
Type Acceptance Report

TAR 3/21B/22 – Revision 1

LEARJET 20/30/50/60 Series

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Executive Summary

New Zealand Type Acceptance has been granted to the Learjet Series based on validation of FAA Type Certificate number A10CE. There are no special requirements for import.

Applicability is currently limited to the Models and/or serial numbers detailed in Appendix 1, which are now eligible for the issue of an Airworthiness Certificate in the Standard Category in accordance with NZCAR §21.191, subject to any outstanding New Zealand operational requirements being met. (See Section 5 of this report for a review of compliance of the basic type design with the operating Rules.) Additional variants or serial numbers approved under the foreign type certificate can become type accepted after supply of the applicable documentation, in accordance with the provisions of NZCAR §21.43(c).

NOTE: The information in this report was correct as at the date of issue. The report is generally only updated when an application is received to revise the Type Acceptance Certificate. For details on the current type certificate holder and any specific technical data, refer to the latest revision of the State-of-Design Type Certificate Data Sheet referenced herein.

1. Introduction

This report details the basis on which Type Acceptance Certificate No. 3/21B/22 was granted in the Standard Category in accordance with NZCAR Part 21 Subpart B.

Specifically the report aims to:

- (a) Specify the foreign type certificate and associated airworthiness design standard used for type acceptance of the model(s) in New Zealand; and
- (b) Identify any special conditions for import applicable to any model(s) covered by the Type Acceptance Certificate; and
- (c) Identify any additional requirements which must be complied with prior to the issue of a NZ Airworthiness Certificate or for any subsequent operations.

2. Aircraft Certification Details

(a) State-of-Design Type and Production Certificates:

Manufacturer: Learjet, Inc. (from June 22, 1990)
Learjet Corporation (from April 5, 1998)
Gates Learjet Corporation (from January 12, 1970)
Lear Jet Industries Inc. (from November 2, 1966)
Lear Jet Corporation (issued March 17, 1966)

Type Certificate: A10CE
Issued by: Federal Aviation Administration

Production Approval: PC 329CE – Issued June 22, 1990 (Model 35A s/n 660 on,
Model 36A s/n 060, 061, 064 and on, all Model 60)
PC 317

(b) Models Covered by the Part 21B Type Acceptance Certificate:

(i) **Model:** 35/35A/36/36A

MCTOW: 17,000 lb. (Model 35/36)
18,000 lb. (Model 35A/36A [with ECR 1495, 1512 or 1517])
18,300 lb. (with ECR 2234 or modified per AAK 90-3)

Max. No. of Seats: 10 (2 crew, 8 passengers) – Models 35/35A
8 (2 crew, 6 passengers) – Models 36/36A

Noise Standard: FAR 36 including Amdt 36-1 (when modified per ECR 1511)

Engine: TFE 731-2-2B
Type Certificate: E6WE
Issued by: Federal Aviation Administration

(ii) **Model:** 60

MCTOW: 22,750 lb.
23,100 lb. (as defined by Learjet Drawing No. 6088001)
23,500 lb. (as defined by ECR 3845)

Max. No. of Seats: 10 (2 crew, 8 passengers)
13 (2 pilots, 10 passengers, 1 attendant) – Model 60 *
11 (2 pilots, 9 passengers) – Model 60XR *
* See TCDS Note 7

Noise Standard: FAR 36 including up to Amendment 36-28 (Stage 4)

Engine: Pratt & Whitney Canada PW305A
Type Certificate: E-22
Issued by: Transport Canada

3. Application Details and Background Information

The application for New Zealand type acceptance of the Model 35A was from Auckland Air Charter Ltd, dated 7 December 2002. The first-of-type example was serial number 649, registered ZK-XVL. The Learjet is an all-metal pressurised light business twin powered by two-spool geared transonic-stage fanjet engines rated at 3500 pounds thrust at sea level.

Type Acceptance Certificate No. 3/21B/22 was granted on 5 March 2003 to the Learjet Models 35/35A and 36/36A Series based on validation of FAA Type Certificate A10CE, and includes the TFE731-2 Series engine based on FAA Type Certificate E6WE. Specific applicability is limited to the coverage provided by the operating documentation supplied, in this case the Flight Manual is the determinant. There are no special requirements for import into New Zealand.

This report was raised to Revision 1 to include the Learjet 60 Series variants. The applicant was JAK Air, and the first-of-type was serial number 60-382 registered ZK-JAK. Type acceptance was granted on 10 March 2017.

The Models 35/36 were developments of the Model 24, the first Learjet certificated in the Transport Category. They incorporate the 30-series wing, which has a 24-inch extension outboard of WS 181, drooped leading edge and vortex generators. There was also a 13-inch fuselage stretch and higher MAUW, but the major change was the addition of turbofan engines. They are essentially the same except that the Model 36 is the long range version, which has a large fuselage fuel tank. The -A versions were introduced at serial numbers 35-067 and 36-018 and resulted primarily from the introduction of the Century III wing modification. A reduced approach speed was achieved through a thicker leading edge and a straight strake at the wingtip tank. (The modification can be fitted retrospectively by AAK 76-4.) A further refinement was the Softflite configuration fitted under AAK 79-10, production incorporated from serial numbers 35-279 and 36-046. The main changes are that the vortex generators are replaced with boundary layer energisers, a wing fence added at WS 125, and a leading edge stall strip is installed. The tip tank strakes are deleted.

The Model 55 was developed from the Model 35 with a lengthened and increased diameter fuselage, extended wing, deleted wingtip tanks and supercritical winglets added. A more powerful engine version has been moved aft and up, while the vertical fin is increased in size and the horizontal stabiliser has been raised 30 inches. The right-hand plug-type escape hatch has been replaced by a large outward-opening hinged door, which also functions as a baggage door. Baggage compartments have been added to the tailcone and to the extended nose section. A larger windshield with separate openable side windows was fitted and a new cockpit arrangement adopted.

The Model 60 was derived from the Model 55C, by extending the constant section of the fuselage by 28 inches and moving the cabin door forward 8 inches. The TFE 731-3 engines were replaced with Pratt & Whitney Canada PW305A engines that are flat rated at 4600 pounds of thrust. Aerodynamic modifications were made to the wing root area, the engine pylon area, the wing-to-fuselage fairings and the winglet root area. The Model 60XR is the marketing name for the later version of the Model 60 which includes an upgrade in the avionics package from Rockwell Collins Proline 4 to Proline 21, and an improved interior. This applied from serial number 60-307 and 60-319 and onwards.

4. NZCAR §21.43 Data Requirements

The type data requirements of NZCAR Part 21B Para §21.43 have been satisfied by supply of the following documents, or were already held by the CAA:

(1) State-of-Design Type certificate:

FAA Type Certificate Number A10CE

FAA Type Certificate Data Sheet no. A10CE at Revision 67 dated Feb 19, 2015

- Model 35/36 approved June 28, 1974
- Model 35A/36A approved April 30, 1976
- Model 60 approved January 15, 1993

FAA Type Certificate Data Sheet no. E6WE at Revision 17 dated May 9, 2000

- Model TFE731-2 approved August 31, 1972

(2) Airworthiness design requirements:

(i) *Airworthiness Design Standards:*

The certification basis of the first Transport Category Learjet Model 24 was FAR Part 25 effective February 1, 1965, as amended by 25-2 and 25-4, plus the Special Conditions set out in two FAA letters and one exemption. For subsequent Models the certification basis was updated to include later FAR 25 amendment status, as listed on the TCDS, plus various additional Special Conditions were applied and a number of Equivalent Level of Safety Findings were made.

This is an acceptable certification basis in accordance with NZCAR Part 21B Para §21.41, as FAR 25 is the basic standard for Transport Category Airplanes called up under Part 21 Appendix C. There are no non-compliances and no additional special conditions have been prescribed by the Director under §21.23.

The certification basis of the Garrett TFE731-2 is FAR Part 33 dated April 3, 1967 and Amendments 1, 2 and 3, and Special Condition Number 33-44-WE-13. This is the basic standard for aircraft engines called up under Part 21 Appendix C.

(ii) *Special Conditions:*

Models 24B/C/D/E/F, 28/29, 35/36/35A/36A:

FAA Letter dated Mar 1, 1967, Reference CE-212, Special Conditions Learjet 25:

- Ref: FAR 25.1441(d) Oxygen Equipment – Provision for operation between FL410 and FL450
- Add: FAR 25.903(d)(3) Vibration – Turbine engine installation cannot be worse than FAR 33
- Replace: FAR 25.955(b) Turbine Fuel Feeding – Continuous supply from all except main tank
- Add: FAR 25.1121(h) Exhaust System – Must discharge clear to prevent fuel build-up if start fails
- Add: FAR 25.1002 Lightning Strike Protection – Fuel system must prevent ignition of vapors
- Add: FAR 25.12 General – Negative flight load accelerations can't affect engine or aircraft systems
- Ref: FAR 21.21(b)(2) – Demonstrate flight for 5 mins with electrical generating systems inoperative
- Ref: FAR 21.21(b)(2) – Investigation needed of response to turbulence and effect on controllability
- Ref: FAR 21.21(b)(2) – Stability tests needed with stabiliser in reasonable out-of-trim condition
- Ref: FAR 21.21(b)(2) – In event of survivable crash the release or ignition of fluids must be remote

Models 35/36/35A/36A:

Special Conditions No.25-50-CE-6 for Gates Learjet Model 26 – Docket No.12671

PROPULSION: Bleed air system, thrust control, powerplant installation, ignition system

AIRFRAME: Limit manoeuvring load factor – May not be less than 2.5 or need be greater than 3.8

SYSTEMS: Operation without normal electrical power, safely in VFR conditions, must be shown

Models 31/31A/55/55B/55C/60:

25-99-CE-14 High Operation Altitude (51,000 ft) – These special conditions were applied because of the high altitude operation and small cabin volume. They required a higher degree of pressure vessel integrity; upgraded air conditioning, ventilation and pressurisation systems to ensure survivability with certain system failures; redefined oxygen system for above 40,000ft; and the aircraft must be able to be flown safely in VFR at max altitude with the electrical power inoperative.

Models 31A/60:

25-ANM-46 Lightning Protection and High Intensity Radiated Fields – The usual requirement that essential and critical digital avionic systems must be designed and installed to preclude component damage and loss of function due to both the direct and indirect effect of lightning and HIRF. The threat environment was defined in the Special Condition.

*(iii) Equivalent Level of Safety Findings:**All Models except Model 60:*

§25.773(b)(2) Pilot's Openable Side Window – As for the Models 24/25 this is not required on the basis of the effectiveness of the dual independent external anti-fog and windscreen alcohol anti-ice systems, plus analysis indicating the aft half will remain usable for viewing during landing.

All Models except Model 55 Series and 60:

§25.807(a)(4) Passenger Emergency Exits – Type IV – Same justification used as for §25.815.

All Models except Model 31/31A, 55 Series and 60:

§25.815 Aisle Width – A strictly non-compliant interior arrangement was accepted after emergency evacuation tests verified the effectiveness of the horizontally-oriented escape window and 8½" aisle width. A compensating factor is the main cabin door, which opens in two halves and should not jam.

Models 31/31A, 35/36, and 55 Series:

§25.1305(r) Thrust Indication – N_1 was accepted as a means of indicating thrust on the basis that it was shown to be as practical and convenient as power setting by EP, the instrumentation has tachometer reliability, and means were taken to minimise unreliable readings due to fan damage.

All Models except 31/31A, Model 55 Series and 60:

§25.1439(b)(2)(ii) Protective Eye Equipment – Accepted by similarity with the Models 24 and 25. The improved environmental control system will readily evacuate smoke and fumes and provide the same level of safety as eye protection. Hence smoke goggles are not required. This finding is based on ECS capability with one engine providing emergency bleed air and the second giving normal bleed air flow in accordance with smoke and fume elimination procedures in the AFM.

All Models except 31/31A, 55C and 60:

§25.1505(b)(1) – A stick puller system as used on the Models 24/25 was accepted in lieu of the requirement for a 7.5 degree nose down upset for 20 seconds. In addition the overspeed warning device can be heard anywhere in the cabin; tests showed safe speed increase and recovery following a reasonable time delay; and the Learjet 23 safe history proves there are adequate speed margins.

Model 60:

§25.813(e) – Frangible Lavatory Door – The 60 has an optional jumpseat in the aft lavatory with a sliding door, which makes this a separate passenger compartment. (No door may be installed in any partition between them.) This was allowed on the basis it is placarded to be open for take-off and landing; latches securely in the open position; and has been successfully tested for frangibility, in case the door jams due to fuselage distortion. It has its own Fasten Seatbelt electrical sign, and there is a limit on the size and weight of the occupant of the jumpseat during take-off or landing.

Model 60:

§25.841(b)(6) – Modifications of the pressurisation system to allow landings in excess of 8000 feet. Reference ECR 3792, SB 60-21-3, and FAA letter 2015-00204 – The Model 60 is certified for operations from airports up to 13,700 feet elevation. The rule requires a warning when cabin altitude exceeds 10,000 feet. The Model 60 has an automatic mode of the pressurization system, which has a low pilot workload and has been well accepted in operation. To avoid nuisance indications the warning resets when high altitude mode is operational, and the aircraft is below 25,000 feet.

Model 60:

§25.855(b), 25.857(c) – ST10705SE-T: Raisbeck Engineering, Inc. (REI) Aft Fuselage Locker – This was accepted without meeting all the requirements of a Class C or E cargo compartment on the grounds it is a very small unpressurised compartment separated from the pressure vessel, that limitations prohibit carriage of ignition sources, and any likely fire to occur would not pose a hazard.

Model 60:

§25.1321(c), §25.1549(a)(b)(c) – ST4427WI-T-P-1: Digital display of engine high pressure rotor speed (N2) – ST4427WI-T-P-2: Digital display of engine oil pressure, oil temperature, and fuel flow – Primary engine parameters for turbine engine aircraft have been traditionally displayed in an analogue form. An increasing demand to conserve primary display space has led to digital-only primary displays for those rotor speeds not normally used for power setting. An ELOS was granted for the use of digital displays which give less effective trend and limit proximity indications on the grounds the engine has no defined cautionary range for N₂, and colour changes and display format provide engine-to-engine data. This was also accepted for the other three digital-only displays, which are not primary power setting parameters and are not directly controlled by the pilot's actions.

All Models

§25.1397(c) – ST4347WI-T-SE-1/2: Wing and Aft Position Light Replacement – LED lights are fitted as a replacement for incandescent bulbs. While meeting the TSO they do not strictly meet the chromaticity requirements for the colour “aviation white”. There are only minor differences in the definitions, and the colour is still perceived as white by the human eye, so there is no confusion.

(iv) *Airworthiness Limitations:*

See the Airworthiness Limitations section of the Aircraft Maintenance Manual for structural component replacement lives.

(3) Aircraft Noise and Engine Emission Standards:

(i) *Environmental Standard:*

The Models 35/36/35A/36A have been certificated for noise under FAR Part 36, including Amendment 36-1. The Model 60 has been certificated for fuel emissions under FAR Part 34, effective September 19, 1990; and for noise under FAR Part 36, including Amendments 36-1 through 36-28.

(ii) *Compliance Listing:*

Report 2745 – Learjet Models 35/36 FAR Part 36 Certification Program

Model 35A/36A	Take-off (Thrust Cutback)	Take-off (No Thrust Cutback)	Sideline	Approach 14,000/14,300 lb
18,000 lb.	83.6 EPNdB	78.7 EPNdB	87.4 EPNdB	91.3 EPNdB
18,300 lb.	83.9 EPNdB	79.2 EPNdB	86.7 EPNdB	91.4 EPNdB

Engineering Report – Design Compliance Report No: 60-D1044 – Powerplant and Fuel Systems Compliance – Model 60 – Revision L – Date: August 6, 2012
(includes Pratt & Whitney Engineering Report 2089, PW305 Smoke Test)

Report 60-SD02 – FAR Part 36 Noise Certification Compliance Report – Learjet M60
– Revision C

Model 60	Lateral 23,500 lb (10,659 kg)	Flyover 23,500 lb (10,659 kg)	Approach 19,500 lb (8845 kg)
NOISE LEVEL:	83.1 EPNdB	70.9 EPNdB	87.7 EPNdB

(4) Certification Compliance Listing:

Report No.35-D1702 Certification Basis Models 35,36,35A & 36A – Revision NC

Report 26-D290 – Models 35/36 Compliance Report List – dated August 9, 1974

Design Reports Listing – Learjet Models 35/36/35A/36A

ECR 866 – Model 35 & 36 – Master Listing of all Engineering Change Records

ECR 1466 – Model 35A – Development of New Model

ECR 1467 – Model 36A – Development of New Model

Engineering Report – Design Compliance Report No: 60-D989 – Applicable
Airworthiness Standards For Learjet Model 60 – Revision B – Date: June 5, 2015
Compliance Checklist Report 60-D994, Model 60 Compliance Checklist

PSCP-468 (Revision D) – Project Specific Certification Plan – FAA Project No.
TD4661WI-T – Interior Upgrade Learjet 60XR

PSCP-427 (Revision H) – Project Specific Certification Plan – FAA Project No.
TD4595WI-T – Model 60 Avionics Upgrade – Learjet 60XR

(5) Flight Manual: FAA-Approved Airplane Flight Manual – Learjet 35A/36A with
FC-530 Autopilot – Document FM 108 – CAA Accepted as AIR 2818

FAA-Approved Airplane Flight Manual – Learjet 60XR (Model 60
Aircraft 60-307, 60-319 & Subsequent) – Document FM133A – CAA
Accepted as AIR 3374

FAA-Approved Airplane Flight Manual – Learjet 60 – Document
FM123 – CAA Accepted as AIR 3376

(6) Operating Data for Aircraft, Engine and Propeller:

(i) *Maintenance Manual:*

Learjet 35/35A 36/36A Maintenance Manual – Part Number MM-99

Learjet 20/30 Series Structural Repair Manual – Part Number SRM-4

Learjet 35/35A 36/36A Wiring Manual – Part Number WM-99

Nondestructive Inspection Manual for Learjet Aircraft Models 23/24 Series/25
Series/28/29/31 Series/35 Series/36 Series/55 Series – Part Number NDI-1

Learjet 60/60XR Maintenance Manual – Part Number MM-103

Learjet 60/60XR Nondestructive Inspection Manual – Part Number NDI-2

Learjet 60/60XR Structural Repair Manual – Part Number SRM-5

Learjet 60/60XR Wiring Manual – Part Number WM-103

Honeywell TFE731-2L.005 CD-ROM Turbofan Engine Publication Collection:
Includes: Report No. 72-02-01 – Light Maintenance Manual
Standard Practices Manual

(ii) *Current service Information:*
Learjet Service Bulletins

Honeywell Service & Spare Parts Bulletins
Honeywell Service Information Letters
Honeywell Operating Information Letters

(iii) *Illustrated Parts Catalogue:*
Learjet 35/36 Series Illustrated Parts Catalog – Part Number IPB-99
Learjet 60/60XR Illustrated Parts Catalog – Part Number IPB-103

Honeywell Report No. 72-00-71 – IPC Models TFE731-2-1C and -2B
Honeywell Report No. 72-02-44 – IPC Models TFE731-2C-1C, -2B and -3B

(7) Agreement from manufacturer to supply updates of data in (5), and (6):

CAA 2171 form from Learjet Inc Airworthiness Specialist dated 18/12/02
CAA 2171 form from Learjet Inc Manager Technical Publications dated 20/02/17
Learjet provides access to publications on their website <http://cic.bombardier.com>

email from Honeywell GA Publications Data Distribution Coordinator – 5/3/03

(8) Other information:

Pilot's Manual Learjet 35A/36A – Document PM 102
Design Report 26-D237 – Model 35/36 All Weather Systems – dated June 14, 1974
Report 35/36-TP129 – All-Weather FAA Certification Flight Test Program
Learjet 35/36 Series Crew Checklist & Quick Reference Handbook – CL-102B
Learjet 24/25, 28/29, 35/36, 55 Series – Master Minimum Equipment List

Pilot's Manual Learjet 60XR – Document PM-133
Pilot's Manual Learjet 60 – Document PM-123
Learjet 60XR Crew Checklist & Quick Reference Handbook – CL-133

60XR Avionics Familiarization Briefing
60XR Interiors Familiarization Briefing

5. New Zealand Operational Rule Compliance

Compliance with the retrospective airworthiness requirements of NZCAR Part 26 has been assessed as they are a prerequisite for the grant of an airworthiness certificate.

Civil Aviation Rules Part 26

Subpart B – Additional Airworthiness Requirements

Appendix B – All Aircraft

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
B.1	Marking of Doors and Emergency Exits	<i>To be determined on an individual aircraft basis</i>
B.2	Crew Protection Requirements – CAM 8 Appdx. B # .35	Not Applicable – Agricultural aircraft only

Appendix C – Air Transport Aeroplanes – More than 9 Pax

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
C.1	Doors and Exits	FAR Part 25 para §25.781(a)(1) and §25.809(b)
C.2.1	Additional Emergency Exits – per FAR 23.807(b) @ 10.5.93	Meets FAR Part 25 Certification requirements
C.2.2	Emergency Exit Evacuation Equipment – Descent means	Not Applicable – Exits less than 2m from the ground
C.2.3	Emergency Exit Interior Marking – Size/self-illuminating	FAR Part 25 para §25.811(e) and §25.812(b)
C.3.1	Landing Gear Aural Warning – Automatic Flap Linking	FAR Part 25 para §25.729(e)

Compliance with the following additional NZ operating requirements has been reviewed and were found to be covered by either the original certification requirements or the basic build standard of the aircraft, except as noted:

Civil Aviation Rules Part 91

Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
91.505	Seating and Restraints – Safety belt/Shoulder Harness	FAR Part 25 §25.785
91.507	Pax Information Signs – Smoking, safety belts fastened	FAR Part 25 §25.791
91.509 Min. VFR	(1) ASI (2) Machmeter (3) Altimeter (4) Magnetic Compass (5) Fuel Contents (6) Engine RPM (7) Oil Pressure	FAR §25.1303(b)(1) FAR §25.1303(b)(1) FAR §25.1303(b)(2) FAR §25.1303(a)(3) FAR §25.1305(a)(2) FAR §25.1305(c)(3) FAR §25.1305(a)(4)
(8) Coolant Temp (9) Oil Temperature (10) Manifold Pressure (11) Cylinder Head Temp. (12) Flap Position (13) U/c Position (14) Ammeter/Voltmeter	Not Applicable – Turbojet FAR §25.1305(a)(6) Not Applicable – Turbojet Not Applicable – Turbojet FAR §25.699 FAR §25.729(e) FAR §25.1351(b)(6)	
91.511 Night	(1) Turn and Slip (2) Position Lights	FAR §25.1303(b)(4) FAR §25.1389
(3) Anti-collision Lights (4) Instrument Lighting	FAR §25.1401 FAR §25.1381	
91.513	VFR Communication Equipment	Standard 35/36 avionics included dual Collins VHF-20A Proline-4 avionics system includes dual VHF-422A
91.517 IFR	(1) Gyroscopic AH (2) Gyroscopic DI (3) Gyro Power Supply (4) Sensitive Altimeter	FAR §25.1303(b)(5) FAR §25.1303(b)(6) FAR §25.1331(a) FAR §25.1303(b)(2)
(5) OAT (6) Time in hr/ min/sec (7) ASI/Heated Pitot (8) Rate of Climb/Descent	FAR §25.1303(a)(1) FAR §25.1303(a)(2) FAR §25.1323(e) FAR §25.1303(b)(3)	
91.519	IFR Communication and Navigation Equipment	Standard avionics for the Model 35/36 included Dual Collins VIR-30A VOR/ILS; Collins DME-40 and Collins ADF-60
	The Learjet 20/30/50/60 Series is type certificated for Day/Night IFR Flight into known icing conditions NOTE : See Fig. 1-4 of PM 102 for typical Model 35/36 instrument panel arrangement Proline avionics system has dual VIR-432A VOR/LOC/GS/MB units, Dual DME-442, ADF-462, dual UNS-1E or FM5000	
91.523	Emergency Equipment: (a) More Than 9 pax – First Aid Kits per Table 7 – Fire Extinguishers per Table 8 (b) More than 20 pax – Axe readily accessible to crew (c) More than 61 pax – Portable Megaphones per Table 9	Not Applicable – Less than 10 passenger seats Not Applicable – Less than 10 passenger seats Not Applicable – Less than 20 passenger seats Not Applicable – Less than 61 passenger seats
91.529	ELT – TSO C126 406 MHz after 22/11/2007	<i>To be determined on an individual aircraft basis</i>
91.531	Oxygen Indicators – to flight crew (i) amount available and whether the oxygen is being delivered to dispensing units; (ii) of pressurised aircraft, by visual or aural warning when cabin pressure altitude exceeds 10 000 ft. AMSL; and (2) to each individual user amount available and whether the oxygen is being delivered to the dispensing unit	FAR Part 25 para §25.1441(c) and §25.1449 FAR Part 25 para §25.841(b)(6) – Note M60 is approved for high altitude operations – Exemption 14/EXE/24 applies No individual dispensing units. (Pax oxygen distribution system amount available is displayed on the pilot's gauge.)
91.535	Standard Learjet oxygen system consists of the crew and passenger distribution lines, a single or dual high-pressure oxygen	

	storage cylinder (standard 38 cu.ft. Model 36; standard 77 cu.ft. Model 60), a shutoff valve and pressure regulator assembly, a pressure transducer and a pressure indicator, an overboard discharge relief valve and indicator, a passenger oxygen control valve, lanyard actuated passenger mask oxygen valves, and crew and passenger oxygen masks.	
	(a) Oxygen for Pressurised Aircraft: (1) Flight Crew Member On-Demand Mask; (2) Pax mask, Portable oxygen equipment (3) Crew Member – Pax Oxygen Mask and Portable (4) Minimal Supplemental Oxygen Quantity (5) Specified Supplemental/Therapeutic Oxygen Quantity (c) Above FL250 and up to FL300 (1) Quick-Donning Crew On-Demand Mask (2) Supplemental O ₂ Masks for all Pax/ Crew and Toilets (3) 15 Minutes Therapeutic Supply Above FL300 (1) Total Outlets Exceed Pax Seats by 10% (2) Extra Units Uniformly Distributed throughout Aircraft (3) Automatically Presented if Cabin Altitude ≥ 14000 ft. (4) Manual Means of Deploying Pax Masks Available	(1) FAR §25.1441(d) and SC 25-99-CE-14(E)(1) (2) Not Applicable – No other official crew members (3) Passenger masks distributed throughout the cabin (min 9) (4) The manufacturer advised (email 18-2-03) that the standard 35/36 aircraft complies with the oxygen quantity requirements – Model 60 FAR §25.1443(b)(c) (1) FAR §25.1441(d) and SC 25-99-CE-14(E)(1) (2) Passenger masks distributed throughout the cabin (min 9) (3) Assessed as part of oxygen quantity under (a)(4) Manufacturer advised the 35/36 and 60 complies with the additional requirements for flight above 30 000 ft. AMSL. (3) FAR §25.1447(c)(1) – Exemption 14/EXE/80 applies (4) FAR §25.1447(c)(1)
91.541	SSR Transponder and Altitude Reporting Equipment	Model 35/36 standard avionics included dual Collins TDR-90 Proline avionics system fitted with dual TDR-94 Mode C/S
91.543	Altitude Alerting Device – Turbojet or Turbofan	Altitude alerter fitted as standard – See PM 102 Page 5-41
91.545	Assigned Altitude Indicator	Not Applicable – Complies with 91.543 above
A.15	ELT Installation Requirements	To be determined on an individual aircraft basis

Civil Aviation Rules Part 125

Air Transport Operations – Medium-size Aircraft

Subpart F – Instrumental and Equipment Requirements

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
125.355	Seating and Restraints	FAR Part 25 §25.785
125.357	Additional Instruments (Powerplant and Propeller)	FAR Part 25 is a Part 21 Appendix C standard
125.359	Night Flight	<i>Operational Requirement – Compliance as applicable</i>
125.361	IFR Operations	<i>Operational Requirement – Compliance as applicable</i>
125.361	Speed, Alt, spare bulbs/fuses	
125.361	SE IFR Requirements – If Applicable	Not Applicable – Multi-engined aircraft
125.363	Emergency Equipment (Part 91.523 (a) and (b))	<i>Operational Requirement – Compliance as applicable</i>
125.365	Public Address and Crew Member Intercom System	<i>Operational Requirement – Compliance as applicable</i>
125.367	Cockpit Voice Recorder – Appendix B.5 requires TSO C84/C123	s/n 649 delivered with Fairchild A100A per Dwg.RZI.04 CVR-120 Digital CVR is an option for Model 60XR
125.369	Flight Data Recorder – Appendix B.6 requires TSO C124	s/n 649 delivered with Fairchild F800 per Drawing FX1.00 FA-2100 DFDR with over 40 parameters is an option for 60XR
125.371	Additional Attitude Indicator	<i>Operational Requirement – Compliance as applicable</i> Proline system has Integrated Standby Indicator System
125.373	Weather Radar – Appendix B.8 requires TSO C63	Standard avionics included Bendix RDR-1200B (s/n 649 was delivered with Primus 450 per Dwg. SW7.13) Proline system has WXR-840 as standard (TWR-850 Optional)
125.375	GPWS – Appendix B.9 requires TSCO C92	<i>Operational Requirement – Compliance as applicable</i>
125.377	HUMS	Not Applicable – Multi-engined aircraft
125.379	Terrain Awareness and Warning System (TAWS) Appendix B.9 requires TSO C151a or b	Proline avionics system has Mk.V EGPWS fitted as standard
125.381	Airborne Collision Avoidance System (ACAS II) Appendix B.10 requires TSO C118/119a or C119b	Proline avionics system has TCAS II fitted as standard

NOTES: 1. A Design Rule reference in the Means of Compliance column indicates the Design Rule was directly equivalent to the CAR requirement, and compliance is achieved for the basic aircraft type design by certification against the original Design Rule.

2. The CAR Compliance Tables above were correct at the time of issue of the Type Acceptance Report. The Rules may have changed since that date and should be checked individually.

3. Some means of compliance above are specific to a particular model/configuration. Compliance with Part 91/119 operating requirements should be checked in each case, particularly oxygen system capacity and emergency equipment.

4. Based on an empty weight of 14,730 lb. and a maximum zero-fuel weight of 17,000 lb (serial number 60-049 and subsequent), this means a maximum payload of 2270 lb. for the Model 60XR. This is less than 3410 kg, so the Learjet 60 would operate under CAR Part 125.

Attachments

The following documents form attachments to this report:

Photographs first-of-type example Learjet 35A s/n 649 ZK-XVL
Three-view drawing Gates Learjet Corporation Model 35
Learjet Drawing 6000001 – General Arrangement Model 60
Copy of FAA Type Certificate/ Type Certificate Data Sheet A10CE

Sign off

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David Gill
Team Leader Airworthiness

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Checked – Charlie Morris
Airworthiness Engineer (Avionics)

Appendix 1

List of Type Accepted Variants:

<i>Model:</i>	<i>Applicant:</i>	<i>CAA Work Request:</i>	<i>Date Granted:</i>
35A/36A with FC-530 AP	Auckland Air Charter Ltd	3/21B/22	5 March 2003
60 and “60XR”	JAK Air	17/21B/10	10 March 2017