

Lear 35A SER# 234 & 590 Limitations with FC-530 Autopilot

Limitation	Associated Number
1. Certified under part 25	
2. Approved for VFR, IFR, day, night, icing conditions.	
3. Minimum flight crew is (2) two.	
4. No Aerobatics including spins are approved	
5. Intentional stalls above 18,000 ft. prohibited with flaps and gear extended	
6. Max Ramp most Aircraft	18,500 lbs
7. Max Takeoff most aircraft	18,300 lbs.
8. Max Zero Wing and Tip Fuel Weight	13,500 lbs.
9. Max Landing Weight	15,300 lbs.
10. Do not extend or operate spoilers above Mmo Vmo	
11. Vmo: Up to 8000 ft.	300 KIAS
8000 and above	350 KIAS
12. Mmo	.81 Mach
13. Mmo with any BLE missing	.77 Mach
14. Mmo with Mach Trim and Autopilot Disengaged	.74
15. Mmo with Stick Puller Inoperative (left S.W. switch off)	.74
16. Va (Stall speed with 3.0 g's at gross wt or highest speed that full rudder and aileron can be applied without overstress.	
17. Vlo	200 KIAS
18. Vle	260 KIAS
19. Vfe 1-8 / 9-20 / 21-40	200/ 185-200 / 150 KIAS
20. Vmca Sea Level -18c (0 f)	110 KIAS
21. Vmcg	103 KIAS
22. Max Pressure Altitude for TO	10,000 ft. MSL
23. Max Tailwind	10 KTS
24. Max Water/Slush	¾" 19mm
25. Max Nosewheel Steering Speed	45 Kts GS
26. Max Tire Limit	182 Kts GS
27. Max Tip Landing WT	925 lbs.
28. Minimum Fuel each wing TO or G/A	600 Lbs.
29. Do not take off with Cabin Pressurized	
30. Seat Belts and Shoulder Harness worn TO & Ldg	
31. Max Operating Altitude	45,000 ft
32. Flight Loads Flaps Up	+3.0 to -1 g (70 degree bank)
Flaps Down	+2.0 to 0 g (60 degree bank)
	Pullups, overspeeds, push-overs limited to these values
33. Both Stall Warning Switches must be on	
34. Pitch Trim runaway training prohibited in flight	
35. Yaw Damp checks must be completed before each flt.	
36. One yaw damper must be on for all flight conditions except TO, LDG, and rudder trimming	
37. Do not extend spoilers with flaps extended while airborne	
38. Do not extend spoilers or operate with spoilers deployed at speeds above Vmo Mmo	
39. Aux Hydraulic Pump	3 min on 20 min off
40. Hydraulic fluid	MIL - H-5606
41. Generator Output Flight / Ground	400 / 320
42. With no CUR LIM or Start Disengage Check every start	
43. Engine Sync off for TO, LDG, SE Ops	
44. Max GPU Output	1,100 Amps
45. Freon Air Cond (No FCN 89-1) / (FCN 89-1) Off Above	18,000 / 35,000
46. Crew and Pax O2 Not Approved Above	40,000 ft. Cabin Alt

33. Pax Mask intended for use during	Emerg Descent
34. Pax Mask will not provide sufficient O2 Above	34,000 ft Cabin Alt
35. Pax Mask not intended for prolonged use above	25,000 ft Cabin Alt
36. Without Emerg Press Valves Wear Masks Above	41,000 MSL
37. O2 Masks must be quick donning above	25,000 ft
38. Max Diff Press	10 psi
39. Windshield and Radome Alcohol grade	0-M-232 Grade A
40. N1 or N2 Overspeed 5 Sec / 1 Minute is	103-105% / 100-103%
41. Max Oil Temp	140 C
42. Oil Type	EMS 53110, Type II
43. ITT Limits Start/Takeoff/Max Cont/Max Transient	860/860 (5 Min) / 832 / 870
44. Fuel Temp for Takeoff other than JP4 or equiv	-29c (-20f)
45. Fuel Temp	-54c (-65f)
46. Any fuel in the tanks that does not register on the fuel quantity indicator is considered unusable	
47. Fuel Anti-Icing either	MIL-I-27686 or MIL-I-85470
48. EFC must be adjusted to the Specific Gravity of Fuel	
49. Mixing of fuel types is allowed	
50. When using any AV Fuel in the mix	
a. No Takeoff with Fuel Temp Lower than -54c	
b. Restricted below 15,000 feet	
c. Both Jet and Standby Pumps must be on and operating	
d. AvGas may not be used in excess of	500 Gal per 100 Hrs
Airspeed Red Line /Barber Pole 67-670 and 018-063	300 KIAS /350/.81
Airspeed Red Line /Barber Pole 671- and 064 -	350 KIAS /350/.81
Trim Takeoff Range	5 - 7.6 degrees
Cabin Altimeter Green/Yellow/Red 67-112 / 107, 133 -	0-8.9/9.2/10 / 0-9.4/9.7/10
Turbine Speed Green/Yellow/Red	48-100/103 1 Minute/103%
Turbine ITT Green/Yellow/Red	230-832/860/860c
N1 Fan Green/Yellow/Red	24-100/103 1 Minute/103%
Oil Pressure Red/Yellow/Green/Yellow/Red	25/25-38/38-46/46-55/55 3 Min. Max
Oil Temperature Green/Yellow/Red	30-127/140/140
Ammeter Yellow/Red	320-400/400
DC Voltmeter Red	32
AC Voltmeter Green	110-130
Hydraulic Pressure 067-646 Yellow/Green/Red	0-155/1,250-1,500/1,750 PSI
Emergency Air Green/Red - Yellow/Green/Red	1,800-3,000 - 1,800/3,000/3,000 PSI
O2 Pressure Green/Yellow/Red	1,550-1,850/0-300/2000PSI
AUTOPILOT FLIGHT DIRECTOR LIMITATIONS	
1. AP/FD are approved for CAT I ILS Approaches	
2. Max Operating Speed is Vmo.Mmo	
3. In Seat, Belt Fastened	
4. Pitch and Roll Axis NOT during TO & LDG	
5. Minimum Altitudes Cruise/Approach	1,000 agl/200 agl
6. Fuel Imbalance	200 lbs
7. If Severe Turbulence use Alt Hold and Soft Mode	
8. No use any axis if fails AP Monitor Check	
9. Disengage before switching static sources	
10. For VOR Approaches lower flaps 8 or more	
DRAGE CHUTE	
No Deploy in Flight	
Max Speed 150 Kts	
Max Demo XW 20 Kts	
DEE HOWARD T/R	
Ground Deployment only	
Engine Starts with T/R Prohibited	
No Use for Backing	
Disarm Immediately after T/O remain until Final Appch	
Full Reverse is 50 Kts	
Maximum Fan Speed in Reverse is 75%	
Simultaneous T/R and Drag Chute Prohibited	