DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A10CE
Revision 52 |
LEARJET

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April 22, 2003 |

TYPE CERTIFICATE DATA SHEET NO. A10CE

This data sheet which is part of Type Certificate No. A10CE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder — Learjet Inc.
One Learjet Way
Wichita, Kansas 67209-2942

I -Model 24 (Transport Aircraft), Approved March 17, 1966
Model 24A (Transport Aircraft), Approved April 5, 1966

Engines — (Standard) Two General Electric Turbojet CJ-610-4
(Optional) Two General Electric Turbojet CJ-610-6
See NOTE 6.

Fuel — See NOTE 5(a).

Engine Limits

	CJ-610-4	CJ-610-6
Thrust ratings (lb.)	2850	2850
Takeoff (standard day), static		
Sea Level (5 min.)		
Maximum continuous, static	2700	2700
Sea Level		
Maximum permissible engine rotor operating speeds		
Normal (r.p.m.)	16,500	16,500
Transient (r.p.m.)	17,820	17, 820
Maximum permissible turbine		
Outlet gas temperatures		
Takeoff (5 min.)	1300°F (704°C)	1321°F (716°C)
Max.continuous	1250°F (677°C)	1295°F (702°C)
Max.transient (10 sec.)	1440°F (782°C)	1440°F (782°C)
Max.transient for starting (5 sec.)	1570°F (854°C)	1570°F (854°C)

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I -Model 24, Model 24A (cont'd)

Airspeed Limits (CAS)

V_{MO}	(Maximum operating)	300 knots
	Sea Level to 31,100 ft.	
M_{MO}	31,100 ft. to 45,000 ft.	
	M = 0.81	
V_A	(Maneuvering)	267 knots
	Sea Level to 36,300 ft.	
M_A	36,300 ft. to 45,000 ft.	
	M = 0.81	
V_{FE}	(Flaps extended)	
	Landing	150 knots
	Takeoff and approach	167 knots
V_{MC}	(Minimum control speed)	
	Air	85 knots
V_{LO}	(Landing gear operating)	200 knots
V_{LE}	(Landing gear extended)	260 knots
V_{SB}	(Spoilers extended)	Any speed, except extension with flaps extended prohibited in flight

C.G. Range (Landing Gear Extended)

All stations noted are body stations.

Model 24	(+223.6) to (+236.7) at 6,386 lb.
	(+223.6) to (+236.7) at 9,000 lb.
	(+228.2) to (+236.7) at 13,000 lb.
Model 24A	(+223.6) to (+236.7) at 6,386 lb.
	(+223.6) to (+236.7) at 9,000 lb.
	(+227.6) to (+236.7) at 12,500 lb.

The variation between points is linear.

Maximum Weights

	Model 24	Model 24A
Ramp	13,300 lb.	12,749 lb.
*Takeoff	13,000 lb.	12,499 lb.
Landing	11,880 lb.	11,880 lb.
Zero fuel	9,000 lb.	9,000 lb.

*See NOTE 8 for eligibility for increased takeoff weight.
See NOTE 11 for eligibility for 11,400 lb. zero wing weight limitation.
See NOTE 12 for reduced takeoff weight - Model 24.

Minimum Crew
For all flights, 2 persons (pilot and copilot)

No. of Seats
8 (2 crew and 6 passengers)
See NOTE 7 for optional seating configurations

Maximum Baggage
500 lb. at Sta. 252

Fuel Capacity (Gal.)

	Model 24		Model 24A (Per ECR 247)		Model 24A (Per ECR 459)	
	Usable	Arm	Usable	Arm	Usable	Arm
Two tip tanks	362	239.2	362	239.2	362	239.2
Two main wing tanks	347	235.3	347	235.3	347	235.3
Auxiliary fuselage tank	125	282.5	112	282.5	80	282.5

See Note 1(a) for data on system fuel.

Oil Capacity (Lb.)
Two engine mounted tanks

Total	Usable	Arm
8 ea.	5.6 ea.	398

See NOTE 1(a) for data on system oil.

Maximum Operating Altitude
41,000 ft. pressure altitude, S/N 100 through 139
45,000 ft. pressure altitude, S/N 140 and up

Other Operating Limitations
See appropriate FAA Approved Airplane Flight Manual.

I -Model 24, Model 24A (cont'd)

Control Surface Movements

Horizontal stabilizer (Model 24 and 24A)			Down	0° to 7.5°
Horizontal stabilizer (Model 24 with ECR 1575)			Down	0° to 9°
Elevator	Up	15°	Down	15°
Aileron	Up	18°	Down	18°
Aileron trim tab	Up	8°	Down	8°
Aileron geared tabs		±15° at -18° aileron deflection		
Rudder	Right	30°	Left	30°
Rudder trim tab	Right	15°	Left	15°
Wing flap			Down	0° to 40°
Speed brake	Up	0° to 40°		

See Airplane Service Manual or LES FT-1007 and LES-FT-1008 for rigging tolerances or instructions.

Serial Nos. Eligible

100 through 180 (eligible as Models 24 and 24A)

Learjet Model 23 aircraft certificated under T.C. A5CE are eligible for certification under

this T.C. when modified by Learjet in accordance with the following approved data:

S/N 003 to 039 ECR 233
S/N 040 to 069 ECR 230
S/N 070 to 099 ECR 227

(Modified aircraft must display both the original and the new identification plates.)

Model 24A may be converted to a Model 24 by complying with ECR 748.

II - Model 25 (Transport Aircraft), Approved October 10, 1967
Model 25A (Transport Aircraft), Approved May 19, 1970 (ECR 980)
Model 25B (Transport Aircraft), Approved August 19, 1970
Model 25C (Transport Aircraft), Approved August 19, 1970
Model 25D (Transport Aircraft), Approved May 20, 1976
Model 25F (Transport Aircraft), Approved May 20, 1976

Engines

Two General Electric Turbojet CJ-610-6 or two CJ-610-8A (See NOTE 23)
Two General Electric Turbojet CJ-610-8A (Models 25D, 25F with ECR 1409)

Fuel

See NOTE 5(a).

Engine limits

	CJ-610-6 or CJ-610-8A (25,25A,25B,25C,25D,25F) (See NOTE 23)		CJ-610-8A (25D and 25F) with ECR 1409
Thrust ratings (lb.)			
Takeoff(standard day) static			
Sea Level (5 min.)	2950	2950	2950
Maximum continuous, static			
Sea Level	2780	2850	2850
Max.permissible engine rotor operating speeds:			
Normal (r.p.m.)	16,500	16,500	16,500
Transient (r.p.m.)	17,820	17,820	17,820
Maximum permissible turbine outlet gas temperatures:			
Takeoff (5 min.)	1321°F(716°C)	1355°F(735°C)	1355°F(735°C)
Maximum continuous	1295°F(702°C)	1335°F(724°C)	1335°F(724°C)
Maximum transient (10 sec.)	1440°F(782°C)	1440°F(782°C)	1440°F(782°C)
Maximum transient for starting (5 sec.)	1570°F(854°C)	1570°F(854°C)	1570°F(854°C)

II - Model 25, Model 25A, Model 25B, Model 25C, Model 25D, Model 25F (cont'd)

Airspeed Limits (CAS) (See NOTE 4)	V_{MO}	(Maximum operating)	300 knots
		Sea Level to 30,400 ft. (Model 25 and 25A)	
		Sea Level to 31,100 ft. (Models 25 and 25A with ECR 936, 25B and 25C)	
	V_{MO}	(Maximum operating)	300 knots
		Sea level to 14,000 ft.	
		14,000 ft. TO 23,900 ft. (Models 25D and 25F)	350 knots
	M_{MO}	30,400 ft. to 45,000 ft. (Models 25 and 25A)	M = .80
		31,100 ft. to 45,000 ft. (Models 25B, 25C, and 25 & 25A with ECR 936)	M = .81 (AFC/SS operative) M = .77 (AFC/SS inoperative)
		23,900 ft. to 45,000 ft. (Models 25D and 25F)	M = .81 (AFC/SS operative) M = .77 (AFC/SS inoperative)
		23,900 ft. to 51,000 ft. (Models 25D & 25F with ECR 1409	M = .81 (AFC/SS operative) M = .77 (AFC/SS inoperative)
	V_A (Maneuvering at 15,000 lb.)	(Models 25, 25A, 25B, 25C)	
		Sea Level	223 knots
		38,500 ft.	254 knots
	M_A	38,500 ft. to 45,000 ft. (Models 25, 25A, 25B, 25C) M = .77, .81 when automatic flight control system is installed and engaged	
	V_A (Maneuvering at 15,000 lb.)	(Models 25D & 25F)	
		Sea Level	182 knots
		45,000 ft.	217 knots
		45,000 ft. (Models 25D & 25F with ECR 1409)	218 knots
	M_A	45,200 ft. to 51,000 ft. (Models 25D & 25F with ECR 1409) M = .77, .81 when automatic flight control system is installed and engaged	
	V_{FE}	(Flaps extended)	
		Landing	150 knots
		Takeoff and approach	200 knots
	V_{MC}	(Minimum control speed) Air	104 knots
	V_{LO}	(Landing gear operating)	200 knots
	V_{LE}	(Landing gear extended)	260 knots
	V_{SB}	(Spoilers extended)	Any speed, except ext. with flaps extended prohibited in flight
C.G. Range (Landing Gear Extended)	Models 25, 25A (+367.6) to (+385.4) at 10,000 lb. or less (+375.1) to (+385.4) at 15,500 lb. Models 25B, 25C, 25D, 25F, 25 & 25A with ECR 936, 25 with ECR 1513 (+366.8) to (+385.4) at 10,000 lb. or less (+375.1) to (+385.4) at 15,500 lb All stations noted are fuselage stations. The variation between points is linear.		

II - Model 25, Model 25A, Model 25B, Model 25C, Model 25D, Model 25F (cont'd)

		Model 25, 25B, 25C, 25D, 25F	Model 25A
Maximum Weights	Ramp	15,500 lb.	12,749 lb.
	Takeoff	15,000 lb.	12,499 lb.
	Landing	13,300 lb.	12,499 lb.
	Zero fuel		10,000 lb.
	Zero wing fuel	11,400 lb.	

See NOTE 11 for eligibility for 12,500 lb. zero wing fuel weight limitation.

Minimum Crew: For all flights - 2 persons (pilot and copilot)

No. of seats: 10 (2 crew and 8 passengers)
See NOTE 7 for optional seating configurations.

Maximum Baggage: 500 lb. at Sta. 402.0 (Models 25, 25A, 25B & 25D)
500 lb. at Sta. 360.0 (Models 25C & 25F)

Fuel Capacity (Gal.)

	Usable	Arm
Two tip tanks (25, 25A)	358	389.2
Two tip tanks (25B,25C,25D & 25F)	368	389.2
Two main tanks	347	385.3
Aux.fuselage tank (25,25A,25B & 25D)	195	438.0
Aux.fuselage tank (25C, 25F)	388	422.5

See NOTE 1(a) for data on system fuel.

Oil Capacity (lb.): Two engine mounted tanks

Total	Usable	Arm
8 ea.	5.6 ea.	458

See NOTE 1(a) for data on system oil.

Maximum Operating Altitude: 45,000 ft. pressure altitude (Models 25,25A,25B,25C,25D and 25F)
51,000 ft. pressure altitude Models 25D and 25F with ECR 1409)

Other Operating Limitations: See appropriate FAA Approved Airplane Flight Manual.

Control Surface movements

Horizontal stabilizer (Models 25,25A,25B,25C)	Up	1.5°	Down	8.5°
Horizontal stabilizer (Models 25 with ECR 1513, 25B & 25C with ECR 1511 & 25D & 25F)			Down	0.5° to 9°
Elevator	Up	15°	Down	15°
Aileron	Up	18°	Down	18°
Aileron trim tab	Up	8°	Down	8°
Aileron geared tabs		±15° at -18° aileron deflection		
Rudder	Right	30°	Left	30°
Rudder trim tab	Right	15°	Left	15°
Wing flap			Down	0° to 40°
Speed brake	Up	0° to 40°		

See Airplane Service Manual or Maintenance Manual or LES FT-1007 or LES-FT-1008 for rigging tolerances or instructions.

Serial Nos. Eligible: 002 through 066 except 061 (25 and 25A) See NOTE 10.
061 and 067 through 201, 204 and 205 (25B and 25C) See NOTE 10.
206 and on (25D and 25F) See NOTES 10 and 16.

III - Model 24B (Transport Aircraft), Approved December 17, 1968
Model 24B-A (Transport Aircraft), Approved April 24, 1969
Model 24C (Transport Aircraft), Approved June 30, 1970
Model 24D (Transport Aircraft) Approved June 30, 1970
Model 24D-A (Transport Aircraft) Approved July 31, 1970
Model 24E (Transport Aircraft), Approved June 2, 1976
Model 24F (Transport Aircraft), Approved August 2, 1976
Model 24F-A (Transport Aircraft), Approved November 24, 1976

Engines: Two General Electric Turbojet CJ-610-6 or two CJ-610-8A (See NOTE 23)
Two General Electric Turbojet CJ-610-8A (Model 24E/F with ECR 1410)

Fuel: See NOTE 5(a),

III - Model 24B, Model 25B-A, Model 24C, Model 24D, Model 24D-A, Model 24E, Model 24F, Model 24F-A (cont'd)

Engine limits

	CJ-610-6 or CJ-610-8A (24B,254B-A, ,24C, ,24D, 24D-A, 24E, 24F, 24F-A) (See NOTE 23)		CJ-610-8A (24E/F with ECR 1410
Thrust ratings (lb.)			
Takeoff(standard day) static			
Sea Level (5 min.)	2950	2950	2950
Max.continuous, static			
Sea Level	2780	2850	2850
Max.permissible engine rotor operating speeds:			
Normal (r.p.m.)	16,500	16,500	16,500
Transient (r.p.m.)	17,820	17,820	17,820
Maximum permissible turbine outlet gas temperatures:			
Takeoff (5 min.)	1321°F (716°C)	1355°F (735°C)	1355°F (735°C)
Max.continuous	1295°F (702°C)	1335°F (724°C)	1335°F (724°C)
Max.transient (10 sec.)	1440°F (782°C)	1440°F (782°C)	1440°F (782°C)
Max.transient for starting (5 sec.)	1570°F (854°C)	1570°F (854°C)	1570°F (854°C)

Airspeed Limits (CAS)			
	V_{MO}	(Maximum operating)	300 knots
		(Models 24B, 24C, 24D & 24E)	
		Sea Level to 31,100 ft.	
	V_{MO}	(Maximum operating)	300 knots
		(Model 24F)	
		Sea level to 14,000 ft.	
	V_{MO}	(Maximum operating)	350 knots
		(Model 24F)	
		14,000 ft. to 23,900 ft.	
	M_{MO}	31,100 ft. to 45,000 ft.	.81 (AFC/SS operative)
		(Model 24B & 24C)	.79 (AFC/SS inoperative)
		(Model 24D & 24E)	.81 (AFC/SS operative)
			.78 (AFC/SS inoperative)
		31,100 ft. to 51,000 ft.	.81 (AFC/SS operative)
		(Models 24E w/ECR 1410)	.78 (AFC/SS inoperative)
	M_{MO}	23,900 ft. to 45,000 ft.	.81 (AFC/SS operative)
		(Model 24F)	.78 (AFC/SS inoperative)
		23,900 ft. to 51,000 ft.	.81 (AFC/SS operative)
		(Model 24F w/ECR 1410)	.78 (AFC/SS inoperative)
	V_A (Maneuvering at 12,900 lb.)		
		(Model 24E)	
		Sea level	167 knots
		45,000 ft.	192 knots
		48,900 ft. (Model 24E w/ECR 1410)	200 knots
	V_A	(Maneuvering at 13,500 lb.)	
		(Model 24F)	
		Sea level	172 knots
		45,000 ft.	198 knots
		47,700 ft. (Model 24F w/ECR 1410)	
	V_A	(Maneuvering at 13,500 lb.)	
		(Models 24B, 24C, 24D)	
		Sea Level	211 knots
		40,000 ft.	244 knots
	M_A	40,000 ft. to 45,000 ft.	
		(Model 24B, 24C, 24D)	
		M = .81	

III - Model 24B, Model 25B-A, Model 24C, Model 24D, Model 24D-A, Model 24E, Model 24F, Model 24F-A (cont'd)

Airspeed Limits (CAS) (cont'd)

M_A	48,900 ft. to 51,000 ft. (Model 24E w/ECR 1410) M = .81	
M_A	47,700 ft. to 51,000 ft. (Model 24F w/ECR 1410) M = .81	
V_{FE}	(Flaps extended)	
	Landing	150 knots
	Takeoff and approach	190 knots
V_{MC}	(Minimum control speed) Air (Models 24B, 24C, 24D, 24E & 24F)	See AFM
V_{LO}	(Landing gear operating)	200 knots
V_{LE}	(Landing gear extended)	260 knots
V_{SB}	(Spoilers extended)	Any speed, except extension with flaps extended prohibited in flight

C.G. Range (Landing Gear Extended)

All stations noted are body stations
(+223.6) to (+236.7) at 6,386 lb.
(+223.6) to (+236.7) at 9,.000 lb.
(+227.6) to (+236.7) at 12,500 lb.
(+228.8) to (236.7) at 13,500 lb.
The variation between points is linear.

Maximum Weight

	24B	24D, 24F	24B-A, 24C 24D-A, 24F-A	24E
Ramp	13,800 lb.	13,800 lb.	12,750 lb.	13,200 lb
Takeoff	13,500 lb.	13,500 lb.	12,499 lb.	12,900 lb.
Landing	11,880 lb.	11,880 lb.	11,880 lb.	11,880 lb.
Zero fuel	10,000 lb.	10,000 lb.	10,000 lb.	10,000 lb.
Zero wing fuel	*	11,400 lb.	*	11,400 lb.

*See NOTE 11 for eligibility for 11,400 lb. zero wing weight limitation.

Minimum Crew

For all flights, 2 persons (pilot and copilot)

No. of Seats

8 (2 crew and 6 passengers)
See NOTE 7 for optional seating configurations

Maximum Baggage

500 lb. at Sta. 252

Fuel Capacity (Gal.)

	Usable	Arm
Two tip tanks	362	239.2
Two main wing tanks	347	235.3
Auxiliary fuselage tank	125	282.5

(Not installed in 24C or 24E or aircraft modified per ECR 1228)
See NOTE 1(a) for data on system fuel.

Oil Capacity (lb.)

Two engine mounted tanks

Total	Usable	Arm
8 ea.	5.6 ea.	308

See NOTE 1(a) for data on system oil.

Maximum Operating Altitude

45,000 ft. pressure altitude (Models 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F, 24F-A)
51,000 ft. pressure altitude (Models 24E/F with ECR 1410)

Other Operating Limitations

See appropriate FAA Approved Airplane Flight Manual.

III - Model 24B, Model 25B-A, Model 24C, Model 24D, Model 24D-A, Model 24E, Model 24F, Model 24F-A (cont'd)

Control Surface Movements	Horizontal stabilizer (Models 24B, 24D, 24B-A, 24D-A, 24C)		0° to 7.5°		
	Horizontal stabilizer (Models 24B with ECR 1514, Model 24D with ECR 1510, 24E, 24F and 24F-A)			Down	0° to 9°
	Elevator	Up	15°	Down	15°
	Aileron	Up	18°	Down	18°
	Aileron trim tab	Up	8°	Down	8°
	Aileron geared tabs		±15° at -18° aileron deflection		
	Rudder	Right	30°	Left	30°
	Rudder trim tab	Right	15°	Left	15°
	Wing flap			Down	0° to 40°
	Speed brake	Up	0° to 40°		
	See Airplane Service Manual or LES FT-1007 or LES-FT-1008 for rigging tolerances or instructions.				
Serial Nos. Eligible	181 through 229 except 218 (Models 24B and 24B-A) 218 and 230 through 328 (Models 24C, 24D, and 24D-A) 329 and on (Models 24E, 24F & 24F-A) See NOTES 9 and 16.				

IV - Model 35 (Transport Aircraft), Approved June 28, 1974
Model 36 (Transport Aircraft), Approved June 28, 1974
Model 35A (Transport Aircraft), Approved April 30, 1976
(Military C-21A, Transport Aircraft, See NOTE 24)
Model 36A (Transport Aircraft), Approved April 30, 1976

Engines	Two Garrett TFE 731-2-2B		
Fuel	See NOTE 5(b)		
Fuel Control Computers	P/N 2118002-202 (Model C21A only)		
Engine Limits	Thrust ratings (lb.)	3500	
	Takeoff (standard day), static		
	Sea level (5 min.)		
	Maximum continuous climb (lb.)	3500	
	Static, sea level		
	Maximum permissible engine rotor operating speeds		
	Low pressure (r.p.m.)	20,668 (100% N_1)	
	High pressure (r.p.m.)	29,692 (100% N_2)	
	100% to 103% N_1 and N_2 r.p.m. limited to 1 minute		
	Maximum permissible interstage turbine gas temperatures		
	Takeoff (5 min.)	1580°F (860°C)	
	Maximum continuous	1530°F (832°C)	
	Maximum climb	1530°F (832°C)	
	Maximum cruise	1463°F (795°C)	
Airspeed Limits (CAS) (See NOTE 4)	V_{MO} (Maximum operating)		
	Sea level to 14,000 ft.	300 knots	
	14,000 to 23,900 ft.	350 knots	
	V_{MO} (Maximum operating)		
	Sea level to 8,000 ft.	300 knots	See NOTE 28
	8,000 to 23,900 ft.	350 knots	
	V_{MO} (Maximum operating)		
	Sea level to 23,900 ft.	350 knots	See NOTE 29
	M_{MO} 23,900 ft. to 45,000 ft.	M = .73 M = .81 with autopilot or mach trim system operating	
	V_A (Maneuvering at 17,000 lb.) (Models 35 & 36)		

IV - Model 35, Model 36, Model 35A (Military C-21A), Model 36A (cont'd)

Airspeed Limits (CAS) (cont'd)

	Sea level	216 knots
	38,500 ft.	255 knots
V_A	(Maneuvering at 17,000 lb.)	
	(Model 35A)	
	Sea level	199 knots
	42,000 ft.	238 knots
V_A	(Maneuvering at 18,000 lb.)	
	(Model 36A and 35A w/ECR 1495)	
	Sea level	204 knots
	40,500 ft.	243 knots
M_A	38,500 ft. to 45,000 ft.	
	(Models 35 & 36)	
	42,000 ft. to 45,000 ft.	
	(Model 35A)	
	40,500 ft to 45,000 ft.	
	(Model 36A and 35A w/ECR 1495)	
	M = .81	
V_{FE}	(Flaps extended)	
	Landing	150 knots
	Takeoff and approach	200 knots
	(Models 35 & 36)	
	Takeoff and approach	180 knots
	(Models 35A & 36A)	
	Takeoff and approach	200 knots
	(Models 35A & 36A with FCN 85-6)	
V_{MC}	(Minimum control speed)	112 knots
	Air	
V_{LO}	(Landing gear operating)	200 knots
V_{LE}	(Landing gear extended)	260 knots
V_{SB}	(Spoilers extended)	Any speed except extension with flaps extended prohibited in flight

C.G. Range(Landing)

Model 35, 36 and 35A

The forward C.G. limit station 366.3 (5.0% MAC) for all weights up to and including 10,000 lbs. and tapers through station 376. (16.8% MAC) at 17,000 lbs. to station 376.4 (17.25% MAC) at 17,250 lbs. The aft limit is station 387 (30.0% MAC) for all weights. The variation between points is linear.

Model 35, 36 with ECR 1517, Model 36A, and 35A with 18,000 lb. TOGW option per ECR 1495, Model 35 w/ECR 1512 & 1495, & Model 36 w/ECR 1512.

The forward C.G. limit station 366.3 (5.0% MAC) for all weights up to and including 10,000 lbs. and tapers through station 377.34 (18.33% MAC) at 18,000 lbs. to station 377.69 (18.75% MAC) at 18,250 lbs.

Maximum Weights

	Model 35/36/35A	Model 36 w/ECR 1512 Model 35 w/ECR 1512 & 1495 Model 35 & 36 w/ECR 1517, Model 36A & 35A w/ECR 1495 option
Ramp	17,250 lb.	18,250 lb.
Takeoff	17,000 lb.	18,000 lb.
Landing	14,300 lb.	14,300 lb.
Zero wing fuel	13,500 lb.(See NOTE 25)	13,500 lb. (See NOTE 25)

See NOTES 17 and 18 for optional weights.

IV - Model 35, Model 36, Model 35A (Military C-21A), Model 36A (cont'd)

Minimum Crew	For all flights - 2 persons (pilot and copilot)
No. of Seats	Model 35, 35A - 10 (2 crew and 8 passengers) Model 36, 36A - 8 (2 crew and 6 passengers) See NOTE 7 for optional seating configurations.

Fuel Capacity (Gal.)

	Usable	Arm
Two tip tanks	357	385.6
Two main tanks	374	385.8
Aux. fuselage tank (Model 35)	200	440.2
Aux. fuselage tank (Model 36)	379	422.5

See NOTE 1(a) for data on unusable fuel.

Oil Capacity

Total	Usable	Arm
1-1/2 gal.ea.	1/2 gal. ea.	437.8

Maximum Operating Altitude	45,000 ft. pressure altitude
Other Operating Limitations	See appropriate FAA Approved Airplane Flight Manual

Control Surface Movements

Horizontal stabilizer (Model 35 and 36)			Down	1° 10' to 8° 30'
Horizontal stabilizer (Model 35A and 36A & 35 and 36 with ECR 1512)			Down	1° 30' to 9°
Elevator (Model 35 and 36)	Up	15°	Down	15°
Elevator (Model 35A and 36A)	Up	16°	Down	15°
Aileron	Up	18°	Down	18°
Aileron trim tab	Up	8°	Down	8°
Aileron geared tabs		±15° at -18° aileron deflection		
Rudder	Right	30°	Left	30°
Rudder trim tab	Right	15°	Left	15°
Wing flap			Down	0° to 40°
Speed brake	Up	0° to 40°		

See Airplane Maintenance Manual or LES FT-1007 and LES-FT-1008 for rigging tolerances or instructions.

Serial Nos. Eligible	001 through 066 (Model 35) 001 through 017 (Model 36) 067 and on (Model 35A) 018 and on (Model 36A) See NOTE 14

V - Model 28 (Transport Aircraft, Approved January 29, 1979
Model 29 (Transport Aircraft), Approved January 29, 1979

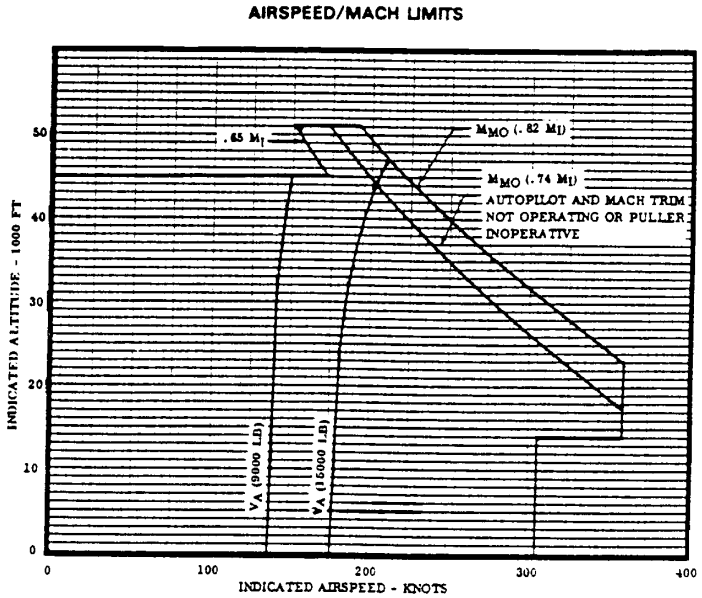
Engines	Two General Electric Turbojet CJ-610-8A	
Fuel	See NOTE 5(a)	
Engine Limits		CJ-610-8A
	Thrust ratings (lb.)	2950
	Takeoff (standard day), static	
	Sea level (5 min.)	
	Maximum continuous, static	2850
	Sea level	

V - Model 28, Model 29 (cont'd)

Engine Limits (cont'd)

Maximum permissible engine rotor operating speeds	
Normal (r.p.m.)	16,500
Transient (r.p.m.)	17,820
Maximum permissible interstage turbine gas temperatures:	
Takeoff (5 min.)	1355°F. (735°C)
Maximum continuous	1355°F. (724°C)
Maximum transient (10 sec.)	1440°F. (782°C)
Maximum transient for starting (5 sec.)	1570°F. (854°C)

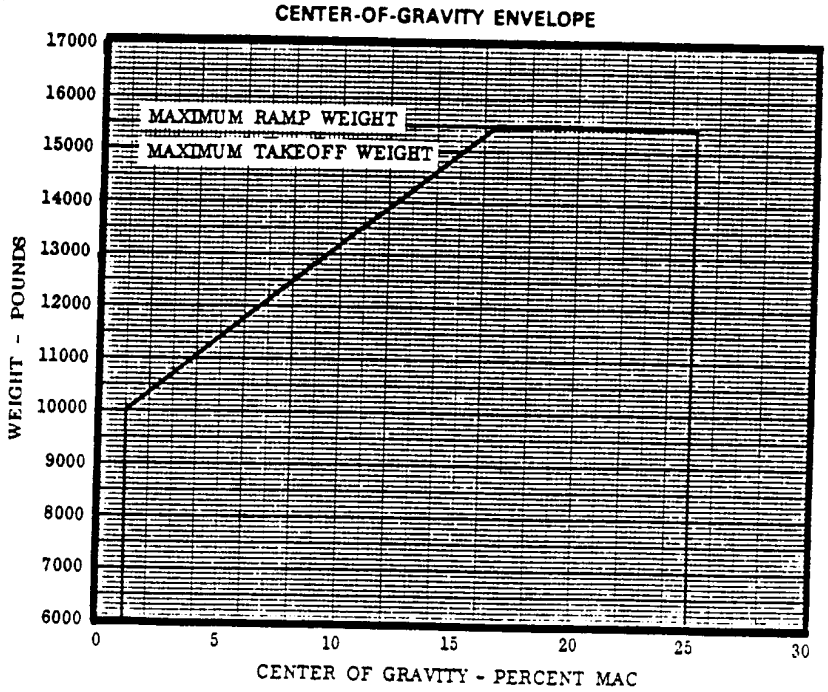
Airspeed Limits (IAS)
(See NOTE 4)



V_{FE}	Flaps 1° to 8°	200 KIAS
	Flaps 9° to 20°	190 KIAS
	Flaps 21° to 40°	150 KIAS
V_{MC}	(Minimum control)	
	Air-sea level, 0°F. (-18°C)	91 KIAS
	Ground-sea level, 0°F (-18°C)	97 KIAS
V_{LO}	(Landing gear operating)	200 knots
V_{LE}	(Landing gear extended)	265 knots
V_{SB}	(Spoilers extended)	Any speed, except extension is prohibited in flight with flaps extended

V - Model 28, Model 29 (cont'd)

C.G. Range (Landing Gear Extended)



% MAC	F.S.
1.0	365.89
16.4	378.22
25.0	385.11

Maximum Weights		Model 28, 29
	Ramp	15,500 lb.
	Takeoff	15,000 lb.
	Landing	13,300 lb.
	Zero Fuel	10,300 lb.

Minimum Crew — For all flights - 2 persons (pilot and copilot)

No. of Seats — 10 (2 crew and 8 passengers)
See NOTE 7 for optional setting configurations.

Maximum Baggage — 500 lb. at Sta. 402.0 (Model 28)
500 lb. at Sta. 360.0 (Model 29)

Fuel Capacity (Gal.)		Usable	Arm
	Two main tanks (Model 28)	430	392.4
	Two main tanks (Model 29)	427	392.4
	Aux. fuselage tank (Model 28)	269	435.0
	Aux. fuselage tank (Model 29)	375	422.6

See NOTE 1(a) for data on unusable fuel.

Oil Capacity (Lb.) — Two engine mounted tanks

Total	Usable	Arm
8 ea.	5.6 ea.	458

See NOTE 1(a) for data on system oil

Maximum Operating Altitude — 51,000 ft. pressure altitude

Other Operating Limitations — See appropriate FAA Approved Airplane Flight Manual.

V - Model 28, Model 29 (cont'd)

Control Surface Movements	Horizontal stabilizer			Down	1.75° to 12.25°
	Elevator	Up	15°	Down	15°
	Aileron	Up	18°	Down	18°
	Aileron trim tab	Up	8°	Down	8°
	Aileron geared tabs		±15° at -18° aileron deflection		
	Rudder	Right	30°	Left	30°
	Rudder trim tab	Right	15°	Left	15°
	Wing flap			Down	0° to 40°
	Speed brake	Up	0° to 40°		

See Airplane Maintenance Manual or LES FT-1007 or LES-FT-1008 for rigging tolerances.

Serial Nos. Eligible
001 and on (Model 28)
001 and on (Model 29)

VI - Model 55 (Transport Aircraft), Approved March 18, 1981
Model 55B (Transport Aircraft), Approved August 29, 1986
Model 55C (Transport Aircraft), Approved December 20, 1988
(See NOTE 21)

Engines

Model 55
(Standard) Two Garrett TFE-731-3A-2B1
(Optional) Two Garrett TFE-731-3A-2B (with fuel heaters)
Two Garrett TFE-731-3AR-2B1
Two Garrett TFE-731-3AR-2B (with fuel heaters)

Model 55B/55C
(Standard) Two Garrett TFE-731-3AR-2B1
(Optional) Two Garrett TFE-731-3AR-2B (with fuel heaters)

Model 55C/ECR 2686 (with thrust reversers)
ECR 2701 (without thrust reversers)
(Standard) Two Garrett TFE-731-3AR-3B1
(Optional) Two Garrett TFE-731-3AR-3B (with fuel heaters)

See NOTE 32.

Fuel
See NOTE 5(b).

Engine Limits

	TFE-731-3A-2B or TFE-731-3A-2B1	TFE-731-3AR-2B or TFE-731-3AR-2B1 or TFE-731-3AR-3B or TFE-731-3AR-3B1
Thrust ratings (lb.)		
Takeoff (standard day), static	3700	3880
Sea level (5 min.)		
Maximum continuous, static	3700	3700
Sea level		
Maximum permissible engine rotor operating speeds		
Low pressure (r.p.m.)	21,000 (101.5% N_1)	21,000 (101.5% N_1)
High pressure (r.p.m.)	29,692 (100% N_2)	29,989 (101% N_2)

101.5% to 103% N_1 r.p.m.
Limited to 1 minute
100% to 103% N_2 r.p.m.
Limited to 1 minute

VI - Model 55, Model 55B, Model 55C (cont'd)

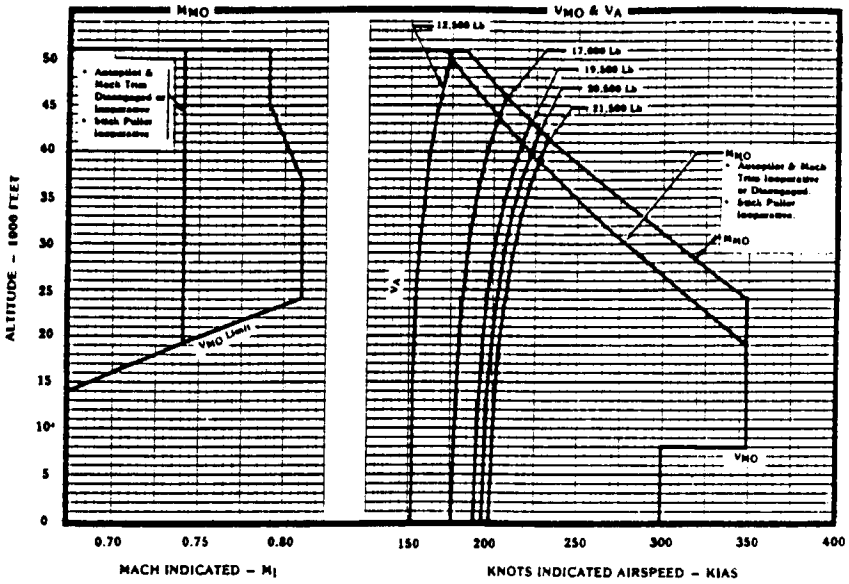
Engine Limits (cont'd) Maximum permissible interstage turbine gas temperatures:

Takeoff (5 min.)	907°C	929°C
Maximum continuous	885°C	885°C
Maximum takeoff transient (10 sec.)	917°C	939°C
Maximum transient for starting	907°C	907°C

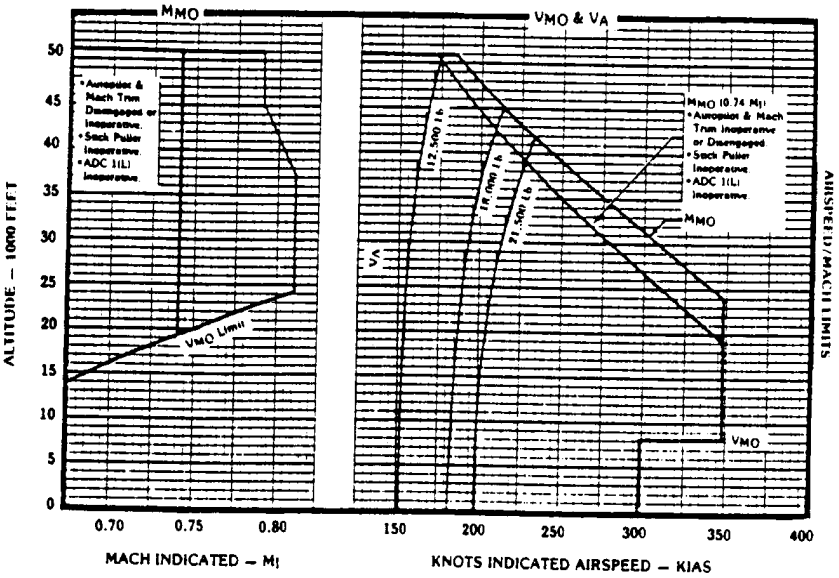
Airspeed Limits (IAS) (See NOTE 4)

AIRSPEED/MACH LIMITS

MODEL 55



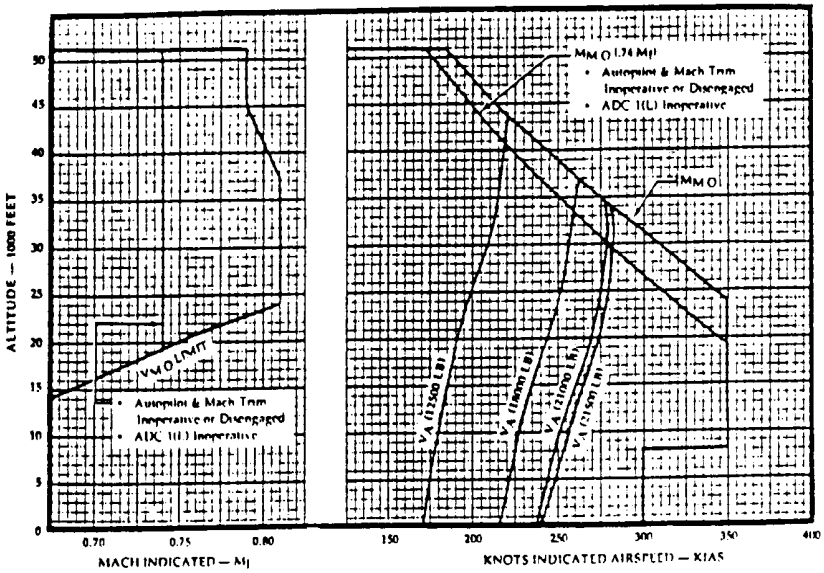
MODEL 55B



VI - Model 55, Model 55B, Model 55C (cont'd)

AIRSPEED/MACH LIMITS (cont'd)

MODEL 55C



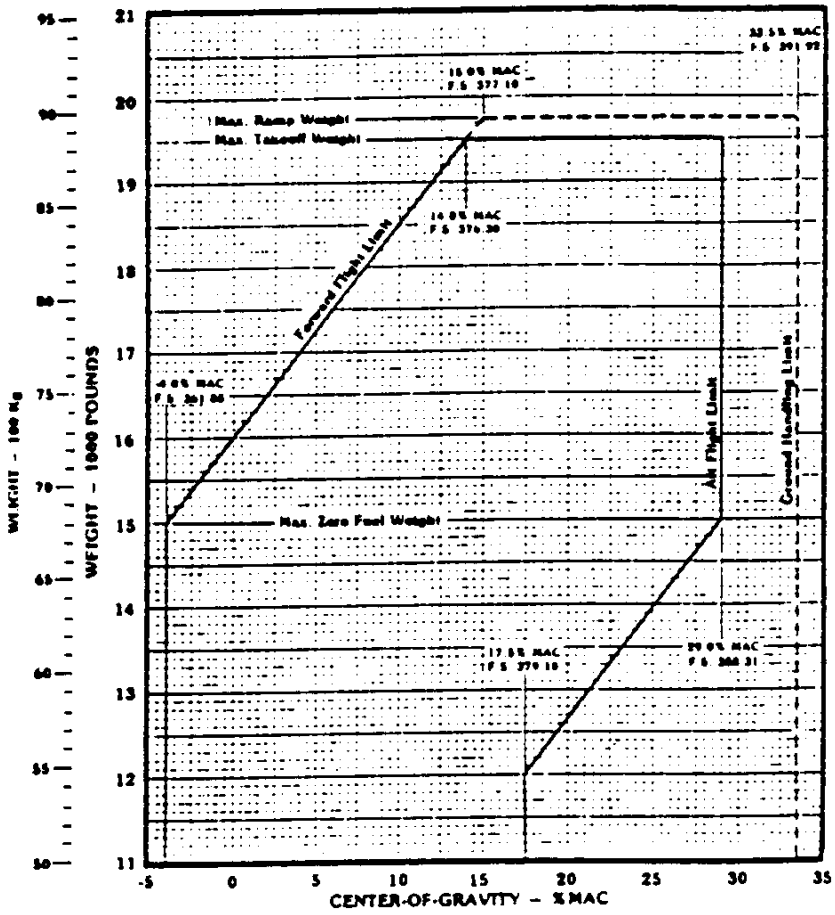
		MODELS 55/55B	MODEL 55C
V_{FE}	Flaps 8°	200 KIAS	250 KIAS
	Flaps 20°	200 KIAS	200 KIAS
	Flaps 40°	150 KIAS	150 KIAS
V_{LO}	(Landing gear operating)	200 KIAS	200 KIAS
V_{LE}	(Landing gear extended)	260 KIAS	260 KIAS
V_{SB}	(Spoilers extended)	Any speed below V_{MO} or M_{MO}, except extension is prohibited in flight with flaps extended	Any speed below V_{MO} or M_{MO}, except extension is prohibited in flight with flaps extended

V_{MCA}	APR Off*	APR On*	APR Off**	APR On**
8° flap	104 KIAS	106 KIAS	111 KIAS	113 KIAS
20° flap	99 KIAS	101 KIAS	105 KIAS	107 KIAS
V_{MCG}	90 KIAS	90 KIAS	94 KIAS	105 KIAS

*Sea level, -40°C. **Sea level, -53.9°C.

VI - Model 55, Model 55B, Model 55C (cont'd)

Center of Gravity Envelope
Model 55



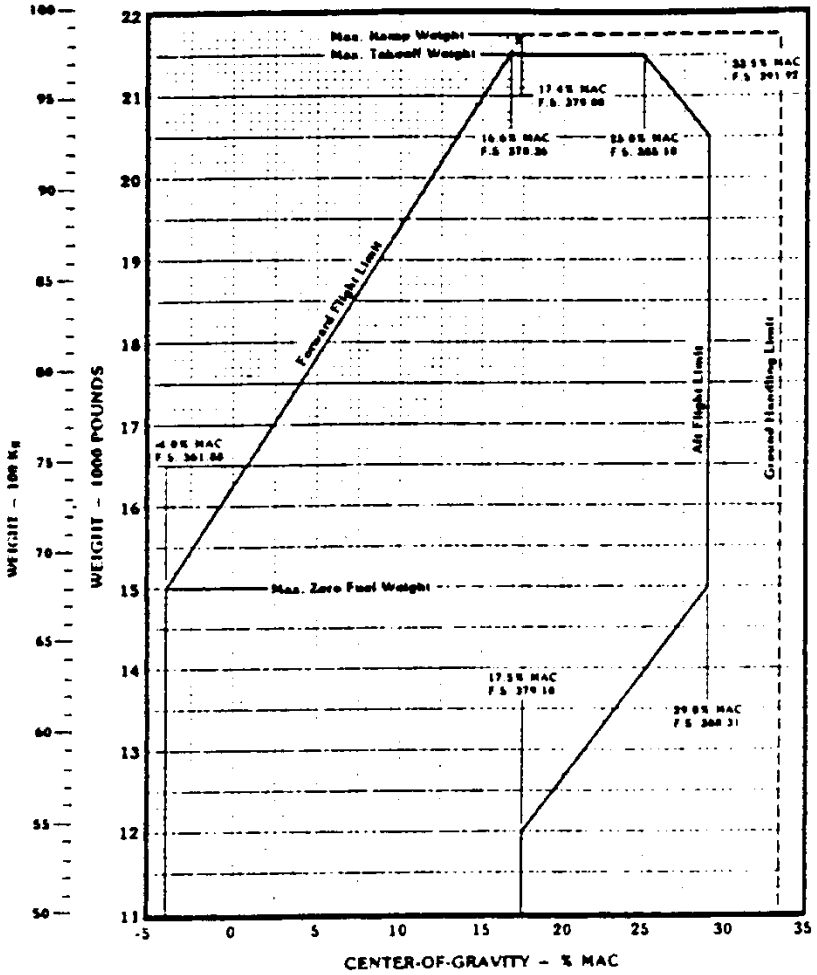
Forward Flight Limit - F.S. 361.88 (-4.0% MAC) for all weights up to and including 15,000 pounds (6,804 kg.) and tapers through F.S. 376.30 (14.0% MAC) at 19,500 pounds (8,845 kg.)

Aft Flight Limit - F.S. 379.11 (17.5% MAC) for all weights up to and including 12,000 pounds (5,443 kg.) tapers to F.S. 388.31 (29.0% MAC) at 15,000 pounds (6,804 kg.) and remains at F.S. 388.31 (29.0% MAC) up to and including 19,500 pounds (8,845 kg.).

Ground Handling Limit - The forward limit is the same as the forward flight limit up to and including 19,500 pounds (8,845 kg.) and then tapers to F.S. 377.10 (15.0% MAC) at 19,750 pounds (8,958 kg.). The aft limit is F.S. 391.92 (33.5% MAC) at all weights.

VI - Model 55, Model 55B, Model 55C (cont'd)

Center of Gravity Envelope
MODEL 55B



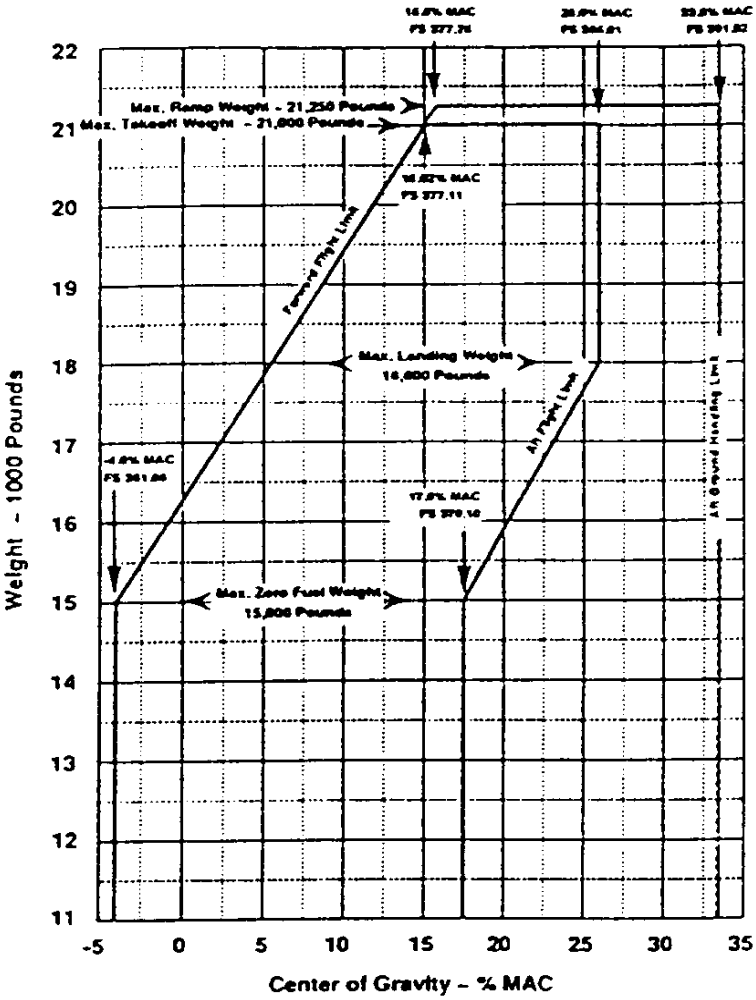
Forward Flight Limit - F.S. 361.88 (-4.0% MAC) for all weights up to and including 15,000 pounds (6,804 kg.) and tapers to F.S. 378.36 (16.6% MAC) at 21,500 pounds (9,752 kg.).

Aft Flight Limit - F.S. 379.10 (17.5% MAC) for all weights up to and including 12,000 pounds (5,443 kg.), tapers to F.S. 388.31 (29.0% MAC) at 15,000 pounds (6,804 kg.), remains at F.S. 388.31 (29.0% MAC) up to and including 20,500 pounds (9,299 kg.), and tapers to F.S. 385.10 (25.0% MAC) at 21,500 pounds (9,752 kg.).

Ground Handling Limit - The forward limit is the same as the forward flight limit up to and including 21,000 pounds (9,752 kg.) and tapers to F.S. 379.00 (17.4% MAC) at 21,750 pounds (9,866 kg.). The aft limit is F.S. 391.32 (33.5% MAC) at all weights.

VI - Model 55, Model 55B, Model 55C (cont'd)

CENTER-OF-GRAVITY ENVELOPE
MODEL 55C



Forward Flight Limit - FS 361.88 (-4.0% MAC) for all weights up to and including 15,000 pounds (6,804 kg.) and tapers to F.S. 377.11 (15.0% MAC) at 21,000 pounds (9,525 kg.).

Aft Flight Limit - F.S. 379.10 (17.5% MAC) for all weights up to and including 15,000 pounds (6,804 kg.), tapers to 386.67 (26.0% MAC) at 18,000 pounds (8,165 kg.), remains at F.S. 386.67 (26.0% MAC) up to and including 21,000 pounds (9,525 kg.).

Ground Handling Limit - The forward limit is the same as the forward flight limit up to and including 21,000 pounds (9,525 kg.) and tapers to F.S. 377.75 (15.8% MAC) at 21,250 pounds (9,639 kg.). The aft limit is F.S. 391.92 (33.5% MAC) at all weights.

VI. Model 55, Model 55B, Model 55C (cont'd)

Maximum Weights

	Model 55	Model 55B	Model 55C
Ramp	19,750 lbs.	21,750 lbs.	21,250 lbs.
Takeoff	19,500 lbs.	21,500 lbs.	21,000 lbs.
Landing	17,000 lbs.	18,000 lbs.	18,000 lbs.
Zero fuel	15,000 lbs.	15,000 lbs.	15,000 lbs.

See NOTE 19 for optional weights, Model 55 only.
See NOTE 31 for optional weights, Model 55C only.

Minimum Crew: For all flights, 2 persons (pilot and copilot)

No. of Seats: 10 (2 crew and 8 passengers)
See NOTE 7 for optional setting and configurations.

Maximum Baggage:
500 lb. at Sta 380.1 (Cabin)
200 lb. at Sta. 496.6 (Tail)
75 lb. at Sta. 108.4 (Nose)

Fuel Capacity

	Usable	Arm
Two main tanks	2,848	392.3
Fuselage tank	3,859	428.5

See NOTE 1(a) for data on unusable fuel.

Oil Capacity: Two engine mounted tanks

Total	Usable	Arm
2 1/4 gal. ea.	1/2 gal. ea.	459

See NOTE 1(a) for data on unusable oil.

Maximum Operating Altitude: 51,000 ft. pressure altitude

Other Operating Limitations: See appropriate FAA Approved Airplane Flight Manual.

Control Surface Movements

Horizontal stabilizer - Models 55/55B			L.E. Down	0.75° to 11.25°
Horizontal stabilizer - Model 55C			L.E. Down	1.37° to 11.37°
Elevator - Models 55/55B	Up	15°	Down	15°
Elevator - Model 55C	Up	15°	Down	16.5°
Aileron	Up	18°	Down	18°
Aileron trim tab	Up	8°	Down	8°
Aileron geared tabs		±15° at -18° aileron deflection		
Rudder	Right	30°	Left	30°
Rudder trim tab	Right	11°	Left	11°
Wing flap			Down	0° to 40°
Spoilers	Up	0° to 40°		

See Airplane Maintenance Manual or LES FT-1206 or LES-FT-1207 for rigging tolerances or instructions.

Serial Nos. Eligible:
001 through 126 (Model 55)
127 through 134 (Model 55B)
135 and on (Models 55C)

VII - Model 31 (Transport Aircraft), Approved August 17, 1988
Model 31A (Transport Aircraft), Approved July 25, 1991

Engines:
Standard - Two Honeywell TFE-731-2-3B, P/N 3073610-1 (w/o fuel heaters)
Optional - Two Honeywell TFE-731-2-3B, P/N 3073610-3 (with fuel heaters)
Optional - Two Honeywell TFE-731-2-3B, P/N 3073610-4 (with fuel heaters)
Effective (See Note 44).

Fuel:
See NOTE 5(b) for Model 31.
See NOTE 5(c) for Model 31A.

VII - Model 31, Model 31A (cont'd)

Fuel Control Computers

Two Honeywell fuel computers P/N 2118002-201 or two P/N 2118002-202 or two P/N 2118002-204 (N2 DEEC's) installed in pairs only.
Optional - Two Honeywell fuel computers P/N 2119010-3 (N1 DEEC's) installed in pairs only (See Note 44).

Engine Limits

Thrust ratings (lb.) 3500
Takeoff (standard day), static
Sea level (5 min.)

Maximum continuous climb (lb.) 3500
Static, sea level

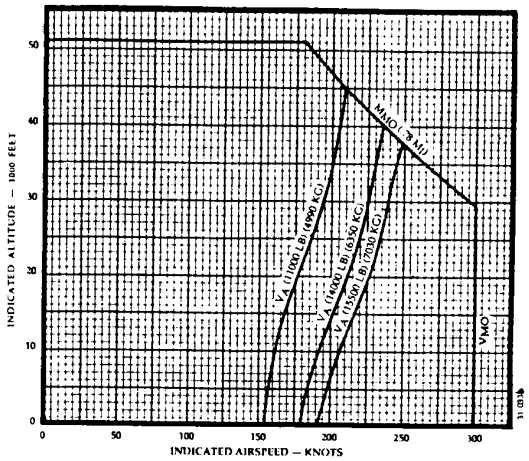
Maximum permissible engine rotor operating speeds
Low pressure (r.p.m.) 20,668 (100% N_1)
High pressure (r.p.m.) 29,692 (100% N_2)
100% to 103% N_1 and N_2 r.p.m.
Limited to 1 minute

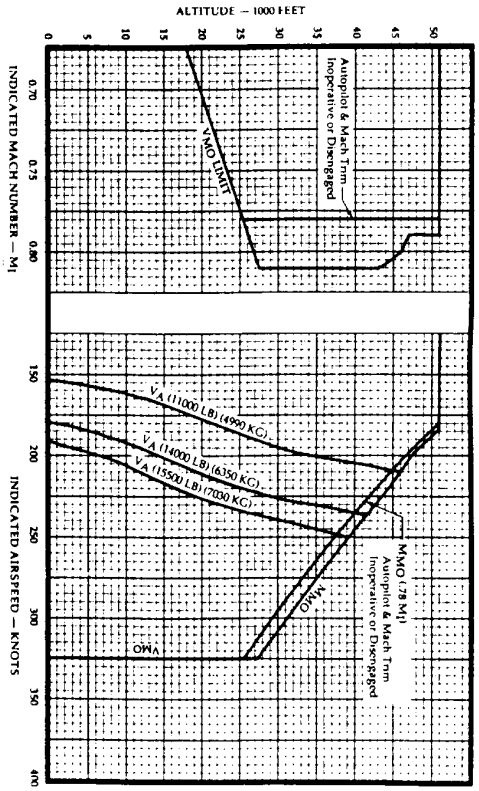
Maximum permissible interstage turbine gas temperatures:

Takeoff (5 min.)	1580°F. (860°C)
Maximum continuous	1530°F. (832°C)
Maximum climb	1530°F. (832°C)
Maximum cruise	1463°F. (795°C)

Airspeed Limits (IAS)
(See NOTE 4)

AIRSPEED/MACH LIMITS
MODEL 31 MODEL 31A





Model 31 and 31A with optional T.O. weight limit per NOTE 30, 33, 40, 41 or 42 refer to Airplance Flight Manual FM-112 or FM-121 respectively.

Model 31 with ECR 3033 (Singapore) refer to Airplane Flight Manual FM-122 for airspeed limits.

VII - Model 31, Model 31A (cont'd)

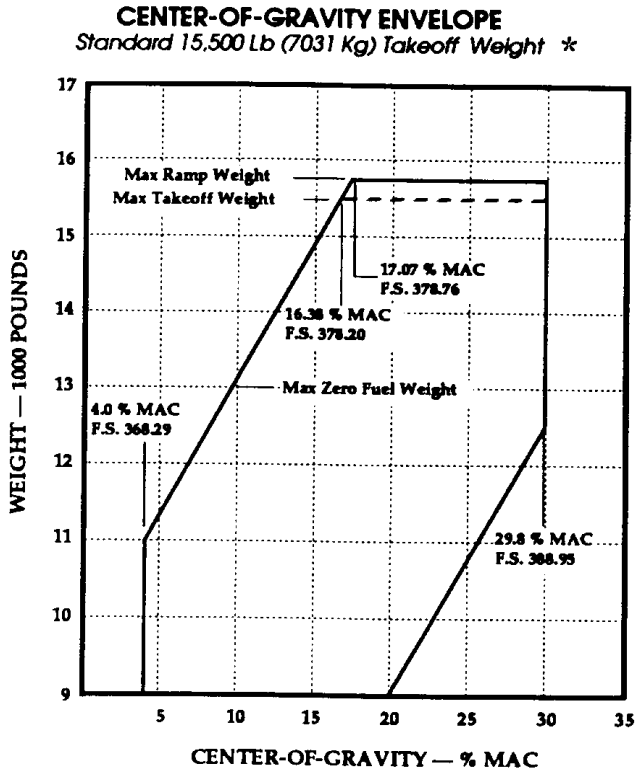
Airspeed Limits (IAS)

		Model 31	Model 31with ECR 2679 (see NOTE 35) and Model 31A
V_{FE}	Flaps 8°	250 KIAS	250 KIAS
	Flaps 20°	200 KIAS	200 KIAS
	Flaps 40°	150 KIAS	150 KIAS
V_{MC}	(Minimum Control)		
	Air	93 KIAS (8° flap) 87 KIAS (20° flap)	93 KIAS (8°flap) 87 KIAS (20° flap)
	Ground	109 KIAS	100 KIAS (w/rudder boost on) 109 KIAS (w/rudder boost off)
V_{LO}	(Landing gear operating)	200 KIAS	200 KIAS
V_{LE}	(Landing gear extended)	260 KIAS	260 KIAS
V_{SB}	(Spoilers extended)	Any speed below V_{MO} or M_{MO}', except extension is prohibited in flight with flaps extended.	Any speed below V_{MO} or M_{MO}', except extension is prohibited in flight with flaps extended.

C.G. Range (Landing Gear Extended)

*Model 31 and 31A with optional T.O. weight limit per Note 30 or 33, 40, 41, or 42 refer to Airplane Flight Manual FM-112 or FM-121 respectively.

*Model 31 with ECR 3033 (Singapore) refer to Airplane Flight Manual FM-122 for C.G. range.



Forward Flight Limit - F.S. 368.29 (4.0% MAC) for all weights up to and including 11, 000 pounds (4990 kg) and tapers through F.S. 378.20 (16.38% MAC) at 15, 500 pounds (7031 kg). to F.S. 378.76 (17.07% MAC) at 15.750 pounds (7144 kg).

Aft Flight Limit - F.S. 381.11 (20.0% MAC) for all weights up to and including 9000 pounds (4082 kg), tapers to F.S. 388.95 (29.8% MAC) at 12, 500 pounds (5670 kg), and remains at F.S. 388.95 (29.8% MAC) up to and including 15, 750 pounds (7144 kg).

VII - Model 31, Model 31A (cont'd)

Maximum Weight

Ramp	15,750 lbs.
Takeoff	15,500 lbs.
Landing	15,300 lbs.
Zero fuel	13,000 lbs.

Model 31 - See NOTES 30 and 40 for optional weights.
Model 31A - See NOTES 33, 41, 42, and 43 for optional weights.
Model 31 with ECR 3033 (Singapore) - See AFM-122 for maximum weight.

Minimum Crew: All flights, 2 persons (pilot and copilot)

No. of Seats: 10 (2 crew and 8 passengers) See NOTE 7 for optional seating configurations.

Maximum Baggage: 500 lb. at Sta. 391 (Cabin)

Fuel Capacity (Lb.)

	Gravity Refuel Usable	Single Point Pressure Refuel Usable	Arm
Two wing tanks, standard	2,804	2,706	392.1
Two wing tanks, extended range	2,826	2,728	392.3
Fuselage tank, standard	1,320	1,313	440.4
Fuselage tank, extended range	1,827	1,749	432.4

See NOTE 1(a) for data on unusable fuel.

Oil Capacity: One engine mounted tank each engine

Total	Usable	Arm
2 1/4 gal. ea.	1/2 gal. ea.	437.8

See NOTE 1(a) for data on unusable oil.

Maximum Operating Altitude: 51,000 ft. pressure altitude

Other Operating Limitations: See appropriate FAA Approved Airplane Flight Manual.

Control Surface Movements

Horizontal stabilizer			L.E. Down	2.0° to 11.5°
Elevator	Up	12.5°	Down	15.5° (Stab. at -6.5°)
Aileron	Up	18°	Down	18°
Aileron trim tab	Up	8°	Down	8°
Aileron geared tabs		±15° at -18° aileron deflection		
Rudder	Right	30°	Left	30°
Rudder trim tab	Right	15°	Left	15°
Wing flap			Down	0° to 40°
Spoilers	Up	0° to 40°		

For rigging tolerances and instructions, see Airplane Maintenance Manual or LES FT-1007 (Model 31), or LES-FT-1551 (Model 31A) for primary controls, and LES-FT 1008 (Model 31, Model 31A) for secondary controls.

Serial Nos. Eligible: 001 through 034 (Model 31)
035 and on (Model 31A)

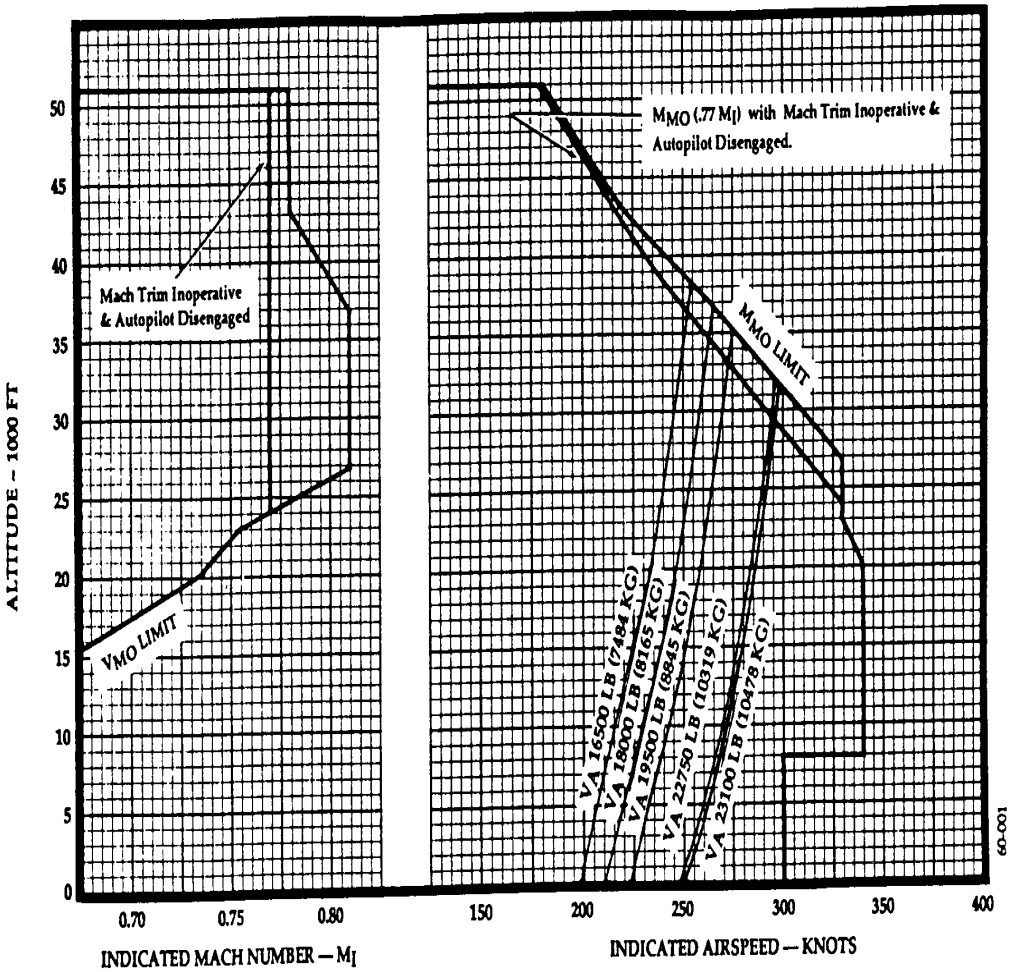
VIII - Model 60 (Transport Aircraft), Approved January 15, 1993

(See NOTE 36)

Engines	Two Pratt & Whitney Canada PW305A (P/N 31B4067-01) or Two P&W Canada PW305A (P/N 31B4067-02) (See NOTE 38) or Two P&W Canada PW305A (P/N 31B4067-04) (See NOTE 46)	
Fuel	See NOTE 5(d)	
Engine Limits	Pratt & Whitney Canada PW305A	
	Thrust ratings (lb.)	
	Takeoff (standard day), static	4600
	Sea level (5 min.)	
	Maximum continuous, static	4600
	Sea level	
	Maximum permissible engine rotor operating speeds	
	Low pressure (r.p.m.)	10,820 (102% N1)
	High pressure (r.p.m.)	27,469 (102% N2)
	102% to 102.5% N1 r.p.m.	
	Limited to 20 seconds	
	102% to 102.5% N2 r.p.m.	
	Limited to 20 seconds	
	Maximum permissible interstage turbine gas temperature:	
	Takeoff	785°C
	Maximum continuous	785°C
	Maximum transient (20 sec)	825°C
	Maximum transient for starting	950°C

Airspeed Limits (IAS)
(See NOTE 4)

AIRSPEED/MACH LIMITS
MODEL 60



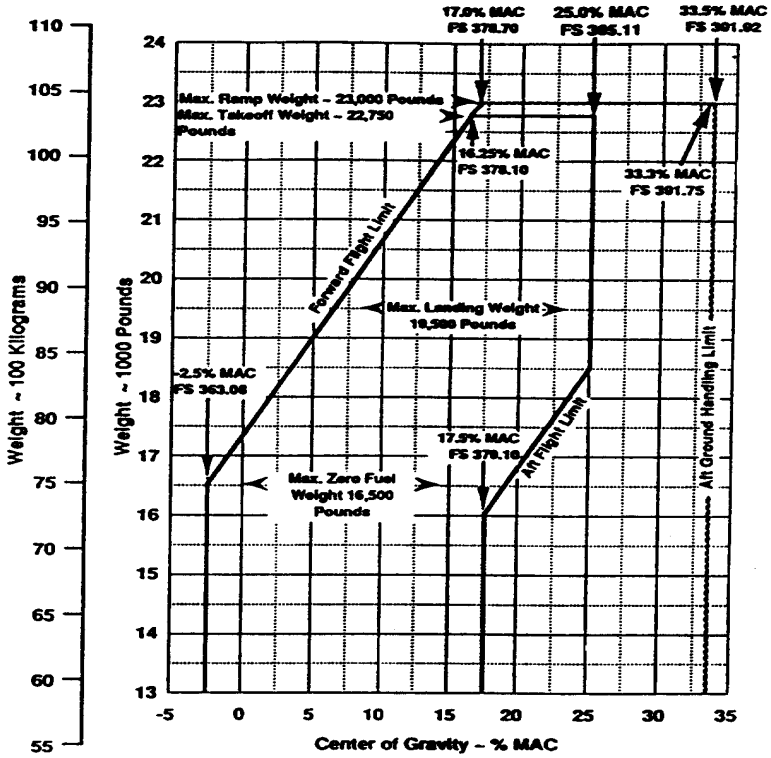
VIII - Model 60 (cont'd)

Airspeed Limits (IAS) (cont'd)

V_{FE}	Flaps 8°	250 KIAS
	Flaps 20°	200 KIAS
	flaps 40°	165 KIAS
V_{LO}	(Landing gear operating)	200 KIAS
V_{LE}	(Landing gear extended)	260 KIAS
V_{SB}	(Spoilers extended)	Any speed below V_{MO} or M_{MO}, except extension is prohibited in flight with flaps extended or with autopilot engaged.
V_{MCA}		
	8° flap	120 KIAS
	20° flap	110 KIAS
V_{MCG} (8° and 20° flap)		
	Rudder Boost Off	116 KIAS
	Rudder Boost On	95 KIAS

C.G. Range (Landing Gear Extended)

CENTER OF GRAVITY ENVELOPE
MODEL 60



Forward Flight Limits -- F.S. 363.08 (-2.5% MAC) for all weights up to and including 16,500 pounds (7484 kg) and tapers to F.S. 378.10 (16.25% MAC) at 22,750 pounds (10,319 kg).

Aft Flight Limit -- F.S. 379.10 (17.5% MAC) for all weights up to and including 16,000 pounds (7258 kg), tapers to F.S. 385.11 (25.0% MAC) at 18,500 pounds (8392 kg), remains at F.S. 385.11 (25.0% MAC) up to and including 22,750 pounds (10,319 kg).

Ground Handling Limit -- The forward limit is the same as the forward flight limit up to and including 22,750 pounds (10,319 kg) and tapers to F.S. 378.70 (17.0% MAC) at 23,000 pounds (10,433 kg). The aft limit is F.S. 391.92 (33.5% MAC) for all weights up to and including 22,987 pounds (10,427 kg) and tapers to F.S. 391.75 (33.3% MAC) at 23,000 pounds (10,433 kg).

See NOTE 39 for Optional C.G. Range

VIII - Model 60 (cont'd)

Maximum Weights

	Standard
Ramp	23,000 lbs.
Takeoff	22,750 lbs.
Landing	19,500 lbs.
Zero fuel	16,500 lbs.

See NOTES 37 and 39 for Optional Weights

Minimum Crew: For all flights, 2 persons (pilot and copilot)

No. of Seats: 10 (2 crew and 8 passengers)
See NOTE 7 for optional configurations.

Maximum Baggage

	Max Baggage	Arm
Cabin	260 lbs.	367.0
Tail	300 lbs.	515.0

Fuel Capacity (lb.)

	Usable	Arm
Two wing tanks	2898	391.7
Fuselage tank	5012	427.1

See NOTE 1(a) for data on unusable fuel

Oil Capacity: One integral tank per engine

Total	Usable	Arm
2.11 gal. ea. engine	1.0 gal. ea. engine	467.1

See NOTE 1(a) for data on unusable oil

Maximum Operating Altitude: 51,000 ft. pressure altitude

Other Operating Limitations: See FAA Approved airplane Flight Manual.

Control Surface Movements

Horizontal stabilizer			Upper Limit	
			L.E.Down	1°6' to 1°21'
			Lower Limit	
			L.E. Down	11°9' to 11° 25'
Elevator	Up	15°± 30'	Down	16.5° ± 30'
Aileron	Up	18° ± 1°	Down	18° +1°, -2°
Aileron trim tab	Up	8° ± 1°	Down	8° ± 1°
Aileron Balance Tabs	Up	15° ± 2°	Down	15° ± 2°
Rudder	Right	30° +2° -1°	Left	30° +2° -1°
Rudder trim tab	Right	20° ± 1°	Left	20° ± 1°
Wing flap			Down	0° to 40° +5° -0°
Spoilers				
1st Partial Detent	Up	10° ± 3°		
2nd Partial Detent	Up	20° ±3°		
Full Deploy	Up	47° +0° -7°		

For rigging tolerances and instructions, see Maintenance Manual or LES-FT-1588 for primary controls, and LES-FT-1589 for secondary controls.

Serial Nos. Eligible: 001 and On

Data Pertinent to All Models

Datum: Models 24, 24A, 24B, 24B-A, 24C, 24D, 24E, 24F and 24F-A: 14 in. aft of nose.
Wing jack points are at sta. 264.9. Fuselage jack points are at sta. 69.8.

Models 25, 25A, 25B, 25C, 25D, 25E, 25F, 28, and 29: 100 in. forward of nose.
Wing jack points are at sta. 414.85. Fuselage jack points are at sta. 183.78.

Data Pertinent to All Models (cont'd)

Datum (cont'd)	Models 35, 36, 35A, 36A, 31, and 31A: 86.75 in. forward of nose. Wing jack points are at sta. 414.85. Fuselage jack points are at sta. 170.53. Models 55, 55B, and 55C: 40.77 in. forward of nose. Wing jack points are at sta. 414.85. Fuselage jack points are at sta. 129.53. Model 60: 12.77 in. forward of nose. Wing jack points are at sta. 414.832. Fuselage jack point is at Sta. 100.703.
MAC	Models 24, 24A, 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F, and 24F-A: 84.486 in. (L.E. of MAC at sta. 210.043). Models 25, 25A, 25B, 25C, 25D, and 25F: 84.486 in. (L.E. of MAC at sta. 360.02). Models 28 and 29: 80.09 in. (L.E. of MAC at sta. 365.085). Models 35, 36, 35A, and 36A: 82.75 in. (L.E. of MAC at sta. 362.17). Models 55, 55B, 55C, and 60: 80.09 in. (L.E. of MAC at sta. 365.085). Models 31, 31A: 80.09 in. (L.E. of MAC at sta. 365.085).
Leveling Means	See airplane Service Manual or Maintenance Manual or LES 1061 for leveling instructions.
Certification Basis	FAR 25 effective February 1, 1965, as amended by 25-2 and 25-4. In addition: <u>Models 24 and 24A</u>: Special Conditions set forth in FAA letters to Learjet dated August 5, 1965, and November 19, 1965, and Exemption No. 490 from FAR 25.1001 - Fuel dumping requirements. <u>Models 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F and 24F-A:</u> Amendment 25-18 and special Conditions set forth in FAA letter to Learjet dated March 1, 1967. <u>Models 24E and 24F with ECR's 1444 and 1559 or with ECR 1410</u>: Amendment 25-18 and Special Conditions set forth in FAA letter to Learjet dated March 1, 1967; Special Conditions No. 25-72-CE-8 dated November 3, 1976, (See NOTE 47) and Amendment 1 dated March 14, 1978. See NOTE 16. <u>Models 25, 25A, 25B, 25C, 25D and 25F</u>: Special conditions set forth in FAA letter to Learjet dated March 1, 1967. <u>Models 25D and 25F with ECR's 1445 and 1559 or with ECR 1409</u>: Special conditions set forth in FAA letter to Learjet dated March 1, 1967; Special Conditions No. 25-72-CE-8 dated November 3, 1976, (See NOTE 47) and Amendment 1 dated March 14, 1978. See NOTE 16. <u>Models 35, 36, 35A and 36A</u>: Amendment 25-7, 25-18 and Paragraph 25.571(d) of Amendment 25-10, Special Conditions set forth in FAA letter to Learjet dated March 1, 1967, and Special Conditions No. 25-50-CE-6 dated April 18, 1973, and Amendment 1 dated September 18, 1973, and Noise Type Certification Standards of Part 36 including Amendment 36-1.

Data Pertinent to All Models (cont'd)

Certification basis (cont'd)

Models 35A and 36A with ECR's 1446 and 1559: Amendment 25-7, 25-18 and Paragraph 25.571(d) of Amendment 25-10, special Conditions set forth in FAA letter to Learjet dated March 1, 1967, and Special Conditions No. 25-50-CE-6 dated April 18, 1973, and Amendment 1 dated September 18, 1973, and Noise Type Certification Standards of Part 36, including Amendment 36-1; Special Conditions No. 25-72-CE-8 dated November 3, 1976, (See NOTE 47) and Amendment 1 dated March 14, 1978. See NOTE 16.

Model 35A (C-21A) Configured per ECR 2675B or modified per AAK88-3B: In addition to the basis listed above, Special Conditions 25-ANM-28 dated May 3, 1989.

Models 28 and 29: Amendments 25-7, 25-10, and 25-18, Special Conditions set forth in FAA letter dated March 1, 1967, and Special Conditions No. 25-72-CE-8 issued November 3, 1976, (See NOTE 47) plus Amendment No. 1 dated March 14, 1978, Noise Standards of FAR Part 36 including Amendment 36-1; SFAR 27, fuel venting.

Models 55 and 55B: Amendments 25-3, 25-7, 25-10, 25-12, 25-18, 25-21, and 25-30, plus Section 25.955(b)(2) of Amendment 25-11, Section 25.954 of Amendment 25-14, Sections 25.803(e), 25.811(f), 25.853(a), 25.853(b), and 25-855(a) of Amendment 25-15, Section 25.1359 of Amendment 25-17, Section 25.785(c) of Amendment 25-20, Sections 25.251(c), 25.251(d), 25.251(e), 25.303, 25.305(b), 25.307(d), 25.331(a)(3), 25.335(b), 25.335(f), 25.337(b), 25.349(b), 25.351(a), 25.363, 23.395(a), 25.395(b), 25.471(a)(1), 25.471(a)(2), 25.473, 25.493(b), 25.499(b), 25.499(c), 25.499(d), 25.509(a)(3), 25.561(b)(3), 25.581, 25.607, 25.615, 25.619, 25.625, 25.629, 25.677, 25.697, 25.699, 25.701, 25.721, 25.723, 25.725, 25.727, 25.729, 25.733, 25.735, 25.865, 25.867, 25.871, 25.903(d), 25.934, 25.994, 25.1103(d), 25.1143(e), 25.1303, 25.1307, 25.1331, and 25.1585(c) of Amendment 25-23, Sections 25.1013(e), 25.1305(c)(4), and 25.1305(c)(6) of Amendment 25-36, Sections 25.815, 25.1322, and 25.1403 of Amendment 25-38, and Sections 25.903(e), 25.939, and 25.943 of Amendment 25-40, Section 25.255 of Amendment 25-42, Section 25.1326 of Amendment 25-43; FAR Part 36 effective December 1, 1969, as amended through Amendment 36-10; Special Federal Aviation Regulation (SFAR) 27 effective February 1, 1974, as amended through Amendment SFAR 27-2; and Special Conditions 25-99-CE-14 (See NOTE 47).

Model 55 Configured per ECR 2377A or modified per AAK 55-83-4: In addition to the basis listed above, Special Conditions 25-ANM-2 dated June 24, 1983.

Model 31: Amendments 25-3, 25-7, 25-10, 25-12, 25-18, 25-21, and 25-30, plus Section 25.955(b)(2) of Amendment 25-11, Section 25.954 of Amendment 25-14, Sections 25.803(e), 25.811(f), 25.853(a), 25.853(b), and 25.855(a) of Amendment 25-15, Section 25.1359 of Amendment 25-17, Section 25.785(c) of Amendment 25-20, Sections 25.25, 25.113, 25.145, 25.251, 25.303, 25.305(b), 25.307(d), 25.331(a)(3), 25.335(b), 25.335(f), 25.337(b), 25.349(b), 25.351(a), 25.363, 25.395(a), 25.395(b), 25.471(a)(1), 25.471(a)(2), 25.473, 25.493(b), 25.499(b), 25.499(c), 25.499(d), 25.509(a)(3), 25.561(b)(3), 25.581, 25.607, 25.615, 25.619, 25.625, 25.629, 25.677, 25.697, 25.699, 25.701, 25.721, 25.723, 25.725, 25.727, 25.729, 25.733, 25.735, 25.865, 25.867, 25.871, 25.903(d), 25.934, 25.994, 25.1103(d), 25.1143(e), 25.1303(a)(1), 25.1303(a)(3), 25.1303(b), 25.1303(c), 25.1307, 25.1331, and 25.1585(c) of Amendment 25-23, Sections 25.1013(e), 25.1305(c)(4), and 25.1305(c)(6) of Amendment 25-36, Sections 25.45 through 25.75 deleted, 25.101, 25.161, 25.815, 25.1303(a)(2), 25.1322, 25.1403, and 25.1439 of Amendment 25-38, Sections 25.903(e) 25.939, and 25.943 of Amendment 25-40, Sections 25.29, 25.143(b), 25.147, 25.177, 25.181, 25.201, 25.207, 25.233, 25.237, 25.255, and 25.703 of Amendment 25-42, Section 25.1326 of Amendment 25-43, Section 25.253 of Amendment 25-54, Sections 25.33 and 25.961 of Amendment 25-57; FAR Part 36 effective December 1, 1969, as amended through Amendment 36-15; SFAR 27 effective February 1, 1974, as amended through Amendment SFAR 27-6; Special Conditions No. 25-99-CE-14 (See NOTE 47) and

Data Pertinent to All Models (cont'd)

Certification basis (cont'd)

Model 31 (cont'd):
Special Conditions No. 25-ANM-19.

Model 31 Configured per ECR 3033: The Model 31 basis listed above, except the following applies to the Honeywell EFIS system installation defined by sub-ECR's 3034, 3049, and 3061.

Sections 25.1309, 25.1321, 25.1333, and 25.1335 of Amendment 25-41, Section 25.1329 of Amendment 25-46, and Special Conditions 25-ANM-46 dated July 17, 1991.

Model 55C: Amendments 25-3, 25-7, 25-10, 25-12, 25-18, 25-21, and 25-30, plus Section 25.955(b)(2) of Amendment 25-11, Section 25.954 of Amendment 25-14, Sections 25.803(e), 25.811(f), and 25.855(a) of Amendment 25-15, Section 25.1359 of Amendment 25-17, Section 25.785(c) of Amendment 25-20, Sections 25.251(c), 25.251(d), 25.251(e), 25.303, 25.305(b), 25.307(d), 25.331(a)(3), 25.355(b), 25.335(f), 25.337(b), 25.349(b), 25.351(a), 25.363, 25.395(a), 25.395(b), 25.471(a)(1), 25.471(a)(2), 25.473, 25.493(b), 25.499(b), 25.499(c), 25.499(d), 25.509(a)(3), 25.561(b)(3), 25.581, 25.607, 25.615, 25.619, 25.625, 25.629, 25.677, 25.697, 25.699, 25.701, 25.721, 25.723, 25.725, 25.727, 25.729, 25.733, 25.735, 25.865, 25.867, 25.871, 25.903(d), 25.934, 25.994, 25.1103(d), 25.1143(e), 25.1303(a)(1), 25.1303(a)(3), 25.1303(b), 25.1303(c), 25.1307, 25.1331, and 25.1585(c) of Amendment 25-23, Sections 25.1013(e), 25.1305(c)(4), and 25.1305(c)(6) of Amendment 25-36, Sections 25.815, 25.1303(a)(2), 25.1322, and 25.1403 of Amendment 25-38, Sections 25.903(e), 25.939, and 25.943 of Amendment 25-40, Section 25.255 and 25.703 of Amendment 25-42, Section 25.1326 of Amendment 25-43, Section 25.853 of Amendment 25-51, Section 25.851 of Amendment 25-54; FAR Part 36 effective December 1, 1969, as amended through Amendment 36-15; SFAR 27 effective February 1, 1974, as amended through Amendment SFAR 27-6; Special Conditions 25-ANM-2 dated June 24, 1983; and Special Conditions 25-99-CE-14 dated March 10, 1981, (See NOTE 47.)

Model 31A: Amendments 25-3, 25-7, 25-10, 25-12, 25-18, 25-21, and 25-30, plus Section 25.955(b)(2) of Amendment 25-11, Section 25.954 of Amendment 25-14, Sections 25.803(e), 25.811(f), 25.853(a), 25.853(b), and 25.855(a), of Amendment 25-15, Section 25.1359 of Amendment 25-17, Section 25.785(c) of Amendment 25-20, Sections 25.25, 25.113, 25.145, 25.251, 25.303, 25.305(b), 25.307(d), 25.331(a)(3), 25.335(b), 25.335(f), 25.337(b), 25.349(b), 25.351(a), 25.363, 25.395(a), 25.395(b), 25.471(a)(1), 25.471(a)(2), 25.473, 25.493(b), 25.499(b), 25.499(c), 25.499(d), 25.509(a)(3), 25.561(b)(3), 25.581, 25.607, 25.615, 25.619, 25.625, 25.629, 25.677, 25.697, 25.699, 25.701, 25.721, 25.723, 25.725, 25.727, 25.729, 25.733, 25.735, 25.865, 25.867, 25.871, 25.903(d), 25.934, 25.994, 25.1103(d), 25.1143(e), 25.1303(a)(1), 25.1303(a)(3), 25.1303(b), 25.1303(c), 25.1307, 25.1331, and 25.1585(c) of Amendment 25-23, Sections 25.1013(e), 25.1305(c)(4), and 25.1305(c)(6) of Amendment 25-36, Sections 25.45 through 25.75 deleted, 25.101, 25.161, 25.815, 25.1303(a)(2), 25.1322, 25.1403, and 25.1439 of Amendment 25-38, Sections 25.903(e), 25.939, and 25.943 of Amendment 25-40, Section 25.1335 of Amendment 25-41, Section 25.29, 25.143(b), 25.147, 25.177, 25.181, 25.201, 25.207, 25-233, 25.237, 25.255, and 25.703 of Amendment 25-42, Section 25.1326 of Amendment 25-43, Section 25.1329 of Amendment 25-46, Section 25.253 of Amendment 25-54, Section 25.33 and 25.961 of Amendment 25-57; FAR Part 34 effective September 10, 1990; FAR Part 36 effective December 1, 1969, as amended through Amendment 36-15; Special Conditions No. 25-99-CE-14 dated March 10, 1981, for operation to 51,000 feet; (See NOTE 47) Special Conditions No. 25-ANM-46 for lightning strike protection and HIRF. For serial number 31-174 and on, the lower fuselage anti-collision light meets the requirements of 25.1401, Amendment 25-41.

Data Pertinent to All Models (cont'd)

Certification basis (cont'd)

Model 31A (cont'd):

NOTE: Altitude Heading Reference System (AHRS), Electronic Flight Instrument System, Autopilot/Flight Director, and Air Data Computer are in compliance with Sections 25.1309, 25.1331, and 25.1333 of Amendment 25-41 on Model 31A.

Model 60: FAR 25 effective February 1, 1965, as amended by Amendments 25-1 through 25-73, except as stated. Sections 25.305(d), 25.562, 25.631, 25.672, 25.773(d), 25.812 and 25.832 are not applicable. The following sections are effective at the amendment level noted: Sections 25.109, 25.365, 25.671, 25.695, 25.775, 25.783, 25.801, 25.805, 25.979, 25.1309, 25.1401 and 25.1435 effective February 1, 1965; Sections 25.807 and 25.855 of Amendment 25-15; Section 25.1529 of Amendment 25-21; Sections 25.561, 25.571, 25.625, and 25.721 of Amendment 25-23; Sections 25.785, 25.853 and 25.1413 of Amendment 25-51; Section 25.1307 of Amendment 25-54; FAR Part 34 effective September 19, 1990; FAR Part 36 effective December 1, 1969, as amended by Amendments 36-1 through 36-18; Special Conditions 25-99-CE-14 dated March 10, 1981, (High Operation Altitude 51 K), (See NOTE 47) and Special conditions 25-ANM-46 dated July 17, 1991 (Lightning Protection and High Intensity Radiated Fields). For the Electronic Flight Instrument System (EFIS) with associated components, and the fully modulated spoiler system, FAR 25.1309 as amended through Amendment 25-41 is applicable in addition to the above certification basis.

Compliance with the following optional requirements has been established:

Ditching: Structural provisions of FAR 25.801(b) through (e) and 25.807(d): Models 24, 24A, 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F, 24F-A, 25, 25B, 25C, 25D, 25F, 28, 29, 31, 31A, 35, 36, 35A, 36A. Compliance with structural provisions of FAR 25.801(b) through (e) and 25.807(d) has not been shown for Models 55, 55B, 55C, and 60.

Ice Protection: FAR 25.1419
When ice protection system is installed per
ECR 770 - Model 24
ECR 771 - Models 25 and 25A (S/N 002 thru 031)
ECR 791 - Models 25, 25A, 25B and 25C (S/N 032 and on), 24B (S/N 194 and on), 24D and 24D-A (S/N 230 and on)
ECR 796 - Models 24B, 24B-A (S/N 181 through 193)
ECR 1133-Models 35 and 36
ECR 1459-Models 24E, 24F, 24F-A, 25D, 25F, 35A and 36A and:
Model 24D with ECR 1510
Model 25B with ECR 1511
Model 25C with ECR 1511
Model 35 with ECR 1512
Model 36 with ECR 1512
Model 24B with ECR 1514 and ECR 791 or 796
Model 24 with ECR 1515 and ECR 770
Model 25 with ECR 1513 and ECR 771 or 791
ECR 1640-Model 28
ECR 1641-Model 29
ECR 2625-Model 31 and 31A
ECR 1906-Model 55, 55B, and 55C
ECR 2952-Model 60

Data Pertinent to All Models (cont'd)

Certification basis (cont'd)

Model 60 (cont'd):

Noise Standards: Compliance with Noise Standards - FAR 36, has been established for Model 24D, and for Models 24D, 25B and 25C airplanes with sound suppressors installed per Gates Learjet ECR 1244. Compliance with FAR 36 has been established for Model 24D, 24E, 24F, 24F-A, 25D, 25F, 35, 36, 35A, 36A, 55, 55B, 55C, 31, 31A and 60 airplanes, and Model 25B and 25C airplanes when modified according to ECR 1511, and for Model 25 airplanes when modified according to ECR 1513, and for Model 24B airplanes and modified according to ECR 1514, and for Models 28 and 29 defined by ECR 1685.

Equivalent Level of Safety:

25.201(c)(2)	(Models 55 & 55B only)
25.773(b)(2)	(except Model 60)
28.807(a)(4)	(except Models 55, 55B, 55C, and 60)
25.813(e)	(Model 60 only)
25.815	(except Models 55, 55B, 55C, 31, 31A and 60)
25.841(b)(6)	(Model 60 only)
25.1305(r)	(Models 35/36, 55, 55B, 55C, 31, and 31A)
25.1321	(Model 24 only)
25.1439(b)(2)(ii)	(except Models 55, 55B, 55C, 31, 31A and 60)
25.1505(b)(1)	(except Models 31, 31A, 55C, and 60)

Application for Type Certificate dated May 13, 1965.
Type Certificate No. A10CE issued March 17, 1966.

Production Basis

Production Certificate No. 317 for Models 24, 24A, 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F, 24F-A, 25, 25A, 25B, 25C, 25D, 25F, 28, 29, 35, 36, 55, and 55B; for Model 31, S/N 001 through 019; for Model 35A, S/N 067 through 659; for Model 36A, S/N 018 through 059, 062, and 063; for Model 55C, S/N 135 through 143.

Production Certificate No. 329CE for Model 31, S/N 020 and on; for Model 35A, S/N 660 and on; for Model 36A, S/N 060, 061, 064 and on; for Model 55C, S/N 144 and on; for Model 31A, S/N 035 and on; for Model 60, S/N 001 and on.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. Gates Learjet Report 26WB-10 (Model 35, 36) defines the required equipment.

Learjet Service Manuals or Maintenance Manuals for the Models 24, 25, 28/29, 31, 31A, 35/36, 55, 55B, 55C, and 60 include structural component replacement lives from FAA Approved Learjet Reports 24-S47, 25-S47, 28/29-S47, 26-S47, 31-S47, 54/55-S47, and 60-S47 respectively.

NOTE 1. (a) Current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification. The empty weight and corresponding center of gravity locations must include:

	MODELS				
	24/24A/ 24B/24B-A	25/25A	24E *24C	24F/24F-A 24D/24D-A	25D/25F 25B/25C
Unusable fuel (based on 6.7 lbs per gal.)	183.0 lb. at 221.3	183.0 lb. at 371.3	145 lb. at 220.4	156 lb. at 222.2	156 lb. at 371.3
Unusable Oil	4.8 lb. at 308.0	4.8 lb. at 453.0	4.8 lb. at 303.0	4.8 lb. at 303.0	4.8 lb. at 453.0
Hydraulic fluid	14.0 lb. at 334.2	14.0 lb. at 485.0	14.0 lb. at 334.2	14.0 lb. at 334.2	14.0 lb. at 485.0

	35A/36A 35/36	28	29	55/55B/55C	31/31A	60
Unusable fuel (based on 6.7 lb. per gal.)	136.9 lb. at 368.2	84 lb. at 382.1	85 lb. at 382.7	121.0 lb. at 384.4	111.0 lb. at 382.2	32 lb. at 382.6
Unusable Oil	16.6 lb. at 437.8	4.8 lb. at 453.0	4.8 lb. at 453.0	16.6 lb. at 459.0	28.3 lb. at 437.8	17.8 lb. at 467.1
Hydraulic fluid	14.0 lb. at 485.0	14.0 lb. at 485.0	14.0 lb. at 485.0	140 lb. at 507.6	14.0 lb. at 485.0	15.2 lb. at 517.8

*Also applicable to aircraft modified per ECR 1228

(b) The airplane must be so loaded that the C.G. is within the specified limits at all times.

NOTE 2. The placards specified in the appropriate FAA Approved Flight Manual or Service Manual or Maintenance Manual must be displayed.

NOTE 3. All replacement seats (crew and passenger), although they may comply with TSO C39 must also be demonstrated to comply with FAR 25.785.

NOTE 4. The limitations section of the Airplane Flight Manual contains indicated airspeed (IAS) operating limitations. Airspeed instrument will be marked with appropriate indicated airspeed.

For the airspeed limits of the following models, see their respective airplane flight manuals: Models 24B-A, 24D-A, 24F-A, 24 with ECR 1515, 24B with ECR 1514, 24D with ECR 1510, 25 with ECR 1513, 25B with ECR 1511, 25C with ECR 1511, 35 with ECR 1512, 36 with ECR 1512, 35 with ECR 1512 and ECR 1495, 35 with ECR 1517, 36 with ECR 1517, and 35A with ECR 1495.

NOTE 5. (a) Commercial kerosene, JP-4 and JP-5 type fuel, conforming to GE. jet fuel spec. D50T1011. MIL-I-27686 anti-icing additive must be blended into aircraft fuel in concentrations of not less than 0.060 or more than 0.15 percent by volume. JP-4 fuel supplied in the United States of America has the necessary anti-icing additive. JP-4 fuel supplied in other countries may not contain the anti-icing additive. See Airplane Flight Manual for fuel procedures.

NOTE 5. (cont'd)

(b) Commercial kerosene, JP-4 and JP-5 fuel, conforming to AiResearch Manufacturing Co. Fuel Specification EMS 53111, EMS 53112, EMS 53113, or EMS 53116 except Model 31 aircraft equipped with fuel heaters per ECR 2637 or AAK 89-6 are not approved for use with JP-4 fuel. MIL-I-27686 anti-icing additive must be blended into aircraft fuel in concentrations of not less than 0.060 or more than 0.15 percent by volume except on those Model 55, 55B, and 55C aircraft equipped with fuel heaters per ECR 2051 or AAK 55-81-1 and Model 31 aircraft equipped with fuel heaters per ECR 2637 or AAK 89-6. JP-4 fuel supplied in other countries may not contain the anti-icing additive. See Airplane Flight Manual for fuel procedures.

(c) Commercial kerosene and JP-5 fuel, conforming to AiResearch Manufacturing Co.Fuel Specification EMS 53111, EMS 53112, EMS 53113, or EMS 53116. MIL-I-27686 anti-icing additive must be blended into aircraft fuel in concentrations of not less than 0.060 or more than 0.15 percent by volume. See Airplane Flight Manual for fuel procedures.

(d) Commercial JP-5, JP-8, Jet A, Jet A-1 type fuels, conforming to Pratt & Whitney Canada Specification CPW204 and Service Bulletin No. 24004 and later revisions. See Airplane Flight Manual for fuel procedures.

NOTE 6. General Electric CJ-610-6 engines derated to 2850 lb. of thrust are eligible in pairs when installed per ECR 319, and eligible mixed with a CJ-610-4 engine on one side when installed per ECR 615. The AFM must be revised to include applicable Engine Pressure Ratio and Engine Exhaust Temperature Data.

NOTE 7. The following optional seating configurations are eligible for approval:

Models 24, 24A, 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F and 24F-A	Two pilots, 9 passengers (per ECR 617B)
Models 25, 25A, 25B, 25C, 25D and 25F	Two pilots, 10 passengers, 1 attendant (per ECR 619B)
Models 28, 29, 35, 36, 35A, 36A	Two pilots, 10 passengers, 1 attendant (Ref.Learjet Report No. 26-D261)
Models 31,31A: Maximum number of occupants:	13 (Two pilots, 10 passengers, 1 attendant)

Ref. Learjet Report No. ER-188-TUC for approved seating configurations.

Models 55, 55B, 55C:
Maximum number of occupants: 13 (Two pilots, 10 passengers, 1 attendant)
Ref. Learjet Report No. ER-084-TUC for approved seating configurations.
Model 60:
Maximum number of occupants: 13 (two pilots, 10 passengers, 1 attendant)
Ref. Learjet Report No. ER-211 for approved seating configurations.

NOTE 8. The following aircraft are eligible for a maximum takeoff weight of 13,500 lb. when modified in accordance with ECR 736:
Model 23, S/N 003 to 039 if modified in accordance with ECR 233.
Model 23, S/N 040 to 069 if modified in accordance with ECR 230.
Model 23, S/N 070 to 099 if modified in accordance with ECR 227.
Model 24, S/N 100 through 180.

NOTE 9. Airplanes complying with ECR 812 are Model 24C.
Those complying with ECR 858 are Model 24D.
Those complying with ECR 990 are Model 24D-A.
Those complying with ECR 1463 are Model 24E.
Those complying with ECR 1464 are Model 24F.
Those complying with ECR 1565 are Model 24F-A.

NOTE 10. Airplanes complying with ECR 813 are Model 25C.
Those complying with ECR 859 are Model 25B.
Those complying with ECR 980 are Model 25A.
Those complying with ECR 1465 are Model 25D.
Those complying with ECR 1469 are Model 25F.

NOTE 11. Model 24 series aircraft are Model 23 aircraft modified to the Model 24 configuration are eligible for 11,400 lb. zero wing fuel weight limitation upon compliance with ECR 1071, ECR 1514, or ECR 1515. Model 25, 25B and 25C aircraft are eligible for 12,500 lb. zero wing fuel weight limitation upon compliance with ECR's 1132 and 1144. This eligibility does not apply to Model 25B or 25C aircraft with ECR 1511, nor to Model 25 airplanes with ECR 1513.

NOTE 12. Model 24 aircraft are authorized to operate at maximum takeoff gross weight of 12,499 lbs. in accordance with AFM without redesignation as Model 24A. The Model 24A is a specific aircraft model and not a lightweight Model 24.

NOTE 13. Special Conditions for export.
The following models are eligible for export to the following countries:

Country / Model	When modified according to Learjet Inc.
Australia	
25B/C	ECR 1248 (Ineligible for U.S. airworthiness without demodification)
25D	ECR 1087 (Ineligible for U.S. airworthiness without demodification)
25F through S/N 349	ECR 1087 (Ineligible for U.S. airworthiness without demodification)
35/36	ECR 1401 (Ineligible for U.S. airworthiness without demodification)
35A/36A	ECR 1531 (Ineligible for U.S. airworthiness without demodification)
55	ECR 2550 (Ineligible for U.S. airworthiness without demodification)
60	M6087030
Argentina	
31A	ECR 4131
60	ECR 3740
Austria	
60	ECR 3840
Brazil	
31	ECR 2655
31A	ECR 3544
55/55B	ECR 2576
55C	ECR 2683
60	ECR 3705
Bermuda	
31A	ECR 4234
60	ECR 3852
Belgium	
60	ECR 8161(Private) or ECR 8145 (Public)
Canada	
35/35A/36/36A	ECR 1447
31A	ECR 3186(Private) or ECR 3187 (Public) (Ineligible for U.S. airworthiness without demodification)
55	ECR 2549 (Ineligible for U.S. airworthiness without demodification)
60	ECR 3726
Cayman Islands	
60	ECR 4174
China	
60	ECR 4035
Czech Republic	
31A	ECR 3870

NOTE 13. (cont'd)

Country / Model	When modified according to Learjet Inc.
Denmark	
31A	ECR 4237
60	ECR 4224
France	
25, 25B/C	ECR 1194
35/35A/36/36A	ECR 1358 (Ineligible for U.S. airworthiness without demodification)
55	ECR 2538
Germany	
35/36	ECR 1318
35A/36A	ECR 1536
31	ECR 2791
31A	ECR 3255 (Private) or ECR 3236 (Public)
55	ECR 2533
55C	ECR 2807
60	ECR 4034 (Private) or ECR 4149 (Public)
Guatemala	
31A	ECR 3641
Indonesia	
31A	ECR 3640
Italy	
31A	ECR 4037
60	ECR 4221
Luxembourg	
31A	ECR 3935
Malaysia	
60	ECR 3826
Mexico	
31A	ECR 3321
60	ECR 3835
Namibia	
31A	ECR 3869
Pakistan	
31A	ECR 3639
Philippines	
31A	MDL M100296ICT
60	MDL M100208ICT
Portugal	
31/31A	M3187009
United Kingdom	
35A/36A	ECR 1793 (Ineligible for U.S. airworthiness without demodification)
55	ECR 2383 (Ineligible for U.S. airworthiness without demodification)
United Arab Emirates	
60	ECR 4097
Sweden	
35/36	ECR 1477
Switzerland	
31A	ECR 4048
60	ECR 3708
South Africa	
31A	ECR 4049
60	ECR 3890
Turkey	
60	ECR 3704

NOTE 14. Model 35 and 36 airplanes are defined by ECR 866.
Airplanes complying with ECR 1466 are Model 35A.
Airplanes complying with ECR 1467 are Model 36A.

NOTE 15. Models 35 and 36 configured per ECR 1404 are eligible for restricted category photographic mission operation. Refer to Airplane Flight Manual Supplement for conversion instructions from restricted to standard category conversion.

NOTE 16. Model 24E and 24F, S/N 24-350, 24-352 through 24-354, 24-356 and on, comply with ECR 1410 which includes sub-ECR's 1444, 1559 and 1563.

Model 25D and 25F, S/N 25-230 and on, comply with ECR 1409 which includes sub-ECR's 1445, 1559 and 1563.

ECR installation effectivity is as follows:

	ECR No.		
Model	Top	Sub	Model Effectivity
24E/F	1410		24-350, 24-352 through 24-354, 24-356 and on
		1444	24-350 and on
		1559	24-348 and on
		1563	24-350, 24-352 through 24-354, 24-356 and on
25D/F	1409		25-230 and on
		1445	25-227 and on
		1559	25-223 and on
		1563	25-230 and on
35A/36A		1446	35-107, 35-113 and on, 36-032 and on
		1559	35-107, 35-113 and on, 36-032 and on

Equipment installed in non-pressurized areas of these airplanes shall be approved for the appropriate environmental conditions resulting from operation at the maximum approved altitude.

NOTE 17. Models 35/36 and 35A/36A configured per ECR 2234 or odified per AAK 80-2 are eligible for a Takeoff Gross Weight of 18,300 pounds and Maximum Ramp Weight of 18,500 pounds.

NOTE 18. Models 35/36 and 35A/36A configured per ECR 2233 or modified per AAK 80-3 are eligible for a Landing Gross Weight of 15,300 pounds.

NOTE 19. Model 55 configured per ECR 2173 is eligible for a Takeoff Gross Weight of 20,500 pounds. Model 55 configured per ECR 2554 or modified per AAK 55-82-3 is eligible for a Takeoff Gross Weight of 21,000 pounds. Model 55 configured per ECR 2431 or modified per AAK 55-84-6 is eligible for Takeoff Gross Weight of 21,500 pounds. Model 55 configured per ECR 2432 or modified per AAK 55-84-3 is eligible for landing weight of 18,000 pounds. Refer to Airplane Flight Manual for operting limitations with this modification.

NOTE 20. Models 55, 55A, 55B, and 60 equipment installations or other modifications to the tailcone area must be coordinated with the controlling FAA Region.

NOTE 21. The Model 55 is defined by ECR 2515, Model 55B is defined by ECR 2604, and Model 55C is defined by ECR 2629.

NOTE 22. Models 55, 55B, 55C, and 60 instrument panel and center console modifications must be coordinated with the controlling FAA Region.

NOTE 23. Two each CJ-610-8A engines may be installed per Gates Learjet Corporation Airplane Accessory Kit No. AAK 83-1.

NOTE 24. U.S. Air Force C-21A aircraft configured per ECR 2420 and ECR 5288 (S/N 35-509 through 35-588) and ECR 5628 (S/N 35-624, 35-625, 35-628, and 35-629) are Model 35A airplanes. Conversion to civil registry requires no modifications except removal of non-FAA approved military equipment added after airplanes have been placed in military service.

NOTE 25. For Model 35/36/35A/36A series aircraft, refer to Airplane Flight Manual for zero wing fuel weights above 13,500 lbs.

NOTE 26. Model 23 airplanes that have been modified to Model 24 configuration per ECR's 233, 230, or 227 are to be considered transport category airplanes under Part 25 and Type Certificate A10CE. All FAA actions affecting Model 24 airplanes under Type Certificate A10CE are applicable to these modified aircraft.

NOTE 27. Model 36A airplanes configured per ECR 2442 are approved for restricted category operation, aerial surveying (Maritime Surveillance). For airspeed limits, CG limits, and fuel capacities of these airplanes, refer to Airplane Flight Manual Supplement W1055. FAR 25.175(d) was found to be inappropriate for restricted category certification of these airplanes.

NOTE 28. Model 35, 36, 35A and 36A aircraft modified per ECR 2342 or AAK 83-2. (FC-530 Autopilot and Rosemount Probe)

NOTE 29. Model 35, 36, 35A and 36A aircraft modified per ECR 2498. (350 knot windshield)

NOTE 30. Model 31 is eligible for optional Takeoff Gross Weight of 16,500 lbs. as defined by Learjet Drawing No. 3100000.

NOTE 31. Model 55C is eligible for optional Takeoff Gross Weight of 21,500 lbs., as defined by Learjet Drawing No. 5500004.

NOTE 32. Engines are eligible for installation only in identical model number pairs.

NOTE 33. Model 31A is eligible for optional Takeoff Gross Weight of 16,500 lbs. as defined by Learjet Drawing No. 3100004.

NOTE 34. The Model 31 is defined by ECR 2621. Model 31A is defined by ECR 2810.

NOTE 35. Model 31 aircraft with ECR 2679 is eligible for improved Balanced Field Length and reduced V_{MCG}.

NOTE 36. The Model 60 is defined by ECR 2940.

NOTE 37. The Model 60 is eligible for optional Takeoff Gross Weight of 23,100 lbs. as defined by Learjet Drawing No. 6088001. The Expanded C.G. (ECR 3845), see NOTE 39, also includes an increased Ramp and Takeoff Gross Weight.

NOTE 38. These engines are eligible at Serial Number -026 through -065 as defined by Learjet Inc. ECRs 3504 and 3719; Serial Number -066 through –128 as defined by Learjet Inc. ECR 3926; Serial Number -002 through -025 incorporating Learjet SB 60-78-1.

NOTE 39. Model 60 is eligible for Expanded C.G. Envelope and optional Takeoff Gross Weight of 23,500 Lbs. as defined by Learjet Inc. ECR 3845.

NOTE 40. Model 31 is eligible for optional Takeoff Gross Weight of 17,000 Lbs. and optional Maximum Zero fuel Weight of 13,500 Lbs. as defined by Learjet Inc. STC ST00583WI.

NOTE 41. Model 31A is eligible for optional Takeoff Gross Weight of 17,000 Lbs. and optional Maximum Zero Fuel Weight of 13,500 Lbs. as defined by Learjet STC ST00583WI or Learjet Inc. ECRs 3938 and 4152.

NOTE 42. Model 31A is eligible for optional Takeoff Gross Weight of 17,700 Lbs. as defined by Learjet Inc. ECR 4202.

NOTE 43. Model 31A is eligible for optional Max Landing Weight of 16000, Lbs. as defined by Learjet Inc. ECR 4214.

NOTE 44. Model 31A is eligible for optional Engine (P/N 3073610-4) and Fuel Computer (P/N 2119010-3) installations as defined by Learjet Inc. ECR 4165.

NOTE 45. {Deleted}

NOTE 46. These engines are eligible at aircraft serial number 60-129 and on as defined by Learjet Inc. ECR 4126. Aircraft serial numbers 60-002 through 60-128 are eligible when both EECs are replaced per Learjet Inc. Service Bulletin 60-76-2.

NOTE 47. The airplane models listed below are the subjects of Special Condition related to operation at high altitude. This special condition includes pressurization system requirements, as well as damage tolerance requirements on the pressure vessel. Therefore, any changes to the pressurization system or modifications or repairs to the pressure vessel must be approved in accordance with the requirements defined in the special condition.

The damage tolerance requirements in the special condition are specified in terms of cabin altitude time history, which is a function of the cabin leak rate. For models (**see table below**) the specified cabin altitude time history requirement can be met with a pressure vessel opening of (**see table below)**, (assuming an emergency descent). The determination of an equivalent crack length will depend upon the particular location of the crack, the pressure vessel configuration in that location, and the direction of the crack, etc. The approval of modifications and/or repairs must take into account the requirements of the special condition and how they apply to the particular location and configuration being modified or repaired. The resulting inspection program must also consider other applicable structural criteria.

Model (s)	High Altitude Special Condition	Pressure Vessel Opening (sq. in.)
24E, 24F (ECR 1410) 25D, 25F (ECR 1409) 28, 29	25-72-CE-8, Par. 3(a)(2)(i) & 3(a)(2)(ii)	3.5
31, 31A	25-99-CE-14 Par. D.1. (b)(1) & D.1. (b)(2)	1.5
35A, 36A (ECR 1446 & 1559)	25-72-CE-8, Par. 3(a)(2)(i) & 3(a)(2)(ii)	4.0
55, 55B, 55C	25-99-CE-14 Par. D.1. (b)(1) & D.1. (b)(2)	2.0
60	25-99-CE-14 Par. D.1. (b)(1) & D.1.(b)(2)	1.2

NOTE 48. The airplane models listed below meet the requirements of manufactures group approval for operation in Reduced Vertical Separation Minimum (RVSM) airspace when modified by the following Learjet Inc Supplemental Type Certificates or Service Bulletins:

Models 35/35A/36/36A with FC-200 Autopilot	Supplemental Type Certificates: ST01199NY-D, ST00321WI-D, ST00952SE-D
Models 35/35A/36/36A with FC-530 Autopilot	Supplemental Type Certificates: ST00913WI, ST00952SE-D
Model 31A	Service Bulletin: SB31-34-11
Model 55	Supplemental Type Certificates: ST00945WI, ST01050SE-D
Model 55B/C	Supplemental Type Certificates: ST00951WI-D, ST01050SE-D
Model 60	Service Bulletin: SB 60-34-6

The operator is responsible for obtaining RVSM operational approval directly from the FAA.

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