

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

Limitation	Associated Number
AC Voltmeter Green	110-130
Airspeed Red Line /Barber Pole 671- and 064 -	350 KIAS /350/.81
Airspeed Red Line /Barber Pole 67-670 and 018-063	300 KIAS /350/.81
Ammeter Yellow/Red	320-400/400
Any fuel in the tanks that does not register on the fuel quantity indicator is considered unusable	
AP/FD are approved for CAT I ILS Approaches	
Approved for VFR, IFR, day, night, icing conditions.	
AUTOPILOT FLIGHT DIRECTOR LIMITATIONS	
Aux Hydraulic Pump	3 min on 20 min off
AV Fuel in the mix no Takeoff with Fuel Temp Lower than -54c Restricted below 15,000 feet	
Both Jet and Standby Pumps must be on and operating	
AvGas may not be use din excess of	500 Gal per 100 Hrs
Both Stall Warning Switches must be on	
Cabin Altimeter Green/Yellow/Red 67-112 / 107, 133 - Certified under part 25	0-8.9/9.2/10 / 0-9.4/9.7/10
Crew and Pax O2 Not Approved Above	40,000 ft. Cabin Alt
DC Voltmeter Red	32
DEE HOWARD T/R	
Disarm Immediately after T/O remain until Final Appch	
Disengage before switching static sources	
Do not extend or operate spoilers above Mmo Vmo	
Do not extend spoilers or operate with spoilers deployed at speeds above Vmo Mmo	
Do not extend spoilers with flaps extended while airborne	
Do not take off with Cabin Pressurized	
DRAGE CHUTE	
EFC must be adjusted to the Specific Gravity of Fuel	
Emergency Air Green/Red - Yellow/Green/Red	1,800-3,000 - 1,800/3,000/3,000 PSI
Engine Starts with T/R Prohibited	
Engine Sync off for TO, LDG, SE Opns	
Flight Loads Flaps Up / Flaps Down	+3.0 to -1 g (70 degree bank) +2.0 to 0 g (60 degree bank) Pullups, overspeeds, push-overs limited to these values
For VOR Approaches lower flaps 8 or more	
Freon Air Cond (No FCN 89-1) / (FCN 89-1) Off Above	18,000 / 35,000
Fuel Anti-Icing either	MIL-I-27686 or MIL-I-85470
Fuel Imbalance	200 lbs
Fuel Temp	-54c (-65f)
Fuel Temp for Takeoff other than JP4 or equiv	-29c (-20f)
Full Reverse is 50 Kts	
Generator Output Flight / Ground	400 / 320
Ground Deployment only	
Hydraulic fluid	MIL - H-5606
Hydraulic Pressure 067-646 Yellow/Green/Red	0-155/1,250-1,500/1,750 PSI
If Severe Turbulence use Alt Hold and Soft Mode	
In Seat, Belt Fastened	
Intentional stalls above 18,000 ft. prohibited with flaps and gear extended	
ITT Limits Start/Takeoff/Max Cont/Max Transient	860/860 (5 Min) / 832 / 870
Max Demo XW 20 Kts	
Max Diff Press	10 psi
Max GPU Output	1,100 Amps
Max Landing Weight	15,300 lbs.
Max Nosewheel Steering Speed	45 Kts GS
Max Oil Temp	140 C
Max Operating Altitude	45,000 ft

Max Operating Speed is Vmo.Mmo	
Max Pressure Altitude for TO	10,000 ft. MSL
Max Ramp most Aircraft	18,500 lbs
Max Speed 150 Kts	
Max Tailwind	10 KTS
Max Takeoff most aircraft	18,300 lbs.
Max Tip Landing WT	925 lbs.
Max Tire Limit	182 Kts GS
Max Water/Slush	¾" 19mm
Max Zero Wing and Tip Fuel Weight	13,500 lbs.
Maximum Fan Speed in Reverse is 75%	
Minimum Altitudes Cruise/Approach	1,000 agl/200 agl
Minimum flight crew is (2) two.	
Minimum Fuel each wing TO or G/A	600 Lbs.
Mixing of fuel types is allowed	
Mmo	.81 Mach
Mmo with any BLE missing	.77 Mach
Mmo with Mach Trim and Autopilot Disengaged	.74
Mmo with Stick Puller Inoperative (left S.W. switch off)	.74
N1 Fan Green/Yellow/Red	24-100/103 1 Minute/103%
N1 or N2 Overspeed 5 Sec / 1 Minute is	103-105% / 100-103%
No Aerobatics including spins are approved	
No Deploy in Flight	
No use any axis if fails AP Monitor Check	
No Use for Backing	
O2 Masks must be quick donning above	25,000 ft
O2 Pressure Green/Yellow/Red	1,550-1,850/0-300/2000PSI
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
Oil Type	EMS 53110, Type II
One yaw damper must be on for all flight conditions except TO, LDG, and rudder trimming	
Pax Mask intended for use during	Emerg Descent
Pax Mask not intended for prolonged use above	25,000 ft Cabin Alt
Pax Mask will not provide sufficient O2 Above	34,000 ft Cabin Alt
Pitch and Roll Axis NOT during TO & LDG	
Pitch Trim runaway training prohibited in flight	
Seat Belts and Shoulder Harness worn TO & Ldg	
Simultaneous T/R and Drag Chute Prohibited	
Trim Takeoff Range	5 - 7.6 degrees
Turbine ITT Green/Yellow/Red	230-832/860/860c
Turbine Speed Green/Yellow/Red	48-100/103 1 Minute/103%
Va (Stall speed with 3.0 g's/ gross wt or highest speed that full rudder & aileron can be applied without overstress.	
Vfe 1-8 / 9-20 / 21-40	200/ 185-200 / 150 KIAS
Vle	260 KIAS
Vlo	200 KIAS
Vmca Sea Level -18c (0 f)	110 KIAS
Vmcg	103 KIAS
Vmo: Up to 8000 ft. / 8000 and above	300 KIAS / 350 KIAS
Windshield and Radome Alcohol grade	0-M-232 Grade A
With no CUR LIM or Start Disengage Check every start	
Without Emerg Press Valves Wear Masks Abv	41,000 MSL
Yaw Damp checks must be completed before each flt.	