

FALCON

50

NORMAL PROCEDURES



Revision 8.4

PILOT CHECKLIST

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LIST OF EFFECTIVE PAGES

NOTE:

Revision numbers in footers occur at the bottom of every page that has technical changes to the text and/or illustrations. Reflow of pages, grammatical, or typographical changes that do not affect the meaning are excluded from this list.

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These are suggested procedures only and in no way supersede current procedures outlined in the FAA-approved *Flight Manual* and any revisions thereto. In the case of conflict, the *Flight Manual* takes precedence.

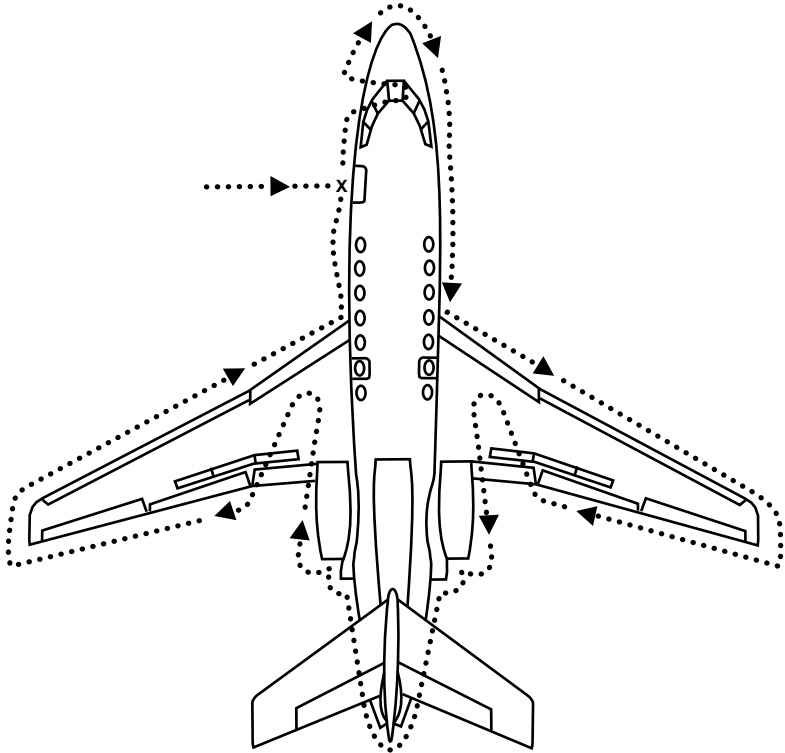
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NORMAL PROCEDURES

PREFLIGHT — EXTERIOR INSPECTION

FORWARD FUSELAGE



1. Left Normal Static Ports: Cover/Condition.....REMOVED/CHECKED
2. Left Normal Pitot Probe: Cover/ConditionREMOVED/CHECKED
3. Left Angle-of-Attack SensorCOVER REMOVED
4. Left Emergency Static Port Cover/Condition.....REMOVED/CHECKED

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PREFLIGHT – EXTERIOR INSPECTION (Cont)

FORWARD FUSELAGE (Cont)

- 5. Left Temperature Probe Cover/ConditionREMOVED/CHECKED
- 6. Cockpit WindowsCHECKED/CLEAN
- 7. Windshield Wipers.....STOWED
- 8. Nose Landing Gear:
 - a. No Hydraulic Leaks, TireCHECKED
 - b. Torsion Link PinINSTALLED
 - c. Chock.....AS REQUIRED
- 9. Taxi Light: ConditionCHECKED
- 10. Nose Cone Closed and Locked.....CLOSED
- 11. Right Emergency Static Port: Cover/Condition....REMOVED/CHECKED
- 12. Right Angle-of-Attack Sensor.....COVER REMOVED
- 13. Lavatory Drain Access Door: ClosedCHECKED
- 14. Right Normal Pitot Probe: Cover/Condition.....REMOVED/CHECKED
- 15. Right Normal Static Ports: Cover/ConditionREMOVED/CHECKED
- 16. Belly Anticollision Light.....CHECKED
- 17. Ice Detection Light.....CHECKED
- 18. Emergency ExitCHECKED
 - a. Fuel Sumps.....CHECKED
- 19. Antennas.....CHECKED

RIGHT WING

- 1. Right Landing LightCHECKED
- 2. Wing Leading Edge ConditionCHECKED
 - a. Underwing Emergency LightingCHECKED
- 3. Gravity Fueling PlugCHECKED

- 4. No Fuel Leaks.....CHECKED
- 5. Navigation/Strobe Lights—Wings Tip FairingUNDAMAGED
- 6. Static Dischargers (all 4).....CHECKED
- 7. Ailerons/Flaps/AirbrakesCHECKED
- 8. Right Landing Gear:
 - a. No Hydraulic Leaks, Tire Condition.....CHECKED
 - b. Shock Absorber HeightNORMAL
 - c. Brake Wear, As NecessaryCHECKED

REAR FUSELAGE—REAR CONE—TAIL SURFACES

- 1. Right Engine Air Inlet.....COVER REMOVED/CHECKED
 - a. P_{T2} T_{T2} Probe
 - b. Cowl Locks
 - c. Oil/Fuel Bypass Pins
 - d. Generator Ventilation Outlet
- 2. Center Engine Air Inlet.....COVER REMOVED/CHECKED
 - a. Cowl Locks
 - b. Oil/Fuel Bypass Pins
 - c. Generator Ventilation Outlet
- 3. Nacelle Ventilation—DrainsCHECKED
- 4. Right Engine Tail PipeCHECKED
- 5. Engine Pylon Static Discharger.....CHECKED
- 6. Pressure Fueling Access Door.....CLOSED
- 7. External Power Connector Access DoorCLOSED
- 8. Lavatory Drain Access DoorCLOSED
- 9. Hydraulic Coupling No. 2 Access DoorCLOSED

Continued on Next Page

PREFLIGHT – EXTERIOR INSPECTION (Cont)

REAR FUSELAGE – REAR CONE – TAIL SURFACES (Cont)

- 10. APU Air Inlet and Exhaust Gas Outlet.....CHECKED
- 11. ECU Air IntakesCHECKED
- 12. Center Engine Tail Pipe.....CHECKED
 - a. Center Engine Static Dischargers.....IN PLACE
- 13. Thrust Reverser, Stowed Position.....CHECKED
- 14. Right Tailplane:
 - a. Leading Edge and Elevator Condition.....CHECKED
 - b. Static Dischargers (All 4).....IN PLACE
- 15. Vertical Stabilizer:
 - a. Leading Edge and Rudder Condition.....CHECKED
 - b. Static Dischargers (All 4).....IN PLACE
 - c. White Navigation LightCHECKED
- 16. Left Tailplane:
 - a. Leading Edge and Elevator Condition.....CHECKED
 - b. Static Dischargers (All 4).....IN PLACE
- 17. Fire Extinguishers Pressures (REAR and BAGG Compartment).....CHECKED
 - a. Hydraulic Fluid Levels
 - b. Batteries
 - c. Accumulators
 - d. S-Duct Inspection Door
 - e. STBY Pump Lever
- 18. Rear Compartment Door.....CLOSED
 - a. LatchesLATCHED
- 19. Baggage Compartment Door.....CLOSED
 - a. Red Forward and Aft Indexes.....OPPOSITE INDEX MARKS

- 20. Extinguisher discharge indicators (all 6).....CHECKED
- 21. Left Engine Tail PipeCHECKED
 - a. Engine Pylon Static DischargerIN PLACE
- 22. Nacelle Ventilation—DrainsCHECKED
- 23. Left Engine Air InletCOVER REMOVED/CHECKED
 - a. P_{T2} T_{T2} Probe
 - b. Cowl Locks
 - c. Oil/Fuel Bypass Pins
 - d. Generator Ventilation Outlet

LEFT WING

- 1. Left Landing Gear:
 - a. No Hydraulic Leaks, Tire Condition.....CHECKED
 - b. Shock Absorber HeightNORMAL
 - c. Brake Wear, As NecessaryCHECKED
- 2. Flaps/Airbrakes/AileronCHECKED
- 3. Static Dischargers (All 4)CHECKED
- 4. Navigation/Strobe Lights—Wing Tip FairingUNDAMAGED
- 5. No Fuel Leaks.....CHECKED
- 6. Gravity Fueling PlugCHECKED
- 7. Leading Edge Condition.....CHECKED
- 8. Left Landing LightCHECKED

LEFT FORWARD FUSELAGE

- 1. Emergency ExitCHECKED
- 2. Wing Inspection Light.....CHECKED
- 3. Cabin Access DoorCHECKED

PREFLIGHT – INTERIOR INSPECTION

1. Oxygen: Pressure, ValveCHECKED
2. First Aid KitCHECKED
3. Cabin and Cockpit Fire ExtinguishersINSTALLED/CHECKED
4. Crash AxeSTOWED
5. Emergency Exit Safety DevicesREMOVED
6. DocumentsON BOARD
7. L/G Free-fall Extension ControlsCHECKED
8. ECU Inlet Door ControlCHECKED/OPEN
9. Fuel Transfer Shut Off Valve Controls (All 3)CHECKED/OPEN
10. Survival EquipmentSTOWED
11. Park BrakeSET
12. ChocksREMOVED

PRESTART

NOTE

Items preceded by an (*) are only required to be accomplished on the first flight of the day only.

1. DC Power SelectionNORMAL
2. RadarOFF
3. BatteriesON
4. Battery LightsOFF
5. Volts/AmpsCHECKED

NOTE

If external power is to be used for checklist accomplishment and engine starting, run the external power checklist ③ first and then proceed to accomplish the following checklists. If external power will not be used, run this checklist first and start APU or No. 2 engine when so indicated below using the appropriate APU Start or Start No. 2 Engine as APU checklists.

6. Emergency Battery Voltage (If Equipped)CHECKED
7. #2 P. BK LightNOT FLASHING

NOTE

If this light is blinking (less than 1,200 psi), recharge the accumulator by placing the standby pump on. Once the light is no longer flashing, place the standby pump off.

8. Park Brake.....SET/LIGHT ON STEADY
9. Fuel QuantityCHECKED/SET REAR
10. Fuel CountersZEROED/SET
11. Gross Weight CounterSET

Continued on Next Page

PRESTART (Cont)

- 12. Takeoff ComputationsBUGS SET
- 13. Radios.....OFF
- 14. Batteries.....OFF
- 15. Circuit BreakersIN
- 16. Generator Switches.....ON
- 17. Engine Computer Switches.....ON
- 18. Start Selector SwitchesGROUND START
- 19. Transfer PumpsOFF
- 20. L and R IntercomCLOSED
- 21. Boost PumpsOFF

NOTE

If the APU is running, the No. 2 boost pump should be on.

- 22. L and R CrossfeedCLOSED
- 23. Pitot Heat SwitchesOFF
- 24. Windshield Heat SwitchesOFF
- 25. InvertersAS REQUIRED
- 26. HP Bleed Switches and PRV.....AUTO
- 27. Isolation Valve.....OPEN
- 28. Cabin and Crew Bleed Air SwitchesAUTO
- 29. Bag Air.....ON
- 30. Anti-ice Switches.....OFF
- 31. Windshield WipersOFF
- 32. Aircraft LightingOFF
- 33. Floor HeatBOTH OFF
- 34. Static Selector.....NORMAL

- 35. Compass SwitchesSLAVED
- 36. Brake SelectorNO. 1 ON
- 37. Hydraulic Standby Pump.....OFF
- 38. Temperature Controllers.....AUTO/12 O’CLOCK
- 39. T/R Emergency Stow SwitchGUARDED
- 40. Fire Pull HandlesIN
- 41. Extinguisher Switches.....POSITION ZERO/SAFETY WIRED
- 42. Normal Gear HandleDOWN/GUARDED
- 43. Emergency Gear Handle.....IN
- 44. Emergency Fuel Transfer Switch (If Equipped).....OFF/GUARDED
- 45. Altitude ControllerSET
- 46. Pressurization SelectorAUTO/GUARDED
- 47. Manual Pressurization Knob.....GREEN INDEX
- 48. Pitot Static SelectorNORMAL
- 49. Oxygen Mask/SystemTESTED/RESET
- 50. Windshield Demist (If Equipped)OFF
- 51. Nose Lever.....OPEN
- 52. ELT/Flap Override (If Equipped).....GUARDED
- 53. Emergency Slat SwitchGUARDED
- 54. Slat/Flap HandleCLEAN
- 55. AirbrakeIN
- 56. Mach Trim.....OFF
- 57. Yaw DamperOFF
- 58. Auto PilotOFF
- 59a. APU StartSEE CHECKLIST A**
- OR**
- 59b. External PowerSEE CHECKLIST B**
- OR**
- 59c. Start #2 Engine.....SEE CHECKLIST C**

Continued on Next Page

PRESTART (Cont)

Ⓐ APU Start

- 1a. Sliding WindowAS REQUIRED
- 2a. BatteriesON/CHECKED
- 3a. Bus TieTIED
- 4a. Bus C and D SwitchesON
- 5a. Radios.....ON
- 6a. No. 2 Boost Pump.....ON
- 7a. No. 2 Engine and Airframe Anti-ice SwitchesOFF
- 8a. NAV LightsAS REQUIRED
- 9a. Fire WarningTESTED
- 10a. APU MasterON/GREEN
- 11a. APU Amber OIL lightON
- 12a. APU Generator SwitchON/GREEN
- 13a. APU Start Switch.....DEPRESS/START CHECKED
- 14a. Ensure Batteries No. 1 and No. 2.....CHARGING
- 15a. APU Bleed 2 mins after APU is Stabilized.....AS REQUIRED
- 16a. FMS'sON
- 17a. InvertersON/CHECKED
- 18a. INS/IRS.....STANDBY/ALIGN
- 19a. Navigation.....PROGRAMMED

OR

(B) External Power

- 1b. Batteries.....ON/CHECKED
- 2b. Battery LightsOFF
- 3b. Bus Tie.....TIED
- 4b. External PowerCONNECTED

NOTE

The GPU must be set to provide 1,000 to 1,100 amps maximum for engine starting.

- 5b. DC Power SelectorPOSITION EXT POWER
- 6b. Battery Lights.....CHECKED ON
- 7b. VoltageCHECKED
- 8b. Bus C and D Switch.....ON
- 9b. InvertersON/CHECKED
- 10b. RadiosON
- 11b. Fire WarningTESTED
- 12b. FMS'sON
- 13b. INS/IRSSTANDBY/ALIGN
- 14b. Navigation.....PROGRAMMED

OR

Continued on Next Page

PRESTART (CONT)

Ⓒ Start No. 2 Engine as APU

- 1c. Sliding WindowAS REQUIRED
- 2c. Batteries.....ON/CHECKED
- 3c. Bus Tie.....TIED
- 4c. Bus C and D Switches.....ON
- 5c. Anticollision Lights.....AS REQUIRED
- 6c. Fire Warning.....TESTED
- *7c. T/O CONFIG/ENG 2 FAIL LightsTEST
- 8c. No. 2 Boost PumpON
- 9c. No. 2 EngineSTART/CHECKED

NOTE

The crew must check for ITT rise ten seconds after the throttle is moved to IDLE, oil pressure ten seconds after light-off, and N₁ indication by 20% N₂. Terminate the start if any of the above are not achieved. Starting times will vary with the starting mode selected, but in all cases after 50 seconds discontinue start.

NOTE

If engine start is to be discontinued:

- 1. Power Lever.....CUT-OFF
- 2. Start Selector.....MOTOR START-STOP
- 3. Start Pushbutton (If Dry Motor Required)....
.....DEPRESS 15 SECONDS
- 10c. InvertersON/CHECKED
- 11c. INS/IRS.....STANDBY/ALIGN
- 12c. Navigation.....PROGRAMMED

PRESTART (CONT)

- 60. Master Failure Warning PanelTESTED
- 61. Landing Gear Panel.....TESTED
- 62. Battery Temperature MonitorTEST
- *63. Emergency Stabilizer TrimCHECK
- 64. Stabilizer Trim.....CHECKED/SET FOR T.O.
- *65. TO CONFIG/ENG 2 FAIL Lights.....TESTED
- 66. Voice/Flight RecorderTESTED
- 67. EFIS Display Reversion Switches.....AS REQUIRED
- 68. Hydraulic Standby Pump.....ON & AUTO/CHECKED
- 69. Pilot’s EFIS (If Installed)ON
- *70. Emergency Aileron TrimCHECKED/LIGHT OUT
- 71. Rudder Trim.....CHECKED/SET FOR T.O.
- 72. Aileron TrimCHECKED/SET FOR T.O.
- 73. Audible Warnings (CAB/V_{MO}).....TESTED
- *74. No. 2 Stall.....TESTED
- 75. Airbrake.....CYCLED IN/LIGHT OUT
- 76. Autopilot Disengagement..... CHECKED/DISENGAGED
- 77. Pilot’s EFIS (If Installed).....OFF
- 78. Hydraulic Standby Pump.....OFF
- 79. INS/IRSALIGNED/NAV
WITHOUT NAVIGATION.....ATT REF

NOTE

If aircraft is moved during the IRS alignment period, the IRU stops the current alignment and restarts a full alignment 30 seconds after the motion has stopped.

START

NOTE

Items preceded by an (*) are required to be accomplished on the first flight of the day only.

1. Cabin Access DoorCLOSED
2. Safety Catch Aligned With Index MarksCHECKED
3. Latches (all 10)CHECKED
4. Cabin Light.....OUT
5. Entrance CurtainOPEN
6. Seat Belt/No Smoking.....ON
7. EMERG LightsON/ARMED
8. Anti-Collision Lights.....AS REQUIRED
9. Boost Pumps (all 3).....ON
10. DC Power SelectorAS REQUIRED
 - a. If a battery start and SAT greater than -15° CNORMAL
 - b. If a battery start, no APU, and SAT less than -15° CLOW TEMP START
 - c. If an APU assisted start.....NORMAL
 - d. If an external power (GPU) start.....EXT POWER
11. No. 2 EngineSTART/CHECKED

CAUTION

Do not start No. 1 engine first under any circumstances as electrical eccentricities may occur. No. 2 engine should be started first.

12. No. 3 EngineSTART/CHECKED
13. No. 1 EngineSTART/CHECKED

AFTER START

1. DC Power Selector.....NORMAL

NOTE

If external power was used, when switching to NORMAL, the battery lights will go out and all three generator lights will remain on until power has been disconnected.

2. External Power CordDISCONNECTED
3. Engine ParametersCHECKED
- a. N₁ROTATING
- b. N₂52% - 65%
- c. Oil Pressure25-46 PSI
- d. Oil TemperatureLESS THAN 127° C
- e. ITTWITHIN LIMITS

NOTE

Other instrument readings will vary greatly with altitude and temperature depending on the individual engine.

4. Batteries: Amps/Temps.....CHECKED
5. Generators: Volts/AmpsCHECKED
6. Bus TieFLIGHT NORMAL (LIGHT OUT)
7. Transfer Fuel PumpsALL ON/LIGHTS OUT
8. EFISON
9. Cockpit LightingAS REQUIRED
10. Emergency Horizon.....UNCAGED
11. Emergency Batteries (If Equipped)ON
12. Radios.....ON/SET
13. Transponder/TCASON/TESTED
14. Marker BeaconsTESTED

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AFTER START (Cont)

- 15. GPWS.....TESTED
- 16. Radar.....STANDBY
- 17. Oxygen Mask InterphoneCHECKED
- *18. No. 1 Stall.....TESTED
- 19. Mach TrimON
- 20. Compass HeadingsBOTH CHECKED
- 21. Circuit BreakersIN
- 22. Galley PowerSET
- 23. Windshield Heat/SideNORMAL/ON

NOTE

Windshield heat will affect the accuracy of the standby compass.

- 24. APU Shutdown.....PER MANUFACTURER
- 25. Hydraulic Standby PumpON
- *26. Anti-iceCYCLED/SET FOR T.O.
- *27. Engine Computers Manual ModeCHECKED/ON

CAUTION

In case of uncommanded acceleration of the engine:

- Immediately set the corresponding engine CMPTR back on.
- Shut down the engine.

- 28. Anti-Skid.....TESTED
- 29. Passenger BriefingCOMPLETE
- 30. Sliding WindowCLOSED
- 31. Flight ControlsCHECKED
- 32. Hydraulic: Pressure/QuantityCHECKED

Continued on Next Page

-
- 33. AltimetersSET/CROSS-CHECKED
 - 34. Flight DirectorsCHECKED/SET
 - 35. Autopilot.....OFF (LIGHT OUT)
 - 36. Yaw DamperAS REQUIRED
 - 37. Flight InstrumentsTESTED/SET FOR T.O.
 - 38. APU Master (With Zero RPM)PUSHED
 - 39. T.O. BriefingCOMPLETE

TAXI

- 1. Park BrakeOFF
- 2. Taxi Light.....ON
- 3. No. 2 BrakesCHECKED/#1 ON
- 4. Slats/Flaps.....CYCLED/SET FOR T.O.
- 5. Thrust Reverser.....CHECKED/STOWED

BEFORE TAKEOFF

- 1. Brake Selector#1 ON/LIGHTS OUT
- 2. Start Selector Switches.....AIR START
- 3. Ignition Lights (All 3).....ON
- 4. RadarAS REQUIRED
- 5. TransponderON
- 6. FRATS (Flaps/Runway/Airbrakes/Trims/Speeds).....CHECKED
- 7. Pitot HeatsON/LIGHTS OUT
- 8. Warning Panel LightsOUT
- 9. Anticollision LightsALL
- 10. Landing Lights.....ON

AFTER TAKEOFF

1. Landing GearUP (LIGHTS OUT)
2. Anti-icing.....AS REQUIRED
3. Yaw Damper.....ON
4. Slats/FlapsCLEAN
5. Hydraulics.....CHECKED
6. Start Selector SwitchesGROUND START
7. Taxi LightOFF
8. No Smoking/Seat Belt Sign.....AS REQUIRED
9. PressurizationCHECKED
10. Cabin Temperature.....CHECKED
11. Climb Thrust.....SET

10,000 FOOT CHECK

1. Landing LightsOFF
2. Standby Pump.....AUTO
3. Seat Belt SignAS REQUIRED
4. AltimetersSET
5. Entrance CurtainAS REQUIRED

18,000 FOOT CHECK

1. Altimeters.....29.92
2. Oxygen.....AS REQUIRED
3. Station Check.....COMPLETE

CRUISE

Station (HEFOE) Check: Perform Periodically

1. Hydraulic Panel.....	CHECKED
2. Electrical Panel and Circuit Breakers	CHECKED
3. Fuel Panel	CHECKED
4. Oxygen, Pressurization and Environmental.....	CHECKED
5. Engine Parameters.....	CHECKED

DESCENT CHECK

1. Entrance Curtain.....OPEN
2. ATIS.....ACQUIRED
3. Cabin Altitude Controller.....SET
4. Anti-icing.....AS REQUIRED

TAT	-30 to -20° C	-20 to -10° C	-10 to 0° C	0 to +10° C
Minimum N ₁ speed in cruise condition	84	81	78	73
Minimum N ₁ speed in approach condition	78	78	78	73
One engine inoperative condition	91	88	84	80

If necessary during approach, extend airbrakes to help keep N₁ speed to no less than specified value, and increase approach speeds (+10 knots if position 1, +15 knots if position 2).

Continued on Next Page

DESCENT CHECK (Cont)

- 5. Fuel XFR Intercom and X-Feed.....CLOSED
- 6. AltimetersSET/X-CHECKED
- 7. Landing ComputationsCHECKED
- 8. Approach Speed.....BUGS SET
- 9. Approach BriefingCOMPLETE
- 10. Radio AltimeterSET

LANDING DATA																	
GROSS WEIGHT X 1000 LBS.																	
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	38.8	
V _{REF} (S+48)	104	106	108	110	112	114	116	118	120	121	123	125	127	128	130	131	
Holding	177	180	184	188	191	195	198	201	204	207	210	213	216	218	221	224	

For L.D./L.F.L. see Performance section; page P-18/P-21.

V_{REF} CORRECTION FOR CONFIGURATION (NEW BUG)

Outboards + 0Add + 25 KTS	Clean Wings.....Add + 30 KTS*
Outboards + 20Add + 10 KTS	Full SlatsAdd + 20 KTS
Outboards + 48Add + 5 KTS	Full Slats + 20Add + 5 KTS

*Add 3000 FT to L.D., 5000 FT to L.F.L., check V_{MBE}

CORRECTION FOR WIND

Wind Gust + 1/2 Steady State (Maximum 20 Knots)

Below 10,000 FT

- 11. Landing Lights.....ON/AS REQUIRED
- 12. Standby PumpON

APPROACH

1. Slats/FlapsSET
2. Seat Belt Sign/No Smoking SignsON
3. Anti-Icing.....AS REQUIRED
4. Radios.....SET FOR APPROACH
5. Passenger Briefing.....COMPLETED
6. Start Selector Switches.....AIR START
7. Ignition Lights(3) ON

LANDING

1. Landing Gear.....DOWN/THREE GREEN
2. Brake Selector.....#1 ON
3. Antiskid.....TESTED
4. Hydraulics (Pressure/Quantity).....CHECKED
5. Test/Stall (Aircraft without SB166).....STALL 1/STALL 2 TESTED
Test/Stall (Aircraft with SB166).....AUTO SLAT LIGHT OUT
6. Flaps.....SET
7. No Smoking SignON
8. Taxi LightON
9. Windshield WipersAS REQUIRED
10. AirbrakesIN/LIGHT OUT
11. Yaw DamperAS REQUIRED
12. Autopilot.....OFF (LIGHT OUT)
13. Landing Lights.....AS REQUIRED

GO-AROUND PROCEDURE (ALL ENGINES, FROM LANDING CONFIGURATION S+48)

1. Maximum ThrustSET
2. Pitch AttitudeGO AROUND
3. AirbrakeIN
4. Slats/FlapsS + 20°
5. Landing GearUP
6. AirspeedV_{REF} - 5 KTS

At 400 Feet AGL (Minimum)

7. AirspeedV_{REF} + 15 KTS
8. Slats/FlapsCLEAN
9. After Takeoff ChecklistCOMPLETE

AFTER LANDING

1. Thrust ReverserSTOWED
2. Anti-iceOFF
3. Windshield HeatOFF
4. Windshield WipersOFF
5. Pitot HeatOFF
6. RadarSTANDBY
7. TransponderSTANDBY
8. Bus TieTIED (LIGHT ON)
9. Start Selector SwitchesGROUND START
10. Anticollision LightsAS REQUIRED
11. Landing LightsOFF
12. Slat/Flap HandleCLEAN
13. AirbrakesRETRACTED (LIGHT OUT)

-
- 14. TrimsSET FOR T.O.
 - 15. RadiosAS REQUIRED
 - 16. APUAS REQUIRED

PARKING

- 1. Park BrakeSET/LIGHT ON STEADY
- 2. Dome LightAS REQUIRED
- 3. RadarOFF
- 4. INS/FMS/IRS/LRNOFF
- 5. Standby PumpOFF
- 6. TransponderOFF
- 7. InvertersOFF
- 8. EFIS (If Installed)OFF
- 9. Taxi LightOFF
- 10. Floor HeatBOTH OFF
- 11. Power LeversCUT-OFF
- 12. Transfer PumpsOFF
- 13. Boost PumpsOFF
- 14. Seat Belt SignOFF
- 15. EMERG LightsOFF
- 16. Anticollision LightsOFF
- 17. Navigation LightsOFF
- 18. Emergency HorizonCAGED
- 19. Emergency Batteries (If Equipped)OFF

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PARKING (Cont)

- 20. Radios.....OFF
- 21. Galley Power.....OFF
- 22. Interior Lights.....OFF
- 23. APU.....SHUTDOWN
- 24. Bus Tie.....FLIGHT NORMAL
- 25. Bus C and D SwitchesOFF
- 26. Cabin Lights.....OFF
- 27. APU Master SwitchOFF
- 28. Batteries.....BOTH OFF
- 29. ChocksIN PLACE
- 30. Park BrakeAS REQUIRED

When leaving the airplane:

- 31. Oxygen Valve (for extended stop).....CLOSED
- 32. Entrance Switch.....OFF

LIMITATIONS

LIMITATIONS

Weight

Maximum Ramp	38,800 LBS
Maximum Ramp w/SB 161	40,780 LBS
Maximum T/O	38,800 LBS
Maximum T/O w/SB 161	40,780 LBS
Maximum Landing	35,715 LBS
Maximum Zero Fuel	25,570 LBS
Minimum Flight	18,959 LBS

Altitude

Maximum Operating	FL 450
Maximum Operating w/SB 163	FL 490
Maximum Takeoff and Landing	-1,000 to + 10,000 FEET W/SB 154 -1,000 to + 14,000 FEET

Airspeed

V_{MO}:

Sea Level to 10,000 Feet	350 TO 370 KNOTS
10,000 to 24,000 Feet	370 KNOTS

FALCON 50 PILOT CHECKLIST

M_{MO}:

Above 24,000 FEET	0.86 MACH
V _A	210 KNOTS
V _{LO} /M _{LO}	190 KNOTS/0.70 MACH
V _{LE} /M _{LE}	220 KNOTS/0.75 MACH
V _{ABO} /V _{ABE}	V _{MO} /M _{MO}
V _{MCA}	82.5 KNOTS
V _{WWO}	205 KNOTS
V _{FE} Slats.....	200 KNOTS
V _{FE} Slats + 20 Flaps	190 KNOTS
V _{FE} Slats + 48 Flaps	175 KNOTS
Maximum for opening Direct Vision Window	180 KNOTS
Maximum Tire Speed (Ground).....	180 KNOTS

Auxiliary Power Unit:

Exhaust Gas Temperature:

Maximum Rated	680° C/1256° F
Maximum Allowable	732° C/1350° F

RPM:

Maximum Rated	100%
Maximum Allowable	110%
Maximum Generator Amperage.....	300 AMPS

NOTE

With Bleed Switch ON, do not perform engine or airframe anti-ice tests.

LIMITATIONS

Engine Operation

GARRETT TFE 731-3-1C

RPM Limits:

	N ₁	N ₂
Takeoff/Maximum Continuous	101.5%	100.0%
One Minute Maximum Allowable	103.0%	103.0%
Transient 5 Seconds Maximum Allowable	105.0%	105.0%

ITT Limits:

		-3	-3D
Starting	Normal	907° C	910° C
Ground	Transient (10 Seconds Max)	927° C	929° C
Air	Transient (5 Seconds Max)	977° C	971° C
Takeoff	Normal (5 Minutes Max)	907° C	910° C
	Transient (10 Seconds Max)	917° C	912° C
Maximum Continuous		885° C	910° C

Starting Time:

Ground Start and Starter Assist Airstart	From 10% N ₂ speed to light-off	10 Seconds Maximum
Windmilling Airstart	From Windmilling N ₂ speed to 60% N ₂	25 Seconds Maximum
Ground Start	From Light-off to idle	50 Seconds Maximum

Oil Pressure:

Thrust Setting	Minimum Pressure	Maximum Pressure
Takeoff or Maximum Continuous	38 psi	46 psi
Idle	25 psi	46 psi
Transient (Less Than 3 Minutes)		55 psi

FALCON 50 PILOT CHECKLIST

Oil Temperature:

Sea Level to 30,000 Feet.....127° C MAXIMUM
Above 30,000 Feet140° C MAXIMUM
Transient (Less than 2 Minutes)149° C MAXIMUM
Minimum for Initiating Take Off, and Continuous Operation.....30° C

Electrical System:

D.C. Distr. System Maximum Voltage32 VOLTS
Generator Normal Voltage28.5 VOLTS
Maximum Amperage:
Transient (1 Minute Maximum)350 AMPS
Up to 39,000 Feet300 AMPS
Above 39,000 Feet.....250 AMPS

Thrust Reverser:

The thrust reverser is approved for ground use only. It must not be used for taxiing in reverse.

Miscellaneous

Maneuvering Flight Load Factors:

Flaps Up+2.6 G TO -1.0 G

Flaps Down.....+2.0 G TO 0 G

Recommended Turbulent

Air Penetration Speed280 KNOTS/0.76 MACH

Maximum Allowable Runway Slope±2.5%

Limiting Tailwind Component10 KNOTS

Demonstrated Crosswind Component23 KNOTS

Maximum Allowable Water Depth for Takeoff3/4 INCH

Ambient Temperature at Sea Level for

Takeoff/Landing-54° C TO + 50° C

Engine computers must be operative for takeoff.

The engine synchronizer system must not be used during takeoff, landing, and missed approach.

Pressure Refueling System Maximum Feed Pressure50 PSI

Cabin Pressurization Max ▲9.1 PSI (9.5 PSI W/SB 163)

ADDITIONAL INFORMATION

FLAP OPERATION.....AI-1
AIRBRAKE OPERATION.....AI-1
THRUST REVERSER OPERATION.....AI-1
FUEL MANAGEMENT.....AI-1
AIRCRAFT OPERATION IN ICING CONDITIONSA-3

**ADDITIONAL
INFORMATION**

FLAP OPERATION

1. In flight, extend or retract the flaps to the next detent only after cessation of movement to the previous detent position.
2. Do not extend the flaps if the slat green light is not on.

AIRBRAKE OPERATION

1. The pilot should keep his hand on the control handle until proper extension or retraction of the airbrakes is ascertained.
2. If the maximum operating speed limit V_{MO}/M_{MO} is inadvertently exceeded, do not hesitate to use the airbrakes.
3. Extension of the airbrakes within 500 feet from the ground is not recommended.

THRUST REVERSER OPERATION

Full reverse thrust is usable until the airplane comes to a complete stop. However, in cross wind conditions, a 5% reduction of engine N_1 is recommended shortly before the complete stop is reached.

On landing, do not attempt a go-around after reverse thrust has been selected.

FUEL MANAGEMENT

FUELING

1. Pressure fueling

NOTE

Illumination of the **STOP FUELING** light calls for immediate interruption of the fueling operation.

Continued on Next Page

FUEL MANAGEMENT (Cont)

2. Overwing fueling

NOTE

Do not pour non-diluted additives into an empty tank.

LOW TEMPERATURE CRUISE

In case of extended cruise in cold atmosphere, with total air temperature below fuel freezing point, wing-to-feeder tank transfer may be lost.

1. Therefore monitor:
 - The total air temperature,
 - The fuel temperature indicator (SB F50-136).
2. Carefully monitor the transfer.
3. If necessary, increase mach number or decrease altitude to raise:
 - The total air temperature above 13° C (23° F) below the fuel freezing point,
 - or
 - The fuel temperature above fuel freezing point + 3° C (5° F).

TRANSFER

The transfer pumps should be switched off when there is no fuel left in the wing tanks.

XFR INTERCOM and X-FEED Systems

These systems should be deactivated for take-off, approach and landing.

FUEL QUANTITY INDICATORS

The selector switch should be in the normal REAR position.

AIRCRAFT OPERATION IN ICING CONDITIONS

ANTI-ICE

Icing Conditions

Icing conditions exist when the OAT on the ground and for take-off, or TAT in flight is 10° C or below, and visible moisture in any form is present (such as clouds, fog with visibility of one mile or less, rain, snow, sleet and ice crystals).

Icing conditions also exist when the OAT on the ground and for take-off is 10° C or below when operating on ramps, taxiways or runways where surface snow, ice, standing water, or slush may be ingested by the engines or freeze on engines, nacelles or engine sensor probes.

Engine Anti-Ice

The engine anti-ice system must not be used with total air temperature in excess of + 10° C.

Wing Anti-Ice

The wing anti-ice system must not be used with total air temperature in excess of + 10° C.

The wing anti-ice system must not be used on ground except for limited checks conducted in accordance with *Airplane Flight Manual* or *Maintenance Manual* instructions.

CAUTION

Extended flight in icing conditions with airplane in S+FLAPS 20 or S+FLAPS 48 configuration must be avoided.

Continued on Next Page

AIRCRAFT OPERATION IN ICING CONDITIONS (Cont)

TAT	-30 TO -20° C	-20 TO -10° C	-10 TO 0° C	0 TO +10° C
Minimum N ₁ speed in cruise condition	84%	81%	78%	73%
Minimum N ₁ speed in approach condition	78%	78%	78%	73%
One engine inoperative condition	91%	88%	84%	80%

If necessary during approach, extend airbrakes to help keep N₁ speed to no less than specified value, and increase approach speeds.

POS 1 – V_{REF} + 10 KTS

POS 2 – V_{REF} + 15 KTS

Extension of the airbrakes within 500 feet from the ground is not recommended.

SLAT SYSTEM OPERATION

Should the slats fail to fully retract when retraction is initiated in icing conditions (red transit light on):

1. Maintain airspeed to V_{FE} (200 KIAS) or below.
2. Leave wing anti-ice system on and maintain engine speed to no less than specified minimum.

WINDSHIELD ANTI-ICING

CAUTION

Selection of the WINDSHIELD PILOT and COPILOT switches to the MAX position should be limited to those icing conditions encountered in flight such that the ice protection afforded in the NORM position is inadequate.

PERFORMANCE

TAKEOFF SPEEDS AND BFL—SLATS + 20° FLAPSP-2

TAKEOFF SPEEDS AND BFL—SLATS ONLYP-4

TAKEOFF THRUST SETTING WITHOUT ANTI-ICE PROTECTIONP-6

TAKEOFF THRUST SETTING WITH ANTI-ICE PROTECTION.....P-6

MAXIMUM CLIMB THRUST—
THREE ENGINES OPERATING CLIMB.....P-8

HIGH ALTITUDE CRUISE LEVEL
LIMITED BY MAXIMUM CRUISE THRUSTP-10

CRUISE—0.75 MACHP-12

CRUISE—0.80 MACHP-14

CRUISE—MAXIMUM CRUISE THRUSTP-16

LANDING DATA—SLATS + 48° FLAPSP-18

LANDING DATA—SLATS + 20° FLAPSP-20

TAKEOFF SPEEDS AND BFL S + 20

P-2

TEMPERATURE/SECOND SEGMENT LIMIT

INTERPOLATION ONLY

FALCON 50

CONDITIONS: DRY RUNWAY
NO WIND
NO SLOPE

ANTI-ICE OFF
ANTISKID OPERATIVE

SLATS + FLAPS 20° TAKEOFF DATA

FOR TRAINING PURPOSES ONLY

G.W. X 1000	D A T A	PRESSURE ALTITUDE AND TEMPERATURE C°											V _R = V ₂	V _{FR}	1.5V _S	G.W. X 1000
		SEA LEVEL					2000'									
		0°	10°	20°	30°	40°	0°	10°	20°	30°	40°					
24	V ₁ BFL	91 2750	91 2850	91 2900	91 3150	91 3450	91 2950	91 2950	91 3150	91 3400	91 3750	98	113	150	24	
26	V ₁ BFL	91 2775	91 2875	91 2925	91 3200	91 3500	91 3000	91 3000	91 3200	91 3450	91 3800	101	116	155	26	
28	V ₁ BFL	91 2800	91 2900	91 2950	91 3225	91 3600	91 3025	91 3050	91 3250	91 3500	92 3900	105	120	160	28	
30	V ₁ BFL	91 2850	91 2950	91 3000	92 3300	95 3650	91 3050	91 3100	92 3300	95 3650	97 4200	109	124	165	30	
32	V ₁ BFL	96 3100	96 3200	96 3300	98 3600	101 4150	96 3400	96 3500	98 3700	100 4200	103 4800	112	127	171	32	
34	V ₁ BFL	101 3400	101 3550	101 3650	103 4050	106 4750	101 3800	101 3950	103 4100	105 4750	108 5550	116	131	177	34	
36	V ₁ BFL	106 3800	106 3900	106 4050	108 4500	111 5300	106 4200	106 4400	108 4600	110 5300	113 6250	119	134	182	36	
38	V ₁ BFL	111 4200	111 4300	111 4450	112 5050	115 6000	111 4650	111 5000	112 5150	115 6000	118 7000	122	137	188	38	
40	V ₁ BFL	115 4700	115 4800	115 4950	117 5700	118 6700	115 5200	115 5650	116 5800	119 6700		126	141	192	40	
40.7	V ₁ BFL	116 4900	116 5000	116 5200	118 6000	120 7000	116 5400	116 5900	117 6100	120 7000		127	142	195	40.7	

Revision 6

TAKEOFF SPEEDS AND BFL S + 20 (Cont)



TEMPERATURE/SECOND SEGMENT LIMIT



INTERPOLATION ONLY

FALCON 50

CONDITIONS: DRY RUNWAY

ANTI-ICE OFF

NO WIND

ANTISKID OPERATIVE

SLATS + FLAPS 20° TAKEOFF DATA

NO SLOPE

FOR TRAINING PURPOSES ONLY

G.W. X 1000	D A T A	PRESSURE ALTITUDE AND TEMPERATURE C°											G.W. X 1000		
		4000					6000'					V _R = V ₂		V _{FR}	1.5V _S
		0°	10°	20°	30°	40°	0°	10°	20°	30°	40°				
24	V ₁ BFL	91 3050	91 3200	91 3450	91 3800	91 4200	91 3400	91 3550	91 3900	91 4300	91 4700	98	113	150	24
26	V ₁ BFL	91 3100	91 3250	91 3500	91 3850	91 4250	91 3450	91 3600	91 3950	91 4400	91 4800	101	116	155	26
28	V ₁ BFL	91 3150	91 3300	91 3550	92 3950	94 4300	91 3500	91 3700	92 4000	94 4500	97 4950	105	120	160	28
30	V ₁ BFL	91 3200	92 3400	94 3750	97 4225	100 4850	92 3550	94 3900	96 4350	99 5000	102 5700	109	124	165	30
32	V ₁ BFL	96 3550	97 3700	100 4250	102 4800	106 5550	97 4050	99 4400	102 4950	105 5700	108 6600	112	127	171	32
34	V ₁ BFL	101 4000	102 4150	105 4800	108 5550	111 6350	102 4600	104 5000	107 5700	110 6550		116	131	177	34
36	V ₁ BFL	106 4500	107 4650	110 5400	113 6300		107 5250	109 5550	112 6400	115 7350		119	134	182	36
38	V ₁ BFL	111 5050	112 5200	115 6050	117 7000		112 5900	114 6250	117 7150			122	137	188	38
40	V ₁ BFL	115 5700	116 5850	119 6800			116 6650	118 6950				126	141	192	40
40.7	V ₁ BFL	116 6000	117 6150	120 7100			117 6900	120 7300				127	142	195	40.7

TAKEOFF SPEEDS AND BFL SLATS ONLY

P-4

TEMPERATURE/SECOND SEGMENT/BRAKE ENERGY LIMITED

INTERPOLATION ONLY

FALCON 50

CONDITIONS: DRY RUNWAY
NO WIND
NO SLOPE

ANTI-ICE OFF
ANTISKID OPERATIVE

SLATS ONLY TAKEOFF DATA

G.W. X 1000	D A T A	PRESSURE ALTITUDE AND TEMPERATURE C°											G.W. X 1000		
		4000					6000'					V _R = V ₂		V _{FR}	1.5V _S
		0°	10°	20°	30°	40°	0°	10°	20°	30°	40°				
24	V ₁ BFL	91 2900	91 3100	91 3400	92 3800	95 4150	91 3200	91 3500	92 3800	94 4100	97 4500	107	132	150	24
26	V ₁ BFL	92 3000	93 3200	95 3550	98 3950	101 4450	93 3300	95 3650	97 4050	100 4450	103 5100	111	136	155	26
28	V ₁ BFL	97 3350	98 3550	101 4000	103 4450	106 5050	99 3700	100 4100	103 4500	106 5100	108 5850	115	140	160	28
30	V ₁ BFL	102 3700	103 4000	106 4500	109 5050	112 5800	104 4150	106 4600	108 5150	111 5850	114 6700	119	144	165	30
32	V ₁ BFL	108 4150	109 4500	112 5100	115 5800	118 6700	110 4750	112 5250	114 5850	117 6700	120 7700	123	148	171	32
34	V ₁ BFL	114 4650	115 5100	118 5750	121 6650	124 7600	116 5400	118 5950	120 6700	123 7650	126 8800	127	152	177	34
36	V ₁ BFL	119 5200	121 5700	123 6450	126 7500	129 8650	121 6100	123 6700	126 7550	128 8600	131 10000	131	156	182	36
38	V ₁ BFL	124 5750	126 6350	128 7250	131 8350	134 9750	126 6950	128 7450				134	159	188	38
40	V ₁ BFL	129 6400										138	163	192	40

FOR TRAINING PURPOSES ONLY

Revision 6

TAKEOFF SPEEDS AND BFL SLATS ONLY (Cont)

TEMPERATURE/SECOND SEGMENT/BRAKE ENERGY LIMITED

INTERPOLATION ONLY

FALCON 50

CONDITIONS: DRY RUNWAY

ANTI-ICE OFF

NO WIND

ANTISKID OPERATIVE

SLATS ONLY TAKEOFF DATA

NO SLOPE

G.W. X 1000	D A T A	PRESSURE ALTITUDE AND TEMPERATURE C°											G.W. X 1000
		8000				10000				V _R = V ₂	V _{FR}	1.5V _S	
		0°	10°	20°	30°	0°	10°	20°	30°				
24	V ₁ BFL	91 3750	92 4000	93 4300	96 4650	92 4200	94 4500	96 4950	97 5400	107	132	150	24
26	V ₁ BFL	95 3900	97 4250	99 4700	102 5350	98 4550	100 5100	102 5700	103 6300	111	136	155	26
28	V ₁ BFL	101 4400	103 4800	105 5450	108 6200	103 5250	105 5850	108 6450	109 7200	115	140	160	28
30	V ₁ BFL	106 5000	108 5500	111 6250	113 7100	108 5000	111 5500	113 6650	115 7350	119	144	165	30
32	V ₁ BFL	112 5750	114 6300	117 7200	119 8200	112 6000	114 6750	117 7650	119 8450	123	148	171	32
34	V ₁ BFL	118 6500	120 7200	123 8150	126 9350	120 7850	122 8900	125 10250	127 11200	127	152	177	34
36	V ₁ BFL	123 7350	126 8100	129 9250	131 10700	126 8850				131	156	182	36
38	V ₁ BFL									134	159	188	38
40	V ₁ BFL									138	163	192	40

TAKEOFF THRUST SETTING WITHOUT ANTI-ICE PROTECTION

#2 ENG N₁ THRUST/Without Anti-Ice*								
PRESS. ALT.	SEA LEVEL		2000		4000		6000	
TEMP °C	TO	MC	TO	MC	TO	MC	TO	MC
+40	97.0	95.4	97.0	95.6	97.0	96.0	96.8	95.8
+30	98.5	96.8	98.5	97.0	98.5	97.3	98.2	97.2
+20	99.1	98.0	99.6	98.2	99.6	98.5	99.4	98.3
+10	97.3	96.6	99.9	99.1	100.5	99.7	100.4	99.3
0	95.6	94.9	98.1	97.3	101.0	99.9	100.8	99.9
-10	93.8	93.2	96.3	95.6	98.7	97.0	100.6	100.0
-20	92.1	91.5	94.5	93.8	96.8	96.2	98.6	98.0
-30	90.3	89.7	92.8	92.1	95.0	94.4	96.8	96.2

OAT/SAT is used for Takeoff; TAT is used for Maximum Continuous.
 *Subtract 0.4% for Lateral Engine N₁ Thrust.

TAKEOFF THRUST SETTING WITH ANTI-ICE PROTECTION

#2 ENG N₁ THRUST/With Anti-Ice*								
PRESS. ALT.	SEA LEVEL		2000		4000		6000	
TEMP °C	TO	MC	TO	MC	TO	MC	TO	MC
+10	96.9	96.2	98.6	96.6	98.4	96.9	98.1	96.5
0	95.5	94.5	98.0	96.8	99.2	97.8	98.8	97.5
-10	93.8	92.7	96.3	95.1	98.5	97.5	99.5	98.2
-20	92.0	91.0	94.4	93.3	96.5	95.6	98.5	97.5
-30	90.3	89.3	92.7	91.6	94.9	93.8	96.7	95.6

OAT/SAT is used for Takeoff; TAT is used for Maximum Continuous.
 *Subtract 0.4% for Lateral Engine N₁ Thrust.

**MAXIMUM CLIMB THRUST—
THREE ENGINES OPERATING CLIMB**

Total Air Temperature (°C)	Pressure Altitude (x 1,000 FT)										
	0	5	10	15	20	25	30	35	40	45	49
45	96.1										
40	96.3										
35	96.5	96.6									
30	96.8	96.8	97								
25	97	97	97.2								
20	97.2	97.3	97.4	97.5							
15	97	97.5	97.6	97.8							
10	96.1	97.7	97.9	98	98.1						
5	95.3	98	98.1	98.2	98.4	98					
0	94.4	98.2	98.3	98.5	98.6	98.3	98				

After
F50-0163
SB

Climb 260 kt/0.72 M_L (shaded area = ISA)

If climb schedule 300 kt/0.8 M_L: add 0.2% N₁

With anti-icing on, maintain N₁ or maximum ITT (885° C), whichever comes first.

Total Air Temperature (°C)	Pressure Altitude (x 1,000 FT)										
	0	5	10	15	20	25	30	35	40	45	49
-5	93.5	97.4	98.6	98.7	98.8	98.5	98.2				
-10	92.6	96.5	98.8	98.9	99	98.7	98.4	98			
-15	91.8	95.7	99	99.1	99.3	99	98.6	98.2	98.2	98.2	98.2
-20	90.9	94.8	99.1	99.4	99.5	99.2	98.9	98.4	98.4	98.4	98.4
-25					99.7	99.4	99.1	98.6	98.6	98.6	98.6
-30					100	99.6	99.3	98.9	98.8	98.8	98.8
-35						99.9	99.6	99.1	99	99	99
-40							99.8	99.3	99.3	99.3	99.3
-45							100	99.6	99.5	99.5	99.5
-50								99.8	99.7	99.7	99.7

After
F50-0163
SB

**HIGH ALTITUDE CRUISE LEVEL LIMITED
BY MAXIMUM CRUISE THRUST**

Max. A/C Weight – lb. – corresponding T.O.W – lb.

MI TEMP. DEV.	.70	.73	.75	.78	.80	.83	MI TEMP. DEV.	.70	.73	.75	.78	.80	.83
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Pressure Altitude: 35,000 FT

Pressure Altitude: 37,000 FT

-10°C	N.L.	N.L.	N.L.	N.L.	N.L.	37,900 39,100	-10°C	N.L.	N.L.	N.L.	N.L.	40,400 N.L.	35,400 36,700
0°C	N.L.	N.L.	N.L.	N.L.	37,400 38,800	28,400 29,500	0°C	N.L.	N.L.	N.L.	38,100 39,700	35,000 36,400	27,100 28,200
+10°C	N.L.	40,000 N.L.	37,700 39,600	31,500 32,900	24,800 25,900		+10°C	39,200 N.L.	36,800 38,800	35,000 36,900	29,600 31,000	24,000 25,100	
+20°C	35,800 38,600	31,000 32,900	26,300 27,800				+20°C	32,800 35,300	28,600 30,400	24,000 25,900			

Pressure Altitude: 39,000 FT

-15°C	N.L.	N.L.	N.L.	N.L.	38,300 39,300	34,000 32,850
-10°C	N.L.	N.L.	N.L.	38,500 40,000	36,300 37,700	31,500 32,700
0°C	39,600 N.L.	38,000 39,900	36,700 38,500	34,000 35,600	30,900 32,200	23,500 24,500
+10°C	34,900 37,100	32,700 34,600	30,800 32,400	25,500 26,800		
+20°C	28,600 30,800	24,100 25,700				

Pressure Altitude: 41,000 FT

-15°C	N.L.	N.L.	38,700 40,400	36,200 37,700	34,400 35,600	30,600 31,650
-10°C	38,000 39,700	37,700 39,400	36,700 38,400	34,400 35,900	32,400 33,700	27,700 28,800
0°C	35,500 37,600	33,800 35,600	32,600 34,300	30,200 31,600	26,900 28,100	
+10°C	30,700 32,700	28,700 30,300	26,500 27,900	21,100 22,200		
+20°C	24,200 26,100					

Pressure Altitude: 43,000 FT

-15°C	36,100 37,600	35,000 36,500	34,300 35,800	32,500 33,900	30,800 32,400	27,100 29,300
-10°C	34,200 36,000	33,700 35,400	32,800 34,300	30,600 32,000	28,800 30,000	24,200 25,200
0°C	31,500 33,400	29,900 31,500	28,800 30,300	26,200 27,500	23,000 24,100	
+10°C	26,600 28,400	24,400 25,900	22,100 23,300			
+20°C						

Pressure Altitude: 45,000 FT

-15°C	32,500 34,000	31,600 33,100	30,800 32,300	29,200 30,300	27,500 28,600	24,000 24,800
-10°C	30,700 32,300	30,100 31,600	29,200 30,600	27,300 28,500	25,600 26,700	20,900 21,800
0°C	27,900 29,600	26,400 27,900	25,300 26,700	22,500 23,700		
+10°C						
+20°C						

- N.L. (Not limitative) allows A/C weight up to Maximum Design Weight.
- Corresponding T.O.W. assumes take-off and direct climb 260 KIAS/.72MI up to given altitude. (No credit for taxi, nor acceleration up to a given Mach number).

CRUISE – 0.75 MACH

WT X1000	ALT TEMP DATA	350			370			390		
		-10	ISA	+10	-10	ISA	+10	-10	ISA	+10
40	FF	714	737		701	725		702		
	N ₁	93.6	95.8		94.8	97.1		97.0		
	TAS	422	432		420	430		420		
38	FF	694	716	739	674	696		669		
	N ₁	93.0	95.2	97.4	93.9	96.2		95.9		
	TAS	422	432	442	420	430		420		
36	FF	677	698	719	649	671		639	661	
	N ₁	92.4	94.6	96.8	93.1	95.3		94.8	97.1	
	TAS	422	432	442	420	430		420	430	
34	FF	661	682	702	630	650	670	613	633	
	N ₁	91.9	94.1	96.3	92.4	94.6	96.8	93.8	96.0	
	TAS	422	432	442	420	430	440	420	430	
32	FF	646	667	687	614	633	653	590	609	
	N ₁	91.5	93.6	95.8	91.8	94.0	96.2	92.9	95.1	
	TAS	422	432	442	420	430	440	420	430	
30	FF	633	653	673	599	618	637	572	591	609
	N ₁	91.0	93.2	95.3	91.3	93.5	95.6	92.2	94.4	96.6
	TAS	422	432	442	420	430	440	420	430	440
28	FF	622	641	661	585	604	622	557	575	592
	N ₁	90.6	92.7	94.8	90.8	93.0	95.1	91.6	93.8	96.0
	TAS	422	432	442	420	430	440	420	430	440
26	FF	612	631	650	573	592	609	543	560	577
	N ₁	90.2	92.3	94.4	90.3	92.5	94.6	91.1	93.3	95.4
	TAS	422	432	442	420	430	440	420	430	440
24	FF	603	622	640	563	581	598	531	548	564
	N ₁	89.8	92.0	94.0	89.9	92.0	94.1	90.5	92.7	94.8
	TAS	422	432	442	420	430	440	420	430	440

CRUISE – 0.75 MACH

WT X1000	ALT DATA	TEMP	410			430			450			
			-10	ISA	+10	-10	ISA	+10	-10	ISA	+10	
40	FF											
	N ₁											
	TAS											
38	FF											
	N ₁											
	TAS											
36	FF	638										
	N ₁	96.9										
	TAS	420										
34	FF	606										
	N ₁	95.6										
	TAS	420										
32	FF	578	597			574						
	N ₁	94.5	96.8			96.5						
	TAS	420	430			420						
30	FF	553	571			543						
	N ₁	93.4	95.7			95.2						
	TAS	420	430			420						
28	FF	533	550			517	534			510		
	N ₁	92.6	94.8			94.0	96.2			95.8		
	TAS	420	430			420	430			420		
26	FF	517	534	550		495	511			482		
	N ₁	91.9	94.1	96.3		93.0	95.2			94.4		
	TAS	420	430	440		420	430			420		
24	FF	503	519	535		479	494			459	474	
	N ₁	91.3	93.5	95.6		92.2	94.4			93.3	95.5	
	TAS	420	430	440		420	430			430	430	

CRUISE – 0.80 MACH

WT X1000	ALT TEMP DATA	350			370			390		
		-10	ISA	+10	-10	ISA	+10	-10	ISA	+10
40	FF	819			808					
	N _i	96.3			97.7					
	TAS	448			446					
38	FF	799	826		772					
	N _i	95.7	98.0		96.6					
	TAS	448	459		446					
36	FF	780	807		744			735		
	N _i	95.1	97.4		95.7			97.6		
	TAS	448	459		446			446		
34	FF	763	788		724	749		701		
	N _i	94.6	96.8		95.1	97.4		96.5		
	TAS	448	459		446	457		446		
32	FF	748	772		706	730		676		
	N _i	94.1	96.3		94.5	96.8		95.6		
	TAS	448	459		446	457		446		
30	FF	734	758		690	713		657	680	
	N _i	93.7	95.9		94.0	96.2		94.9	97.2	
	TAS	448	459		446	457		446	457	
28	FF	722	745		676	698		640	661	
	N _i	93.3	95.5		93.5	95.7		94.3	96.5	
	TAS	448	459		446	457		446	457	
26	FF	711	733		663	685		625	646	
	N _i	92.9	95.1		93.0	95.2		93.7	96.0	
	TAS	448	459		446	457		446	457	
24	FF	701	723	746	652	673	694	612	632	
	N _i	92.6	94.8	97.0	92.6	94.8	97.0	93.2	95.4	
	TAS	448	459	469	446	457	467	446	457	

CRUISE — 0.80 MACH

WT X1000	ALT TEMP DATA	410			430			450		
		-10	ISA	+10	-10	ISA	+10	-10	ISA	+10
40	FF									
	N _i									
	TAS									
38	FF									
	N _i									
	TAS									
36	FF									
	N _i									
	TAS									
34	FF									
	N _i									
	TAS									
32	FF	661								
	N _i	97.2								
	TAS	446								
30	FF	632								
	N _i	96.1								
	TAS	446								
28	FF	610			590					
	N _i	95.3			96.7					
	TAS	446			446					
26	FF	593	613		566					
	N _i	94.6	96.9		95.7					
	TAS	446	457		446					
24	FF	577	596		548			523		
	N _i	94.0	96.2		94.9			95.9		
	TAS	446	457		446			446		

CRUISE – MAXIMUM CRUISE THRUST

WT X1000	ALT TEMP DATA	350			370			390		
		-10	ISA	+10	-10	ISA	+10	-10	ISA	+10
40	FF	892	814	728	816	744		725		
	N _i	98.0	97.7	97.2	97.9	97.6		97.6		
	TAS	460	453	430	448	436		427		
38	FF	895	818	734	823	751	669	733	664	
	N _i	98.0	97.8	97.2	97.9	97.7	97.1	97.7	97.4	
	TAS	464	457	441	455	446	420	438	419	
36	FF	898	821	738	827	756	676	740	674	
	N _i	98.0	97.8	97.2	98.0	97.7	97.1	97.7	97.4	
	TAS	466	462	447	460	454	434	447	434	
34	FF	900	825	741	830	759	681	747	681	605
	N _i	98.1	97.8	97.2	98.0	97.7	97.1	97.8	97.5	96.8
	TAS	468	466	453	464	459	444	455	446	418
32	FF	902	827	743	832	763	685	751	685	612
	N _i	98.1	97.8	97.2	98.0	97.7	97.1	97.8	97.5	96.8
	TAS	470	470	457	466	464	450	461	453	433
30	FF	903	830	745	834	766	688	753	689	617
	N _i	98.1	97.8	97.1	98.0	97.7	97.0	97.8	97.5	96.8
	TAS	472	473	461	468	468	455	464	459	443
28	FF	905	832	747	836	769	690	755	692	620
	N _i	98.1	97.8	97.1	98.0	97.7	97.0	97.8	97.5	96.8
	TAS	473	475	465	470	472	460	466	464	450
26	FF	906	833	749	837	770	692	757	695	623
	N _i	98.1	97.8	97.1	98.0	97.7	97.0	97.9	97.5	96.8
	TAS	475	477	468	472	474	464	468	469	455
24	FF	907	834	750	839	772	694	759	697	625
	N _i	98.1	97.8	97.1	98.0	97.7	97.0	97.9	97.5	96.8
	TAS	476	479	470	473	476	467	470	472	460

CRUISE – MAXIMUM CRUISE THRUST

WT X 1000	ALT DATA TEMP	410			430			450		
		-10	ISA	+10	-10	ISA	+10	-10	ISA	+10
40	FF									
	N _i									
	TAS									
38	FF									
	N _i									
	TAS									
36	FF	654								
	N _i	97.4								
	TAS	425								
34	FF	663	599		580					
	N _i	97.4	97.0		97.0					
	TAS	437	417		410					
32	FF	670	608		590					
	N _i	97.5	97.1		97.0					
	TAS	448	434		425					
30	FF	675	614		598	538		525		
	N _i	97.5	97.2		97.1	96.6		96.7		
	TAS	456	446		439	418		414		
28	FF	679	619	550	604	547		533		
	N _i	97.6	97.2	96.4	97.2	96.7		96.7		
	TAS	461	453	432	449	436		430		
26	FF	681	622	554	609	552		541	486	
	N _i	97.6	97.2	96.4	97.2	96.7		96.8	96.2	
	TAS	464	459	442	457	446		443	423	
24	FF	683	625	557	612	556	491	546	493	
	N _i	97.6	97.2	96.4	97.2	96.7	95.8	96.8	96.3	
	TAS	467	464	449	462	453	431	452	439	

**LANDING DATA SLATS + 48 FLAPS - STANDARD
TEMPERATURE – UNCORRECTED**

G.W. X 1000	V _{REF}	LANDING DISTANCE/LANDING FIELD LENGTH			HOLDING SPEED	G.W. X 1000
		SEA LEVEL	2000'	4000'		
24	104	2100/3510	2175/3640	2250/3760	177	24
25	106	2150/3590	2250/3760	2325/3890	180	25
27	110	2275/3800	2375/3970	2475/4140	188	27
29	114	2400/4010	2500/4180	2625/4390	195	29
31	118	2550/4260	2675/4470	2775/4640	201	31
33	121	2700/4510	2825/4720	2950/4930	207	33
35	125	2850/4760	2975/4970	3100/5180	213	35
35.7	126	2900/4850	3025/5060	3150/5260	215	35.7
37	128	3025/5060	3150/5260	3275/5470	218	37
38.8	131	3200/5350	3300/5520	3450/5690	224	38.8

CONDITIONS: ZERO WIND
ZERO SLOPE
ANTISKID OPERATIVE

**LANDING DATA SLATS +48 FLAPS – STANDARD
TEMPERATURE – UNCORRECTED**

G.W. X 1000	V _{REF}	LANDING DISTANCE/LANDING FIELD LENGTH			HOLDING SPEED	G.W. X 1000
		6000'	8000'	10000'		
24	104	2375/3970	2575/4300	2775/4640	177	24
25	106	2425/4050	2650/4430	2875/4810	180	25
27	110	2575/4300	2800/4680	3025/5060	188	27
29	114	2725/4550	2950/4930	3200/5350	195	29
31	118	2900/4850	3125/5220	3400/5680	201	31
33	121	3075/5140	3325/5560	3600/6020	207	33
35	125	3250/5430	3500/5850	3800/6350	213	35
35.7	126	3300/5520	3575/5970	3875/6480	215	35.7
37	128	3425/5720	3700/6180	4025/6730	218	37
38.8	131	3575/5970	3875/6480	4225/7060	224	38.8

CONDITIONS: ZERO WIND
ZERO SLOPE
ANTISKID OPERATIVE

**LANDING DATA SLATS + 20 FLAPS - STANDARD
TEMPERATURE – UNCORRECTED**

G.W. X 1000	V _{REF} +5 KTS	LANDING DISTANCE/LANDING FIELD LENGTH			HOLDING SPEED	G.W. X 1000
		SEA LEVEL	2000'	4000'		
24	109	2475/4150	2550/4275	2650/4425	177	24
25	111	2550/4275	2625/4400	2750/4600	180	25
27	115	2675/4475	2775/4650	2875/4800	188	27
29	119	2800/4675	2900/4850	3025/5050	195	29
31	123	2925/4900	3050/5100	3175/5300	201	31
33	127	3075/5150	3200/5350	3350/5600	207	33
35	130	3225/5400	3375/5650	3500/5850	213	35
35.7	132	3275/5475	3425/5725	3575/5975	215	35.7
37	134	3400/5675	3525/5900	3675/6150	218	37
38.8	137	3525/5900	3700/6200	3825/6400	224	38.8

CONDITIONS: ZERO WIND
ZERO SLOPE
ANTISKID OPERATIVE

**LANDING DATA SLATS + 20 FLAPS – STANDARD
TEMPERATURE – UNCORRECTED**

G.W. X 1000	V _{REF} +5 KTS	LANDING DISTANCE/LANDING FIELD LENGTH			HOLDING SPEED	G.W. X 1000
		6000'	8000'	10,000'		
24	109	2775/4650	3000/5025	3250/5425	177	24
25	111	2850/4775	3075/5150	3325/5550	180	25
27	115	3000/5025	3250/5425	3525/5900	188	27
29	119	3150/5275	3425/5725	3700/6200	195	29
31	123	3300/5525	3600/6025	3875/6475	201	31
33	127	3475/5800	3775/6300	4075/6825	207	33
35	130	3650/6100	3950/6600	4275/7150	213	35
35.7	132	3700/6200	4025/6725	4350/7275	215	35.7
37	134	3825/6400	4150/6950	4475/7475	218	37
38.8	137	3975/6650	4325/7225	4675/7825	224	38.8

CONDITIONS: ZERO WIND
ZERO SLOPE
ANTISKID OPERATIVE

FALCON 50 PILOT CHECKLIST

LANDING DATA																
GROSS WEIGHT X 1000 LBS.																
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	38.8
V _{REF} (S+48)	104	106	108	110	112	114	116	118	120	121	123	125	127	128	130	131
Holding	177	180	184	188	191	195	198	201	204	207	210	213	216	218	221	224
For L.D./L.F.L. see Performance section; page P-18/P-21.																
V _{REF} CORRECTION FOR CONFIGURATION (NEW BUG)																
Outboards + 0Add + 25 KTS Clean Wings.....Add + 30 KTS*																
Outboards + 20Add + 10 KTS Full SlatsAdd + 20 KTS																
Outboards + 48Add + 5 KTS Full Slats + 20Add + 5 KTS																
*Add 3000 FT to L.D., 5000 FT to L.F.L., check V _{MBE}																
CORRECTION FOR WIND																
Wind Gust + 1/2 Steady State (Maximum 20 Knots)																

TAT	-30 to -20° C	-20 to -10° C	-10 to 0° C	0 to +10° C
Minimum N ₁ speed in cruise condition	84	81	78	73
Minimum N ₁ speed in approach condition	78	78	78	73
One engine inoperative condition	91	88	84	80

If necessary during approach, extend airbrakes to help keep N₁ speed to no less than specified value, and increase approach speeds (+10 knots if position 1, +15 knots if position 2).