P.	
17. Minimum Flight Crew:	2	
18. Number of seats:	15 pax	
19. Baggage/Cargo Compartments:	Maximum loading of baggage compartments:	
	forward baggage compartment	140 kg
	aft baggage compartment	150 kg
	Cargo variant	1000 kg

20. Control surface deflections:	Elevator	up	30° ± 1°
		down	14° + 1° -0°
	Rudder	left and right	17° + 0° -0°30´
	Aileron	up	27° ± 1°
		down	14° ± 1°
	Wing flap inner		
		landing position	43° ± 1°
	Wing flap outer		
		take-off position	15° ± 1°
		landing position	35° ± 1°
	Left aileron trim tab		
		up	20° ± 2°
		down	20° ± 2°
	Elevator trim tab		
		up	10° ± 1°
		down	16° ± 1°
	Rudder trim tab		
		left	10° + 0° -1°
		right	10° + 0° -1°
	Maximum spoiler deflection, up		72° 30´ ± 2°
	Maximum ABC tab deflection, up		55° ± 2°

21. Wheels and Tyres:

Nose wheel K21-6000-7 with tyre
9.00-6(550 x 225) M4
or 9.00-6/906 TO6 - Good Year

Main wheel K20-6100-7 with tyre
12.50-10(720 x 310) M4
or 29x11,0-10/11OTO1-1 Good Year

22. Other Limitations: The aircraft is approved for Day and Night VFR and IFR flights.

IV. Operating and Service Instructions

1. Flight Manual

– In Czech:
  Do-L410-1019.2 Letová příručka letounu L-410 UVP
– In English:
  Do-L410-1019.2 Flight Manual for the L 410 UVP Aeroplane
– In Russian:
  Do-L410-1019.3 Rukovodstvo po letnoj ekspluatacii samoleta L 410 UVP

2. Maintenance Schedule:

– In Czech:
  For aircraft in overhaul maintenance system:
  Do-L410-1053.2 Předpis pro údržbu letounu L-410 UVP
  For aircraft in overhaul-free maintenance system:
  Do-L410-1053.4 Předpis pro údržbu letounu L-410 UVP bez GO
– In English:
  For aircraft in overhaul-free maintenance system:
  Do-L410-1053.5 Maintenance Schedule for the L 410 UVP Aeroplane without overhaul
  For aircraft converted to overhaul-free maintenance system after 30.6.1998:
  Do-L410-1053.6 Maintenance Schedule for the L 410 UVP Aeroplane without overhaul
– In Russian:
  For aircraft in overhaul maintenance system:
  Do-L410-1053.2 Reglament techničeskogo obsluživanija samoleta L-410 UVP
  For aircraft in overhaul-free maintenance system:
  Do-L410-1053.4 Reglament techničeskogo obsluživanija samoleta L-410 UVP bez kapitalnogo remonta
  For Russia:
  Do-L410-1053.7 Reglament techničeskogo obsluživanija samoleta L-410 UVP bez kapitalnogo remonta

3. Maintenance Manual:

– In Czech:
  Do-L410-1131.1 Provozně technická příručka pro letouny L-410 UVP
– In English:
  Do-L410-1131.0 Maintenance Manual for the L 410 UVP Aeroplane
– In Russian:
  Do-L410-1131.2 Rukovodstvo po techničeskoj ekspluatacii samoleta L 410 UVP

4. Wiring Manual

- In Czech:
  Do-L410-1064.1 Album elektroschemat pro letouny L-410 UVP
- In English:
  Do-L410-1064.0 Wiring Manual for the L 410 UVP Aeroplane
- In Russian:
  Do-L410-1064.2 Albom elektroschem samoletov L 410 UVP

5. Illustrated Parts Catalogue

- In Czech:
  Do-L410-1044.1 Katalog dílů a montážních jednotek pro letouny L-410 UVP
- In English:
  Do-L410-2052.2 Illustrated Parts Catalogue for the L 410 UVP Aeroplane
- In Russian:
  Do-L410-1044.0 Katalog detalej i sboročnych edinic samoleta L 410 UVP

6. Album of production, operation and repair tolerances

- In Czech:
  Do-L410-2032.0 Album výrobních, provozních a opravárenských tolerancí L-410 UVP
- In English:
  Do-L410-2032.2 Album of Production, Operation and Repair Tolerances of the L 410 UVP Aeroplane
- In Russian:
  Do-L410-2031.1 Albom osnovnych sočleněnij i remontnych dopuskov samoleta L 410 UVP, L 410 UVP-E

7. Inspection Manual:

- In Czech:
  Do-L410-2012.0 Příručka pro revizi letounů L-410 UVP
- In English:
  Do-L410-2012.2 Inspection Manual for the L 410 UVP Aeroplane
- In Russian:
  Do-L410-2012.1 Rukovodstvo po profiloktičeskomu techničeskomu obsluživaniju samoleta L 410 UVP

8. Structural Repair Manual:

- In Czech:
  Do-L410-2021.1 Příručka pro opravu draku letounu L-410 v polních podmínkách
- In English:
  Do-L410-2021.2 Airframe Repair Manual L 410 UVP, L 410 UVP-E, L 410 UVP-E9, L 410 UVP-E20 Aeroplane
- In Russian:
  Do-L410-2021.1 Rukovodstvo po remontu planera samoleta L 410 UVP v polevychuslovjach

9. List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.
   - In Czech:
     Do-L410-3200.0 Přehled modelů a jejich variant, výrobních čísel letounů řady L410/ L420 a jejich schváleného vybavení.
   - In English:
     Do-L410-3200.0 Survey of models, their variants, and serial numbers of the L 410/L 420 aircraft series and their approved eqipment

V. Notes

1. The model was approved by the original Type Certificate No. 79- 02 of 10.07.1979.

2. The list of models serial numbers and their variants is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

3. List of NLGS-2 requirements for which exemptions have been approved:
   - 3.1.5., 3.1.8., 3.18.2., 3.4.3.6, 3.4.3.7., 3.4.3.8, 3.4.3.9 3.4.3.10, 3.4.3.11, 3.6.3.9, 3.6.3.10, 3.4.1.2, 3.4.1.11, 3.4.2.3, 3.6.1.1, 3.6.1.13, 3.6.3.5 Various conditions of runway surface
   - 3.4.3.5, 3.6.3.8, 3.7.4.5 Aeroplane movement at cross wind
   - 3.6.1.5, 3.6.3.1 Landing distance from a height of 15 m
   - 3.7.3 Wheel control forces
   - 3.7.3.7 Ability to trim the aeroplane longitudinally
   - 3.7.4.2 Spiral motion of the aeroplane
   - 3.7.5.5 Flight performance in icing conditions
   - 4.2.6, 3.1.2 Windshield strength
   - 5.4.6, 5.4.8 Brake control system
   - 5.1.11 Cabin noise
   - 5.4.17 Brake system warning indication
   - 5.5.5 Use of non-combustible hydraulic fluid
   - 5.5.9 Hydraulic system backup
   - 5.6.11, 5.11.12.5, 5.11.12.6, 7.5.3.1.2a, 7.5.1.2.2 Incombustibility of padding materials
   - 5.7.2 Heating in pilot and passenger compartments
   - 5.7.6 Air temperature in pilot compartment
   - 5.7.8 Air-conditioning system
   - 5.7.24 Automatic temperature control in pilot and passenger compartments
   - 5.7.28 Maximum temperature of mixed air
   - 5.7.32 Hot air temperature measurement
   - 5.7.33 Air-conditioning system mode indication
   - 5.9.6 Engine air intake icing indication
   - 5.10.1.1, 5.10.3, 8.4.1.2, 8.4.2.1, 8.4.3.3, 8.4.3.5 Cockpit noise recorder
   - 5.10.1.2 Flight data recorder
   - 5.10.2.2 Flight data recording duration
   - 5.11.8.2 Windows in emergency exits
   - 5.11.10.1 Minimum width of aisle
   - 5.12.6 Single-point fueling
   - 6.6.4 Clearance between propeller blade tips and airframe parts
   - 7.1.1.11 Fuel transfer
   - 7.1.2.9 Continuous fueling
   - 7.1.3.9 Impossibility of installation of non-return valves in reverse sense
   - 7.1.3.11 Fuel system markings
   - 7.17.1, 7.2.2.12, 7.2.6.1, 8.2.3.1, 7.1.7.2 Fuel flowmeter
   - 7.1.7.3, 7.1.8.8.1 Fuel quantity measurement accuracy

- 7.1.8.8.3 Calibration of fuel level indicator
- 7.2.1.5 Overfilling of engine with oil
- 7.2.3.2 Oil system marking
- 7.5.1.3 Fire resistance of cable bundles
- 7.5.1.3.5 Fire warning sensors
- 7.5.1.4.6, 7.5.1.4.8, 7.5.1.2.7, 7.5.4.3.2 Automatic operation of fire extinguishing system
- 7.5.1.4.7 Inadvertent actuation of fire extinguishing system
- 7.5.1.4.11 Fire extinguishing system marking
- 7.5.2.1.7 Compressor air bleed
- 7.5.2.3.2 Fire extinguishing in engine inside cavities
- 7.5.3.2.3 Front baggage compartment fire warning system
- 8.1.2.14 Electromagnetic compatibility of equipment
- 8.2.2.1.1.b Limit angle of bank warning Autopilot
- 8.2.2.1.7, 8.2.2.1.9 Warning of pitch-angle, bank-angle and heading indication malfunction
- 8.3.2.1, 8.3.3.4, 2.2.2, 2.2.21 ATC transponder
- 8.4.1.2, 8.4.3.3 Passenger address system
- 8.4.2.1, 8.4.3.6, 2.2.21, 2.2.2 Emergency locator transmitter
- 8.5.3.1, 8.5.3.2, 8.5.4.9 Power supply of category 1 and 2 electrical services
- 8.5.4.2, 8.5.8.1 Generator characteristics
- 8.5.4.4, 8.5.8.1, 8.1.2.9 Auxiliary power supply characteristics
- 8.5.5.5, 8.5.8.1 Standby power supply characteristics
- 8.5.5.11, 8.5.8.1 Characteristics of ground power supply connectors
- 8.5.6.1, 8.5.8.2, 8.1.2.9 Characteristics of electrical loads
- 8.5.7.1 Self-extinguishing properties of electrical conductors
- 8.5.7.2 Location, attachment, binding, and protection of cable bundles
- 8.5.7.7 Security of cable attachment in connectors
- 8.6.2.17 Flash frequency of anticollision beacon
- 8.7.1.9 Cockpit control knobs

4. Previous maximum spoiler operating speed was provided by TC-79-02.

5. Previous maximum take-off weight was provided by TC-79-02

6. Realisation of service bulletin ZB L-410 UVP/052a provides increasing of MTOW to 5800 kg.

7. Service bulletin ZB L-140 UVP/052a provides reducing of maximum spoiler operating speed to 180 km/h IAS.

8. Realisation of service bulletin ZB L-410 UVP/084b provides increasing of MTOW to 6000 kg.

9. Realisation of service bulletin IB L-410 UVP/140b provides possibility of modification L-410 – UVP to the type L 410UVP – LW with lower MTOW 5700 kg.

10. EASA TC No. EASA.A. was issued for model L-410 UVP - Turbolet aircraft on 28.03.2007.

Model L - 410 UVP - E

I. General

1. Data Sheet No.:	71 - 04
2. Model	L - 410 UVP - E
2.1. Varianty:	L 410 UVP – E L 410 UVP – E – LW (see note no.5)
3. Airworthiness category:	Passenger
4. Type Certificate Holder:	Aircraft Industries, a.s. Kunovice 1177, 686 04 Kunovice
5. Manufacturer:	Up to and including S/N 912626 LET, a.s. 686 04 Kunovice 1177
6. Application Date:	1981
7. Certificate Date:	30. 01. 1986

II. II. Certification Basis

1. Certification Basis:	NLGS-2, Issue 2, 1974, Chapters 2, 3, 4, 5, 6 7, 8 including Changes 1 to 21, temporary changes applicable to airplanes having a weight of less than 10 000 kg, and select requirements of ENLGS. Refer to Supplement No. 3 for list of NLGS-2 requirements having been replaced by the requirements of ENLGS.
2. Special Conditions:	None
3. Exemptions:	Refer to Supplement No. 4
4. Equivalent Safety Findings:	For those exemptions specified in item 3 above appropriate measures were accepted showing, as a minimum, the same level of safety. These measures form parts of the certification data.
5. Environmental Standards:	L16/I, Part II, Chapter 5

III. Technical Characteristics and Operational Limitations

1. Type Design Definition:	Specification Sheet B 500 110 X - L - 410 UVP - E		
2. Description:	Self-supporting, upper-wing, all-metal design. Powered by two turboprop engines. Control system is performed for two pilots. Landing gear consists of main and nose landing gear.		
3. Equipment:	The list of approved equipment is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.		
4. Dimensions:	Span:	19.980 m	with wing tip tanks
		19.479 m	with wing tips
	Length:	14.467 m	
	Height:	5.829 m	
	Wing Area:	35.18 m^2	with wing tips
		34.86 m^2	without wing tip

5. Engine:

5.1.1 Model:	WALTER M 601 E	
5.1.2 Type Certificate:	89-03, CAA CZ issued	
5.1.3 Limitations:	Maximum continuous power rating:	
	Maximum power	560 kW
	Max. gas generator speed	100.5 %
	Max. propeller speed	2080 rpm
	Max. ITT	760 °C
	Take-off power rating:	
	Maximum power	560 kW
	Max. gas generator speed	100 %
	Max. propeller speed	2080 rpm
	Max. ITT	735°C
	Take-off power rating with water injection:	
	Maximum power	560 kW
	Max. gas generator speed	100 %
	Max. propeller speed	2080 rpm
	Max. ITT	735 °C
	Contingency power rating:	
	Maximum power	595 kW
	Max. gas generator speed	102 %
	Max. propeller speed	2080 rpm
	Max. ITT	780 °C
	or	

5.2.1. Model: WALTER M 601E-21

5.2.2. Type Certificate: 89-03, CAA CZ issued

5.2.3. Limitations:

Maximum continuous power rating:

Maximum power	560 kW
Max. gas generator speed	100.5 %
Max. propeller speed	2080 rpm
Max. ITT	760°C

Take-off power rating:

Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735°C

Take-off power rating with water injection:

Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735°C

Contingency power rating:

Maximum power	595 kW
Max. gas generator speed	102 %
Max. propeller speed	2080 rpm
Max. ITT	780 °C

6. Propeller:

6.1. Model: V510

6.2. Type Certificate: 89-04, CAA CZ issued

6.3. Number of blades: 5

6.4. Diameter: 2302 mm maximum, 2298 mm minimum

6.5. Sense of Rotation: Clockwise in view of flight direction

7. Fuel: T1 according to ST SEV 5024-85, or GOST 10227-86

TS 1 according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

RT according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

PL 6 according to PND 25005-76

PL 7 according to PND 25005-92

JET A according to ASTMD 1655-89

	JET A-1 according to ASTMD 1655-89, or DERD 2494	
	PSM 2 according to PN-86/C-96026	
8. Oil:	Aero Shell Turbo Oil 500	
	Aero Shell Turbo Oil 555	
	Aero Shell Turbo Oil 560	
	Mobil Jet 0 II	
	B3V (Russian production)	
	Exon TO 2380	
	Castrol 599	
9. Air Speeds:	Maximum maneuvering speed v_A	260 km/h IAS
	Maximum operating speed v_{MO}	350 km/h IAS
	Maximum flaps extended speed, landing configuration 42° v_{FE}	220 km/h IAS
	Maximum flaps extended speed, take-off configuration 18° V_{FE}	250 km/h IAS
	Maximum landing gear operating speed v_{LO}	250 km/h IAS
	Maximum landing gear extended speed v_{LE}	250 km/h IAS
	Maximum spoiler operating speed V_{SP}	190 km/h IAS
	Minimum control speed on ground $V_{min\ ER}$	130 km/h IAS
	Minimum control speed, take-off $V_{min\ EV}$	135 km/h IAS
	Minimum control speed, balked landing $V_{min\ EK}$	130 km/h IAS
	Minimum control speed, landing $V_{min\ EP}$	120 km/h IAS
10. Load factors:	Maximum positive limit load factor	
	- with wing flaps extended	2.0
	- with wing flaps retracted	3.1
	Maximum negative limit load factor	- 1.0
11. Maximum Operating Altitude:	14000 ft	
12. Weights:	Maximum taxiing weight	6420 kg
	Maximum take-off weight	6400 kg
	Maximum take-off weight for L 410 UVP-E-LW - (see note no.5)	5700kg
	Maximum landing weight	6200 kg
	Maximum landing weight in exceptional cases	6400 kg
	Maximum zero-fuel weight	5870 kg

13. Center of Gravity Range:	Forward c.g. limit		17 % MAC
	Aft c.g. limit		28 % MAC
14. Datum:	Datum point is the leveling point No. 2 (LP 2) on the fuselage, located 2.730 m aft of the fuselage nose tip.		
15. Mean Aerodynamic Chord (MAC):	1.918 m		
16. Leveling Means:	In longitudinal direction, leveling points No. 3, 5, 6 in spanwise direction define the leveling plane by leveling points No. 19L and 19P.		
17. Minimum Flight Crew:	2		
18. Number of seats:	19 pax		
19. Baggage/Cargo Compartments:	Maximum loading of baggage compartments:		
	forward baggage compartment		140 kg
	aft baggage compartment		150 kg
	Cargo variant		1000 kg
20. Control surface deflections:	Elevator	up	30° ± 1°
		down	14° + 1° -0°
	Rudder	left and right	17° + 0° -0°30´
	Aileron	up	27° ± 1°
		down	14° ± 1°
	Wing flap inner		
		take-off position	18°
		landing position	52° ± 1°30´
	Wing flap outer		
		take-off position	18° ± 1°
		landing position	42° ± 1°
	Left aileron trim tab		
		up	20° ± 2°
		down	20° ± 2°
	Elevator trim tab		
		up	10° ± 1°
		down	16° ± 1°
	Rudder trim tab		
		left	10° + 0° -1°
		right	10° + 0°-1°30´
	Maximum spoiler deflection, up		72° 30´ ± 2°
	Maximum ABC tab deflection, up		55° ± 2°

21. Wheels and Tyres:

Nose wheel K21-6000-7 with tyre
9.00-6(550 x 225) M4
or 9.00-6/906 TO6 - Good Year

Main wheel K20-6100-7 with tyre
12.50-10(720 x 310) M4
or 29x11,0-10/11OTO1-1 Good Year

22. Other Limitations:

- The aircraft is approved for flights in condition of low and mean icing conditions at temperatures not lower than - 20 °C.
- The aircraft is approved for Day and Night VFR and IFR flights.

IV. Operating and Service Instructions

1. Flight Manual

– In Czech:
  Do-L410-1215.0 Letová příručka letounu L - 410 UVP - E
– In English:
  Do-L410-1215.2 Airplane Flight Manual for the L 410 UVP-E Aeroplane
– In Russian:
  Do-L410-1211.1 Rukovodstvo po letnoj ekspluatacii samoleta L 410 UVP-E

2. Master Minimum Equipment List

– In English:
  Do-L410-3000.2 Master Minimum Equipment List L 410 UVP-E, E9, E20

3. Maintenance Schedule:

– In Czech:
  For aircraft in overhaul maintenance system:
  Do-L410-1221.1 Předpis pro údržbu letounu L - 410 UVP – E
  For aircraft in overhaul-free maintenance system:
  Do-L410-1222.1 Předpis pro údržbu letounu L - 410 UVP - E bez GO
– In English:
  For aircraft in overhaul maintenance system:
  Do-L410-1221.1 Maintenance Schedule for the L 410 UVP-E Aeroplane
  For aircraft in overhaul-free maintenance system:
  Do-L410-1222.1 Maintenance Schedule for the L 410 UVP-E Aeroplane without overhaul
– In Russian:
  For aircraft in overhaul maintenance system:
  Do-L410-1221.1 Reglament techničeskogo obsluživanija samoleta L 410 UVP-E
  For aircraft in overhaul-free maintenance system:
  Do-L410-1222.1 Reglament techničeskogo obsluživanija samoleta L 410 UVP-E bez kapitalnogo remonta
  For Russia:
  Do-L410-1222.2 Reglament techničeskogo obsluživanija samoleta L 410 UVP-E bez kapitalnogo remonta

4. Maintenance Manual:

– In Czech:
  Do-L410-1232.0 Provozně technická příručka pro letouny L - 410 UVP - E, L - 410 UVP - E9, L - 410 UVP - E20
  For aircraft to S/N 912602
  Do-L410-1231.1 Provozně technická příručka pro letoun L - 410 UVP - E
  In English:
  Do-L410-1232.2 Maintenance Manual for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane
  Pro letouny do v.č. 912528
  Do-L410-1231.4 Maintenance Manual for the L 410 UVP-E Aeroplane

– In Russian:
  Do-L410-1231.1 Rukovodstvo po těchničeskoj ekspluatacii camoleta L 410 UVP-E

5. Wiring Manual
– In Czech:
  Do-L410-1242.0 Album elektroschemat pro letouny L - 410 UVP - E, L - 410 UVP - E9, L - 410 UVP - E20
  For aircraft to S/N 912602
  Do-L410-1241.1 Album elektroschemat letounu L - 410 UVP – E
– In English:
  Do-L410-1242.2 Wiring Manual for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane
  For aircraft to S/N 912528
  Do-L410-1241.4 Wiring Manual for the L 410 UVP-E Aeroplane
– In Russian:
  Do-L410-1241.1 Albom elektroschem samoleta L 410 UVP-E

6. Illustrated Parts Catalogue
– In Czech:
  Do-L410-2051.0 Katalog dílů a montážních jednotek pro letouny L - 410 UVP - E, L - 410 UVP - E9, L - 410 UVP - E20
– In English:
  Do-L410-2051.2 Illustrated Parts Catalogue for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane
– In Russian:
  Do-L410-1251.1 Katalog detalej i sboročnych edinic samoleta L 410 UVP-E

7. Album of Production, Operation and Repair Tolerances
– In Czech:
  Do-L410-2031.0 Album výrobních, provozních a opravárenských tolerancí L - 410 UVP - E, E9, E20
– In English:
  Do-L410-2031.0 Album of Production, Operation and Repair Tolerances of the L 410 UVP-E, E9, E20 Aeroplane
– In Russian:
  Do-L410-2031.1 Albom osnovnych sočleněnij i remontnych dopuskov samoletov tipa L 410 UVP i L 410 UVP-E

8. Inspection Manual
– In Czech:
  Do-L410-2011.0 Příručka pro revizi letounů L - 410 UVP - E, L - 410 UVP - E9, L - 410 UVP - E20
– In English:
  Do-L410-2011.2 Inspection Manual for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane
– In Russian:
  Do-L410-2011.1 Rukovodstvo po profiloktičeskomu těchničeskomu

obsluživaniju
samoleta L 410 UVP-E, E9, E20

9. Structural Repair Manual

– In Czech:
  Do-L410-2021.1 Příručka pro opravu draku letounu L-410 v polních podmínkách
– In English:
  Do-L410-2021.2 Airframe Repair Manual L 410 UVP, L 410 UVP-E, L 410 UVP-E9, L 410 UVP-E20 Aeroplane
– In Russian:
  Do-L410-2021.1 Rukovodstvo po remontu planera samoleta L 410 v polevych uslovjach

10. List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

– In Czech:
  Do-L410-3200.0 Přehled modelů a jejich variant, výrobních čísel letounů řady L410/ L420 a jejich schváleného vybavení.
– In English:
  Do-L410-3200.0 Survey of models, their variants, and serial numbers of the L 410/L 420 aircraft series and their approved eqipment

V. Notes

1. The original Type Certificate No. 86- 01 of 30.01.1986 approved the model.

2. The list of models serial numbers and their variants is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

3. List of NLGS-2 requirements having been replaced by ENLGS requirements:
   - NLGS-2 para 3.6.1.5 replaced by ENLGS para 3.6.2.1 Actual landing distances
   - NLGS-2 para 5.2.8.4 replaced by ENLGS para 5.2.8.4 Remote electric control of wing flaps and spoilers
   - NLGS-2 para 5.4.2 replaced by ENLGS para 5.4.2 Brake fluid leakage
   - NLGS-2 para 5.4.6 replaced by ENLGS para 5.4.6 Landing with braked wheels
   - NLGS-2 para 5.4.8 replaced by ENLGS para 5.4.6 Skidding with braked wheels
   - NLGS-2 para 5.5.5 replaced by ENLGS para 5.5.5 Incombustible hydraulic fluid
   - NLGS-2 para 5.5.10 replaced by ENLGS para 5.5.9 Automatic change-over of primary hydraulic systems
   - NLGS-2 para 5.5.13 replaced by ENLGS para 5.5.5 Fire resistance and explosion resistance of hydraulic system
   - NLGS-2 para 5.7.6 replaced by ENLGS para 5.7.4 Control of air temperature in cabin
   - NLGS-2 para 5.11.8.2 replaced by ENLGS para 5.11.7.16 Windows in emergency exits

- NLGS-2 para 7.1.2.9 replaced by ENLGS para 7.1.2.8 Part only: Fueling time
- NLGS-2 para 7.5.1.2.7 replaced by ENLGS para 7.5.1.2.5 Automatic operation of fire extinguishing system during emergency landing
- NLGS-2 para 7.5.1.4.8 replaced by ENLGS para 7.5.1.2.5 Actuation of fare extinguishing system during emergency landing
- NLGS-2 para 8.5.5.11 replaced by ENLGS para 8.5.2.13

4. List of NLGS-2 requirements for which exemptions have been approved:
   - 3.6.1.3 Landing distances required
   - 3.7.5.2 Transient process characteristics during critical engine failure
   - 5.4.2 Brake fluid leakage
   - 5.4.17 Brake system warning indication
   - 5.7.2 Independence of air-conditioning systém
   - 5.12.6 Single-point fueling
   - 5.11.10.1 Width of aisle
   - 7.1.1.11 Overfilling of fuel tanks
   - 7.1.7.1 Fuel system instruments
   - 7.1.7.2 Fuel quantity checking
   - 7.1.7.3 Fuel reserve checking error
   - 7.1.8.8.1 Reserve fuel quantity indicator error
   - 7.2.6.1 Oil system instruments
   - 7.5.1.1.1a Fire precautions
   - 7.5.1.4.6 Automatic actuation of fire extinguishing systém
   - 7.5.1.4.7 Inadvertent actuation of fire extinguishing systém
   - 8.2.2.1.7 Pitch-angle, bank-angle, and heading indication after a failure
   - 8.2.2.1.9 Indication of correct operation of pitch-angle, bank-angle, and heading indicators
   - 8.2.3.1 Engine instruments
   - 8.5.4.2 Generator characteristics
   - 8.5.5.5 Characteristics of protective derives
   - 8.5.6.1 Electrical loads-compliance with the requirements of P8.5
   - 8.5.7 Self-extinguishing properties of electrical conductors
   - 8.5.8.1 Electrical loads-compliance with the requirements of P8.5
   - 8.7.1.9 Cockpit control knobs-color contrast

5. Realisation of service bulletin IB L-410 UVP/192b provides possibility of modification L-410–UVP–E to the type L 410UVP–E–LW with lower MTOW 5700 kg.

6. EASA TC No. EASA.A.026 was issued for model L-410 UVP - E aircraft on 28.3.2007.

Model L 410 UVP - E9

I. General

1.	Data Sheet No.:	71 - 04
2.	Model	L 410 UVP - E9
3.	Airworthiness category:	Transport
4.	Type Certificate Holder:	Aircraft Industries, a.s. Kunovice 1177, 686 04 Kunovice
5.	Manufacturer:	Up to and including S/N 962715 LET, n.p. 686 04 Kunovice 1177 From S/N 012638 onward LETECKÉ ZÁVODY a.s. 686 04 Kunovice 1177
6.	Application Date:	-
7.	Certificate Date:	22. 03. 1988

II. Certification Basis

1.	Certification Basis:	JAR 25, Change 11, dated 17.03.1986
2.	Special Conditions:	None
3.	Exemptions:	Refer to Supplement No. 3
4.	Equivalent Safety Findings:	For those exemptions specified in item 3 above appropriate measures were accepted showing, as a minimum, the same level of safety. These measures form parts of the certification data.
5.	Environmental Standards:	L16/I, Part II, Chapter 10

III. Technical Characteristics and Operational Limitations

1. Type Design Definition:	Specification sheet B 500 111 X - L 410 UVP - E9		
2. Description:	Self-supporting, upper-wing, all-metal design. Powered by two turboprop engines. Control system is performed for two pilots. Landing gear consists of main and nose landing gear.		
3. Equipment:	The list of approved equipment is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.		
4. Dimensions:	Span:	19.980 m	with wing tip tanks
		19.479 m	with wing tips
	Length:	14.467 m	
	Height:	5.829 m	
	Wing Area:	35.18 m^2	with wing tips
		34.86 m^2	without wing tip

5. Engine:

5.1.1. Model:	WALTER M 601 E	
5.1.2. Type Certificate:	89-03, CAA CZ issued	
5.1.3. Limitations:	Maximum continuous power rating:	
	Maximum power	560 kW
	Max. gas generator speed	100.5 %
	Max. propeller speed	2080 rpm
	Max. ITT	760 °C
	Take-off power rating:	
	Maximum power	560 kW
	Max. gas generator speed	100 %
	Max. propeller speed	2080 rpm
	Max. ITT	735°C
	Take-off power rating with water injection:	
	Maximum power	560 kW
	Max. gas generator speed	100 %
	Max. propeller speed	2080 rpm
	Max. ITT	735 °C
	Contingency power rating:	
	Maximum power	595 kW
	Max. gas generator speed	102 %
	Max. propeller speed	2080 rpm
	Max. ITT	780 °C
	or	

5.2.1. Model: WALTER M 601E-21

5.2.2. Type Certificate: 89-03, CAA CZ issued

5.2.3. Limitations:

Maximum continuous power rating:

Maximum power	560 kW
Max. gas generator speed	100.5 %
Max. propeller speed	2080 rpm
Max. ITT	760°C

Take-off power rating:

Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735°C

Take-off power rating with water injection:

Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735°C

Contingency power rating:

Maximum power	595 kW
Max. gas generator speed	102 %
Max. propeller speed	2080 rpm
Max. ITT	780 °C

6. Propeller:

6.1. Model: V510

6.2. Type Certificate: 89-04, CAA CZ issued

6.3. Number of blades: 5

6.4. Diameter: 2302 mm maximum, 2298 mm minimum

6.5. Sense of Rotation: Clockwise in view of flight direction

7. Fuel: T1 according to ST SEV 5024-85, or GOST 10227-86

TS 1 according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

RT according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

PL 6 according to PND 25005-76

PL 7 according to PND 25005-92

JET A according to ASTMD 1655-89

	JET A-1 according to ASTMD 1655-89, or DERD 2494	
	PSM 2 according to PN-86/C-96026	
8. Oil:	Aero Shell Turbo Oil 500	
	Aero Shell Turbo Oil 555	
	Aero Shell Turbo Oil 560	
	Mobil Jet 0 II	
	B3V (Russian production)	
	Exon TO 2380	
	Castrol 599	
9. Air Speeds:	Maximum operating speed v_{MO}	335 km/h IAS
	Maximum flaps extended speed, landing configuration 42° v_{FE}	220 km/h IAS
	Maximum flaps extended speed, take-off configuration 18° v_{FE}	250 km/h IAS
	Maneuvering speed v_A	260 km/h IAS
	Maximum landing gear operating speed v_{LO}	250 km/h IAS
	Maximum landing gear extended speed v_{LE}	250 km/h IAS
	Maximum spoiler operating speed v_{SP}	190 km/h IAS
	Minimum control speed on ground v_{MCG}	130 km/h IAS
	Minimum control speed, take-off v_{MCA}	135 km/h IAS
	Minimum control speed during landing approach v_{MCL}	135 km/h IAS
10. Load factors:	Maximum positive limit load factor	
	- with wing flaps extended	2.0
	- with wing flaps retracted	3.1
	Maximum negative limit load factor	- 1.0
11. Maximum Operating Altitude:	14000 ft	
12. Weights:	Maximum taxiing weight	6620 kg
	Maximum take-off weight	6600 kg
	Maximum landing weight	6400 kg
	Maximum landing weight in exceptional cases	6600 kg
	Maximum zero-fuel weight	5870 kg
13. Center of Gravity Range:	Forward c.g. limit	17 % MAC
	Aft c.g. limit	30 % MAC
14. Datum:	Datum point is the leveling point No. 2 (LP 2) on the fuselage, located 2.730 m aft of the fuselage nose tip.	

15. Mean Aerodynamic Chord (MAC):	1.918 m		
16. Leveling Means:	In longitudinal direction, leveling points No. 3, 5, 6 in spanwise direction define the leveling plane by leveling points No. 19L and 19P.		
17. Minimum Flight Crew:	2		
18. Number of seats:	19 pax		
19. Baggage/Cargo Compartments:	Maximum loading of baggage compartments:		
	forward baggage compartment		140 kg
	aft baggage compartment		150 kg
	Cargo variant		1000 kg
20. Control surface deflections:	Elevator	up	30° ± 1°
		down	14° + 1° -0°
	Rudder	left and right	17° +0° -0°30´
	Aileron	up	27° ± 1°
		down	14° ± 1°
	Wing flap inner		
		take-off position	18°
		landing position	52° ± 1°30´
	Wing flap outer		
		take-off position	18° ± 1°
		landing position	42° ± 1°
	Left aileron trim tab		
		up	20° ± 2°
		down	20° ± 2°
	Elevator trim tab		
		up	10° ± 1°
		down	16° ± 1°
	Rudder trim tab		
		left	10° + 0° -1°
		right	10° + 0° -1°30´
	Maximum spoiler deflection, up		72° 30´ ± 2°
	Maximum ABC tab deflection, up		55° ± 2°
21. Wheels and Tyres:	Nose wheel K21-6000-7 with tyre 9.00-6(550 x 225) M4		
	or 9.00-6/906 TO6 - Good Year		
	Main wheel K20-6100-7 with tyre 12.50-10(720 x 310) M4		
	or 29x11,0-10/11OTO1-1 Good Year		

22. Other Limitations:

- The aircraft is approved for flights in condition of low and mean icing conditions at temperatures not lower than -20 °C
- The aircraft is approved for Day and Night VFR and IFR flights.

IV. Operating and Service Instructions

1. Flight Manual

– In English:
For aircraft S/N 882039 and 882040
Do-L410-1211.2 Airplane Flight Manual for the L-410 UVP-E Aeroplane
For aircraft from and including S/N 861809
Do-L410-1213.2 Airplane Flight Manual for the L-410 UVP-E9 Aeroplane

2. Master Minimum Equipment List

– In English:
Do-L410-3000.2 Master Minimum Equipment List L410 UVP-E, E9, E20

3. Maintenance Schedule:

– In Czech:
Do-L410-1225.0 Předpis pro údržbu letounu L-410 UVP-E9 bez GO
– In English:
Do-L410-1225.2 Maintenance Schedule for the L 410 UVP-E9 Aeroplane without overhaul

4. Maintenance Manual:

– In Czech:
Do-L410-1232.0 Provozně technická příručka pro letouny L - 410 UVP - E, L - 410 UVP - E9, L - 410 UVP - E20
– In English:
Do-L410-1232.2 Maintenance Manual for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane

5. Wiring Manual

– In Czech:
Do-L410-1242.0 Album elektroschemat pro letouny L - 410 UVP - E, L - 410 UVP - E9, - 410 UVP - E20
– In English:
Do-L410-1242.2 Wiring Manual for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane

6. Illustrated Parts Catalogue

– In Czech:
Do-L410-2051.0 Katalog dílů a montážních jednotek pro letouny L-410 UVP-E, L-410 UVP-E9, L-410 UVP-E20
– In English:
Do-L410-2051.2 Illustrated Parts Catalogue for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane

7. Album of Production, Operation and Repair Tolerances

- In Czech:
  Do-L410-2031.0 Album výrobních, provozních a opravárenských tolerancí L-410 UVP-E, E9, E20
- In English:
  Do-L410-2031.0 Album of Production, Operation and Repair Tolerances of the L 410 UVP-E, E9, E20 Aeroplane

8. Inspection Manual

- In Czech:
  Do-L410-2011.0 Příručka pro revizi letounů L-410 UVP-E, L-410 UVP-E9, L-410 UVP-E20
- In English:
  Do-L410-2011.2 Inspection Manual for the L 410 UVP Aeroplane, L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane and L 410 UVP-E20 Aeroplane

9. Airframe Repair Manual

- In Czech:
  Do-L410-2021.1 Příručka pro opravu draku letounu L-410
- In English:
  Do-L410-2021.2 Airframe Repair Manual L 410 UVP-E, E9, E20 Aeroplane

10. List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

- In Czech:
  Do-L410-3200.0 Přehled modelů a jejich variant, výrobních čísel letounů řady L410/ L420 a jejich schváleného vybavení.
- In English:
  Do-L410-3200.0 Survey of models, their variants, and serial numbers of the L 410/L 420 aircraft series and their approved eqipment

V. Notes

1. The model was approved by the original Type Certificate No. 88- 01 of 22.03.1988.

2. The list of models serial numbers and their variants is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

3. List of JAR-25 requirements for which exemptions have been approved:
   - JAR 25.607 (a) Some removable fasteners in those systems specified in (1) and (2) of this paragraph do not incorporate two separate locking devices. They are secured by means of slotted nuts and split pins.

- JAR 25.672 (a) Only the condition of automatic bank control circuit is annunciated on the central warning display. Drop of pressure in the hydraulic system is indicated by a pressure gauge. Correct function of electrical circuit is checked before take-off by means of a TEST pushbutton.
- JAR 25.677 (b) For the aileron trim tab the neutral position is only annunciated. The Aeroplane Flight Manual requires that the neutral position must be checked before taxiing-out for take-off.
- JAR 25.679 The control surfaces can only be locked on the ground, by means of clamps. These locking devices are conspicuously marked by red flags.
- JAR 25.703 A yellow light on the central warning display annunciates that the wing flaps are not in the take-off position. Parking brake release is indicated by the position of the control lever and a change in pressure gauge reading.
- JAR 25.777 (e) The wing-flap control is located level with the landing gear control.
- JAR 25.777 (f) The landing gear control is not located of the throttles, but aft of the throttles.
- JAR 25.853 (c) The test in compliance with this requirement was not conducted.
- JAR 25.1305 (c) A fuel flowmeter indicator is not included in the fuel system for each engine. The engine power setting is sufficiently characterized by the indicated engine parameters.
- JAR 25.1305-(c) (8) There is no indication of proper functioning of the fuel heater. Warm oil passes through the heater continuously.
- JAR 25.1305 (e) (3)Each propeller blade position below the minimum flight pitch is indicated.
- JAR 25.1326 (a)Operation of the pitot heating system is indicates by a green light. When the system is not operating, for any reason, the green light extinguishes.
- JAR 25.1337 (a) (2)Instrument lines and hoses have 4 mm inner diameter, which reduces the risk of escape of excessive fluid if the line fails.
- JAR 25.1435 (a) (2)A means to indicate hydraulic fluid quantity is not installed. The hydraulic system is a closed circuit, which is not connected with the atmosphere. Hydraulic fluid leakage could only occur in the event of a failure of some system component. In such a case a separate emergency system can be used.

4. EASA TC No. EASA.A.026 was issued for model L-410 UVP – E9 aircraft on 28.03.2007.

Model L 410 UVP-E20

I. General

1. Data Sheet No.:	71-04
2. Model	L 410 UVP-E20
3. Airworthiness category:	Commuter
4. Type Certificate Holder:	Aircraft Industries, a.s. Kunovice 1177, 686 04 Kunovice
5. Manufacturer:	Up to and including S/N 992736 LET, n.p. 686 04 Kunovice 1177
6. Application Date:	-
7. Certificate Date:	30. 10. 1990

II. Certification Basis

1. Certification Basis:	FAR 23, including Amendment 34
2. Special Conditions:	None
3. Exemptions:	Refer to Supplement No. 3
4. Equivalent Safety Findings:	For those exemptions specified in item 3 above appropriate measures were accepted showing, as a minimum, the same level of safety. These measures form parts of the certification data.
5. Environmental Standards:	L16/I, Part II, Chapter 10

III. Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Specification sheet B 500 112 X - L 410 UVP-E20		
2.	Description:	Self-supporting, upper-wing, all-metal design. Powered by two turboprop engines. Control system is performed for two pilots. Landing gear consists of main and nose landing gear.		
3.	Equipment:	The list of approved equipment is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.		
4.	Dimensions:	Span:	19.980 m	with wing tip tanks
			19.479 m	with wing tips
		Length:	14.424 m	
		Height:	5.829 m	
		Wing Area:	35.18 m^2	with wing tips
			34.86 m^2	without wing tip

5. Engine:

5.1.1. Model: WALTER M 601 E

5.1.2. Type Certificate: 89-03, CAA CZ issued

5.1.3. Limitations:

Maximum continuous power rating:

Maximum power	560 kW
Max. gas generator speed	100.5 %
Max. propeller speed	2080 rpm
Max. ITT	760 °C

Take-off power rating:

Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735°C

Take-off power rating with water injection:

Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735 °C

Contingency power rating:

Maximum power	595 kW
Max. gas generator speed	102 %
Max. propeller speed	2080 rpm
Max. ITT	780 °C

Aircraft produced since the year 2004 according to Brazilian Type Certificate, or aircraft after the IB L410UVP-E/160b accomplishment:

Maximum continuous power rating:	
Maximum power	560 kW
Max. gas generator speed	100.5 %
Max. propeller speed	2080 rpm
Max. ITT	760 °C
Take-off power rating:	
Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735°C
Take-off power rating with water injection:	
Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735 °C
Maximum take-off power rating:	
Maximum power	595 kW
Max. gas generator speed	102 %
Max. propeller speed	2080 rpm
Max. ITT	780 °C

or

5.2.1. Model: WALTER M 601E-21

5.2.2. Type Certificate: 89-03, CAA CZ issued

5.2.3. Limitations:

Maximum continuous power rating:	
Maximum power	560 kW
Max. gas generator speed	100.5 %
Max. propeller speed	2080 rpm
Max. ITT	760°C
Take-off power rating:	
Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735°C
Take-off power rating with water injection:	
Maximum power	560 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735°C
Contingency power rating:	
Maximum power	595 kW
Max. gas generator speed	102 %
Max. propeller speed	2080 rpm
Max. ITT	780 °C

6. Propeller:

6.1. Model: V510

6.2. Type Certificate: 89-04, CAA CZ issued

6.3. Number of blades: 5

6.4. Diameter: 2302 mm maximum, 2298 mm minimum

6.5. Sense of Rotation: Clockwise in view of flight direction

7. Fuel: T1 according to ST SEV 5024-85, or GOST 10227-86

TS 1 according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

RT according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

PL 6 according to PND 25005-76

PL 7 according to PND 25005-92

JET A according to ASTMD 1655-89

JET A-1 according to ASTMD 1655-89, or DERD 2494

PSM 2 according to PN-86/C-96026

8. Oil:

Aero Shell Turbo Oil 500

Aero Shell Turbo Oil 555

Aero Shell Turbo Oil 560

Mobil Jet 0 II

B3V (Russian production)

Exon TO 2380

Castrol 599

9. Air Speeds:

Maximum design speed v_D	400 km/h IAS
Demonstrated maximum flight speed v_{DF}	400 km/h IAS
Maximum operating speed v_{MO}	335 km/h IAS
Maximum flaps extended speed, landing configuration 42° v_{FE}	220 km/h IAS
Maximum flaps extended speed, take-off configuration 18° v_{FE}	250 km/h IAS
Maximum maneuvering speed v_A	265 km/h IAS
Maximum landing gear operating speed v_{LO}	250 km/h IAS
Maximum landing gear extended speed v_{LE}	250 km/h IAS
Maximum spoiler operating speed v_{SP}	190 km/h IAS
Minimum control speed on ground, take-off run v_{MCG}	130 km/h IAS
Minimum control speed, take-off v_{MCA}	135 km/h IAS
Minimum control speed during landing approach v_{MCL}	135 km/h IAS

Variant for Brazil:

Maximum design speed v_D	400 km/h IAS
Demonstrated maximum flight speed v_{DF}	400 km/h IAS
Maximum operating speed v_{MO}	335 km/h IAS
Maximum flaps extended speed, landing configuration 42° v_{FE}	230 km/h IAS
Maximum flaps extended speed, take-off configuration 18° v_{FE}	260 km/h IAS
Maximum maneuvering speed v_A	275 km/h IAS
Maximum landing gear operating speed v_{LO}	260 km/h IAS
Maximum landing gear extended speed v_{LE}	260 km/h IAS
Maximum spoiler operating speed v_{SP}	190 km/h IAS
Minimum control speed on ground, take-off run v_{MCG}	140 km/h IAS
Minimum control speed, take-off v_{MCA}	155 km/h IAS
Minimum control speed during landing approach v_{MCL}	150 km/h IAS

10. Load factors:	Maximum positive limit load factor		
	- with wing flaps extended		2.0
	- with wing flaps retracted		3.1
	Maximum negative limit load factor		- 1.24
11. Maximum Operating Altitude:	14000 ft		
12. Weights:	Maximum taxiing weight		6620 kg
	Maximum take-off weight		6600 kg
	Maximum landing weight		6400 kg
	Maximum landing weight in exceptional cases		6600 kg
	Maximum zero-fuel weight		
	- without wing-tip tanks		6000 kg
	- with wing-tip tanks		6060 kg
13. Center of Gravity Range:	Forward c.g. limit		19 % MAC
	Aft c.g. limit		30 % MAC
14. Datum:	Datum point is the leveling point No. 2 (LP 2) on the fuselage, located 2.730 m aft of the fuselage nose tip.		
15. Mean Aerodynamic Chord (MAC):	1.918 m		
16. Leveling Means:	In longitudinal direction, the leveling plane is defined by leveling points No. 3, 5, 6 in spanwise direction by leveling points No. 19L and 19P.		
17. Minimum Flight Crew:	2		
18. Number of seats:	19 pax		
19. Baggage/Cargo Compartments:	Maximum loading of baggage compartments:		
	forward baggage compartment		140 kg
	aft baggage compartment		150 kg
	Cargo variant		1000 kg
20. Control surface deflections:	Elevator	up	30° ± 1°
		down	14° + 1° -0°
	Rudder	left and right	17° + 0° -0°30´
	Aileron	up	27° ± 1°
		down	14° ± 1°
	Wing flap inner		
		take-off position	18°
		landing position	52° ± 1°30´
	Wing flap outer		
		take-off position	18° ± 1°
		landing position	42° ± 1°

	Left aileron trim tab		
		up	20° ± 2°
		down	20° ± 2°
	Elevator trim tab		
		up	10° ± 1°
		down	16° ± 1°
	Rudder trim tab		
		left	10° + 0° -1°
		right	10° + 0° -1°30´
	Maximum spoiler deflection, up		72° 30´ ± 2°
	Maximum ABC tab deflection, up		55° ± 2°

21. Wheels and Tyres:

Nose wheel K21-6000-7 with tyre
9.00-6(550 x 225) M4
or 9.00-6/906 TO6 - Good Year

Main wheel K20-6100-7 with tyre
12.50-10(720 x 310) M4
or 29x11,0-10/11OTO1-1 Good Year

22. Other Limitations:

- Flights in icing conditions, with leading edge deicing system continuously ON, are permitted.
- The aircraft is approved for Day and Night VFR and IFR flights.

IV. Operating and Service Instructions

1. Flight Manual

– In English:
For aircraft S/N 851334, 922728, 942705, 942707, 942708, 942709
Do-L410-1211.2 Airplane Flight Manual for the L-410 UVP-E20
For aircraft operating based on Brazilian Type Certificate No. 9401- from S/N 912532
Do-L410-1212.2 L 410 UVP-E20 Brazilian Airplane Flight Manual
Do-L410-1214.2 Airplane Flight Manual for the L-410 UVP-E20
For aircraft operating based on Indonesian Type Certificate No. A048
Do-L410-1216.2 Airplane Flight Manual for the L-410 UVP-E20

2. Maintenance Schedule:

– In Czech:
Do-L410-1223.0 Předpis pro údržbu letounu L-410 UVP-E20 bez GO
– In English:
Do-L410-1223.2 Maintenance Schedule for the L410 UVP-E20 Aeroplane without overhaul

3. Master Minimum Equipment List

– In English:
Do-L410-3000.2 Master Minimum Equipment List L410 UVP-E, E9, E20

4. Maintenance Manual:

– In Czech:
For aircraft manufactured since 15.03.93
Do-L410-1232.0 Provozně technická příručka pro letouny L-410 UVP-E, L-410 UVP-E9, L-410 UVPE20 (valid)
– For aircraft since S/N 912710
Do-L410-1231.1 Provozně technická příručka pro letoun L - 410 UVP – E
– In English:
For aircraft since S/N 972731
Do-L410-1232.2 Maintenance Manual for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane
For aircraft to S/N 962709
Do-L410-1231.4 Maintenance Manual for the L 410 UVP-E Aeroplane

5. Wiring Manual

– In Czech:
For aircraft manufactured since 15.03.93
Do-L410-1242.0 Album elektroschemat pro letouny L-410 UVP-E, L-410 UVP-E9, L-410 UVP-E20
For aircraft to S/N 912710
Do-L410-1241.1 Album elektroschemat letounu L - 410 UVP – E

– In English:
For aircraft from S/N 972731

Do-L410-1242.2	Wiring Manual for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane

For aircraft to S/N 962709

Do-L410-1241.4	Wiring Manual for the L 410 UVP-E Aeroplane

6. Illustrated Parts Catalogue

– In Czech:

Do-L410-2051.0	Katalog dílů a montážních jednotek pro letouny L-410 UVP-E,L-410 UVP-E9, L-410 UVP-E20

– In English:

Do-L410-2051.2	Illustrated Parts Catalogue for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane

7. Album of Production, Operation and Repair Tolerances

– In Czech:

Do-L410-2031.0	Album výrobních, provozních a opravárenských tolerancíL-410 UVP-E, E9, E20

– In English:

Do-L410-2031.0	Album of Production, Operation and Repair Tolerances of the L 410 UVP-E, E9, E20 Aeroplane

8. Inspection Manual

– In Czech:

Do-L410-2011.0	Příručka pro revizi letounů L-410 UVP-E, L-410 UVP-E9, L-410 UVP-E20

– In English:

Do-L410-2011.2	Inspection Manual for the L 410 UVP-E Aeroplane, L 410 UVP-E9 Aeroplane, L 410 UVP-E20 Aeroplane

9. Structural Repair Manual

– In Czech:

Do-L410-2021.1	Příručka pro opravu draku letounu L-410

– In English:

Do-L410-2021.2	Airframe Repair Manual L 410 UVP, E, E9, E20 Aeroplane

10. List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

– In Czech:

Do-L410-3200.0	Přehled modelů a jejich variant, výrobních čísel letounů řady L410/ L420 a jejich schváleného vybavení.

– In English:

Do-L410-3200.0	Survey of models, their variants, and serial numbers of the L 410/L 420 aircraft series and their approved eqipment

V. Notes

1. The model was approved by the original Type Certificate No. 90- 03 of 30.10.1990.

2. The list of models serial numbers and their variants is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

3. List of FAR-23 requirements for which exemptions have been approved:
   - FAR 23.677 (a) For the aileron trim tab the neutral position is only annunciated. The Aeroplane Flight Manual requires that the neutral position must be checked before taxiing-out for take-off.
     This exemption is cancelled for aircraft manufactured according to the Indonesian Type Certificate A 048 by introduction of aileron trim tab indication in all range of deflections.
   - FAR 23.1305 (v) There is no indication of proper functioning of the fuel heater. The heater operates automatically, there are no pilot-operated controls. A malfunction of the heater will not result in an emergency. A check of correct functioning of the fuel heater is required by the Maintenance Schedule after 300 flight hours.
   - FAR 23.1307 (b) (1) There is a separate switch for each electrical power source (2 storage batteries, 4 generators). These 6 switches are located next to each other on the overhead panel. This arrangement allows the switches to be switched off almost simultaneously. This arrangement prevents the possibility of a loss of all electrical power sources in the event of one master switch failure.
     This exemption is cancelled in force for aircraft completed after 01.01.2004 by introduction of Master Switch installation.

4. EASA TC No. EASA.A.026 has been issued for model L 410 UVP-E20 aircraft on February 4, 2005

Model L - 420

I. General

1. Data Sheet No.:	71-04
2. Model	L-420
3. Airworthiness category:	Commuter
4. Type Certificate Holder:	Aircraft Industries, a.s. Kunovice 1177, 686 04 Kunovice
5. Manufacturer:	S/N 922729A: LET, a.s. 686 04 Kunovice 1177 From 012735A except of S/N 922729A: LETECKÉ ZÁVODY a.s. 686 04 Kunovice 1177
6. Application Date:	-
7. Certificate Date:	11. 03. 1998

II. Certification Basis

1. Certification Basis:	FAR-23, including Amendment 41
2. Special Conditions:	None
3. Exemptions:	None
4. Equivalent Safety Findings:	None
5. Environmental Standards:	– L16/I, Part II, Chapter 10 – FAR Part 36

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: B 500 113 X (top specification sheet) L-420

2. Description: Self-supporting, upper-wing, all-metal design. Powered by two turboprop engines. Control system is performed for two pilots. Landing gear consists of main and nose landing gear.

3. Equipment: The list of approved equipment is shown in the document Do-L410-3200.0
List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

4. Dimensions:

Span:	19.980 m	with wing tip tanks
	19.479 m	with wing tips
Length:	14.424 m	
Height:	5.829 m	
Wing Area:	35.18 m^2	with wing tips
	34.86 m^2	without wing tip

5. Engine:

5.1. Model: WALTER M 601 F

5.2. Type Certificate: 89-03, CAA CZ issued

5.3. Limitations:

Maximum continuous power rating:

Maximum power	580 kW
Max. gas generator speed	100.5 %
Max. propeller speed	2080 rpm
Max. ITT	760°C

Take-off power rating:

Maximum power	580 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735 °C

Take-off power rating with water injection:

Maximum power	580 kW
Max. gas generator speed	100 %
Max. propeller speed	2080 rpm
Max. ITT	735 °C

Maximum take-off power rating:

Maximum power	595 kW
Max. gas generator speed	102 %
Max. propeller speed	2080 rpm
Max. ITT	780°C

6. Propeller:

6.1 Model:	V510
6.2 Type Certificate:	89-04, CAA CZ issued
6.3 Number of blades:	5
6.4 Diameter:	2302 mm maximum, 2298 mm minimum
6.5 Sense of Rotation:	Clockwise in view of flight direction

7. Fuel:

T1 according to ST SEV 5024-85, or GOST 10227-86

TS 1 according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

RT according to ST SEV 5024-85, or GOST 10227-86, or ČSN 656 520

PL 6 according to PND 25005-76

PL 7 according to PND 25005-92

JET A according to ASTMD 1655-89

JET A-1 according to ASTMD 1655-89, or DERD 2494

PSM 2 according to PN-86/C-96026

8. Oil:

Aero Shell Turbo Oil 500

Aero Shell Turbo Oil 555

Aero Shell Turbo Oil 560

Mobil Jet 0 II

B3V (Russian production)

Exon TO 2380

Castrol 599

9. Air Speeds:

Maximum operating limit speed v_{MO}	375 km/h IAS
Maximum flaps extended speed, landing configuration 42° v_{FE}	210 km/h IAS
Maximum flaps extended speed, take-off configuration 18° v_{FE}	297 km/h IAS
Maneuvering speed v_A	273 km/h IAS
Maximum landing gear operating speed v_{LO}	297 km/h IAS
Maximum landing gear extended speed v_{LE}	297 km/h IAS

10. Load factors:	Maximum positive limit load factor		
	- with wing flaps extended		2.0
	- with wing flaps retracted		3.1
	Maximum negative limit load factor		- 1.24
11. Maximum Operating Altitude:	20000 ft		
12. Weights:	Maximum taxiing weight		6620 kg
	Maximum take-off weight		6600 kg
	Maximum landing weight		6400 kg
	Maximum landing weight in exceptional cases		5950 kg
13. Center of Gravity Range:	Forward c.g. limit		19 % MAC
	Forward c.g. limit		30 % MAC
14. Datum:	Datum point is the leveling point No. 2 (LP 2) on the fuselage, located 2.730 m aft of the fuselage nose tip.		
15. Mean Aerodynamic Chord (MAC):	1.918 m		
16. Leveling Means:	In longitudinal direction, leveling points No. 3, 5, 6 in spanwise direction define the leveling plane by leveling points No. 19L and 19P.		
17. Minimum Flight Crew:	2		
18. Number of seats:	19 pax		
19. Baggage/Cargo Compartments:	Maximum loading of baggage compartments:		
	forward baggage compartment		140 kg
	aft baggage compartment		150 kg
	Cargo variant		1000 kg
20. Control surface deflections:	Elevator	up	30° ± 1°
		down	14° + 1° -0°
	Rudder	left and right	17° + 0° -0°30´
	Aileron	up	27° ± 1°
		down	14° ± 1°
	Wing flap inner		
		take-off position	18°
		landing position	52° ± 1°30´
	Wing flap outer		
		take-off position	18° ± 1°
		landing position	42° ± 1°
	Left aileron trim tab		
		up	20° ± 2°
		down	20° ± 2°

	Elevator trim tab		
		up	10° ± 1°
		down	16° ± 1°
	Rudder trim tab		
		left	10° + 0° -1°
		right	10° + 0°-1°30´
	Maximum spoiler deflection, up		72° 30´ ± 2°
	Maximum ABC tab deflection, up		55° ± 2°
21. Wheels and Tyres:	Nose wheel K21-6000-7 with tyre		
		9.00-6(550 x 225) M4	
	or	9.00-6/906 TO6 - Good Year	
	Main wheel K20-6100-7 with tyre		
		12.50-10(720 x 310) M4	
	or	29x11,0-10/11OTO1-1 Good Year	

22. Other Limitations:

– Flights in icing conditions, with leading edge deicing system continuously ON.

– The aircraft is approved for Day and Night VFR and IFR flights.

IV. Operating and Service Instructions

1. Flight Manual

- In Czech:
  Do-L410-1311.0 Letová příručka pro letoun L 420
- In English:
  Do-L410-1311.2 Airplane Flight Manual for the Airplane Model L-420

2. Maintenance Schedule:

- In Czech:
  Do-L420-1224.0 Předpis pro údržbu letounu L-420
- In English:
  Do-L420-1224.2 Maintenance Schedule for the L-420 Aeroplane

3. Master Minimum Equipment List

- In Czech:
  Do-L410-1312.0 Základní seznam minimálního vybavení a seznam snímatelných dílců a podmínky provozu při jejich ztrátě nebo poruše pro letoun L-420
- In English:
  Do-L410-1312.2 Master Minimum Equipment List and Configuration Deviation List for the Airplane Model L-420

4. Maintenance Manual:

- In Czech:
  Do-L410-1233.0 Provozně technická příručka pro letoun L-420
- In English:
  Do-L410-1233.2 Maintenance Manual for the L-420 Aeroplane

5. Wiring Manual

- In Czech:
  Do-L410-1243.0 Album elektroschemat pro letoun L-420
- In English:
  Do-L410-1243.2 Wiring Manual for the L-420 Aerplane

6. Illustrated Parts Catalogue

- In Czech:
  Do-L420-2052.0 Katalog dílů a montážních jednotek letounu L-420
- In English:
  Do-L420-2052.2 Illustrated Parts Catalogue for the L-420 Aeroplane

7. Album of Production, Operation and Repair Tolerances

- In Czech:
  Do-L420-1231.0 — Album výrobních, provozních a opravárenských tolerancí L-420
- In English:
  Do-L420-1231.0 — Album of Production, Operation and Repair Tolerances of the L-420 Aeroplane

8. Structural Repair Manual

- In Czech:
  Do-L410-2021.1 — Příručka pro opravu draku letounu L-410 UVP, L 410 UVP-E, L 410 UVP-E9, L 410 UVP-E20, L –420
- In English:
  Do-L410-2021.2 — Airframe Repair Manual L 410 UVP, L 410 UVP-E, L 410 UVP-E9, L 410 UVP-E20, L-420 Aeroplane

9. List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

- In Czech:
  Do-L410-3200.0 — Přehled modelů a jejich variant, výrobních čísel letounů řady L410/ L420 a jejich schváleného vybavení.
- In English:
  Do-L410-3200.0 — Survey of models, their variants, and serial numbers of the L 410/L 420 aircraft series and their approved eqipment

V. Notes

1. The model was approved by the original Type Certificate No. 98- 01 of 11.03.1998.

2. The list of models serial numbers and their variants is shown in the document Do-L410-3200.0 List of models, their variants, serial numbers of L-410/L-420 aircraft and their approved equipment.

3. EASA TC No. EASA.A.026 has been issued for model L-420 aircraft on February 4, 2005.