

Boeing 747 400 Limitations

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| Autopilot with Use of Aileron Trim | Prohibited | |
| HF Operation During Refueling | Prohibited | |
| Extend or retract Flaps Between 1 & 5 During Jettison | Prohibited | |
| Jet-A1 Freeze | -47 | C |
| JP-5 Freeze | -46 | C |
| Jet-A Freeze | -40 | C |
| Diff TO & LDG | .11 | PSI |
| Turb Air Penetration .82 - | .85 | M |
| Flight Maneuvering Load Flaps Up | 2.5 - 1.0 | G |
| Runway Slope | 2 | Percent |
| Flight Maneuvering Load Flaps Down | 2.0 - 0 | G |
| Minimum Glideslope Angle | 2.5 | DEG |
| Glideslope Angle | 3.25 | DEG |
| Diff Cabin | 9.4 | PSI |
| Min Icing Temperature or Below OAT/TAT | 10 | C |
| Icing TAT | 10 | C |
| Do Not Use Frequencies | 11.133 | MHZ |
| Autoland Tailwind | 15 | KTS |
| Tailwind TO & LDG | 15 | KTS |
| Min Oil Quantity Before Start | 18 | QTS |
| Do Not Use Frequencies | 22.434 | MHZ |
| Do Not Use Frequencies | 22.683 | MHZ |
| Do Not Use Frequencies | 22.766 | MHZ |
| Autoland Crosswind Max | 25 | KTS |
| Autoland Headwind Max | 25 | KTS |
| Do Not Use Frequencies | 29.489 | MHZ |
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| VNAV level-off (2000') QNH Min (after Altimeter Chg) | 29.70 | "Hg |
| Crosswind TO & LDG not limiting | 30 | KTS |
| Diff CPT / FO ALT RVSM 0-5000' | 35 | FT |
| Diff CPT / FO ALT RVSM 10,000' | 40 | FT |
| Door Operating Wind | 40 | KTS |
| Jet-B JP-4 (Prohibited) Tank Temp | 43 | F |
| WX Radar No Use Within (Fuel Spill) | 50 | FT |
| Autopilot Must be Disengaged Below MDA Before | 50 | FT |
| Jet-A Jet A-1 JP-5 JP-8 Tank Temp | 54 | F |
| Door Opened Wind | 65 | KTS |
| Oil Press Minimum | 70 | PSI |
| Autopilot Single Channel Must be Disengaged Before | 100 | FT |
| N2 | 105.5 | RPM |
| N1 | 111.4 | RPM |
| OIL Temp | 163 | C |
| OIL Temp 20 Minute Limit | 177 | C |
| Vfe 30 | 180 | KTS |
| Diff CPT / FO ALT RVSM | 200 | FT |
| Tire Speed | 204 | KTS |
| Vfe 25 | 205 | KTS |

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| Vfe 20 | 230 | KTS |
| Vfe 10 | 240 | KTS |
| Autopilot Must Not Be Engaged During TO Below | 250 | FT |
| Vfe 5 | 260 | KTS |
| Vlo Extension & Retraction | 270 | KTS |
| Vfe 1 | 280 | KTS |
| Turb Air Penetration 290 - | 310 | KTS |
| Vle Extended | 320 | KTS |
| EGT Starting Flight | 750 | C |
| EGT Starting Ground | 750 | C |
| Brake Accumulator Precharge Minimum | 750 | PSI |
| EGT Transient 40 Seconds | 870 | C |
| EGT MAX Flight | 925 | C |
| Oxygen Crew Over Land Minimum | 950 | PSI |
| EGT MAX Takeoff | 960 | C |
| Oxygen Supernumerary Minimum | 1200 | PSI |
| Oxygen Crew Over Ocean | 1500 | PSI |
| Fuel Imbalance 1 & 4 | 3,000 | LBS |
| Fuel Imbalance 2 & 3 | 6,000 | LBS |
| Max TO & LDG ALT | 10,000 | FT |
| Fuel Reserve Max per side 8,589 | 17,178 | LBS |
| Max Flaps Extension | 20,000 | FT |
| Max Altitude Operating | 45,100 | FT |
| Fuel Main 1 and 4 Main Max per side 30,029.5 | 60,059 | LBS |
| Fuel CWT Max | 114,999 | LBS |
| Fuel Main 2 and 3 Main Max per side 84,058 | 168,116 | LBS |
| Fuel Total Capacity | 360,889 | LBS |
| Minimum In-flight Wt. | 361,200 | LBS |
| ZFW (811,000 or less) or reduce Linearly to 610,000 | 635,000 | LBS |
| Max Landing Wt | 666,000 | LBS |
| Minimum In-Flight Wt. Landing Flaps 30 | 670,000 | LBS |
| Fuel Transfer Wt Max (Res 2&3 must be full w/TOW Abv: | 785,000 | LBS |
| Takeoff Max | 875,000 | LBS |
| Taxi Max (@ZFW 610 & Above=MTOW +3000) | 878,000 | LBS |