

GULFSTREAM G500 / G600 LIMITATIONS

| DIMENSIONS: | G500 | | G600 |
|--|-----------------------------|------------------------------|-----------------------------|
| ▪ WINGSPAN | 87'1" | Δ 7'11" | 95' |
| ▪ LENGTH | 91'2" | Δ 5'3" | 96'5" |
| ▪ TAIL HEIGHT | 25'6" | | 25'3" |
| ▪ APPROX | 88 X 92 X 26 | | 95 X 97 X 26 |
| ▪ MIN TAXI STRIP FOR 180° TURN | TILLER: 60' RUDDER: 125' | | TILLER: 65' RUDDER: 135' |
| WEIGHTS: | G500 | | G600 |
| ▪ MAX RAMP | 80,000 LBS | | 95,000 LBS |
| ▪ MAX TAKEOFF | 79,600 LBS | | 94,600 LBS |
| ▪ ASC 005 | 74,900 LBS | | |
| ▪ MAX LANDING | 64,350 LBS | | 76,800 LBS |
| ▪ MAX ZERO FUEL | 52,100 LBS | | 57,440 LBS |
| ▪ MAX BAGGAGE COMPARTMENT | 2,250 LBS | | 2,500 LBS |
| MAX IMBALANCE: | | | |
| ▪ TAKEOFF | | 1000 LBS | |
| ▪ IN FLIGHT | | 2000 LBS | |
| USEABLE FUEL: | | | |
| ▪ WEIGHT | 30,250 LBS | | 41,500 LBS |
| ▪ VOLUME | 4,515 GALS | | 6,194 GALS |
| AIR SPEEDS: | G500 | | G600 |
| ▪ VTURB > 10,000' | | 270 KCAS | .85M |
| ▪ VTURB < 10,000' | | 240 KCAS | |
| ▪ FLAP 10°/20°/39° | | 250 / 220 / 180 KIAS | |
| ▪ GEAR VLO/VLE/EMER | | 225 / 250 / 175 KCAS | |
| VMCA: | | | |
| ▪ FLAPS 10 | 120 KCAS | | 108 KCAS |
| ▪ FLAPS 20 | 112 KCAS | | 104 KCAS |
| ▪ FLAPS FULL | 109 KCAS | | 101 KCAS |
| VMCG: | | | |
| ▪ FLAPS 10 | 111 KCAS | | 105 KCAS |
| ▪ FLAPS 20 | | | 112 KCAS |
| ▪ TIRE LIMIT | | 195 KTS | |
| ▪ YAW DAMPER FAILURE | | 285 KCAS / 0.90M MAX | |
| ▪ DEGRADED CLAW MODE | | | |
| ▪ FLIGHT CONTROL FAILURE | | | |
| ▪ VAPPR APPROACH | | VREF + ½ STEADY STATE + GUST | |
| ▪ VAPPR MIN | | VREF + 5 | |
| THRUST REVERSERS: | | | |
| ▪ REVERSE IDLE BEFORE | | 60 KCAS | |
| ▪ MIN FOR DUAL REVERSERS | | 10 KGS | |
| ALTITUDES: | G500 | | G600 |
| ▪ MAX OPERATING | | 51,000' | |
| ▪ SINGLE PACK | | 48,000' | |
| ▪ BAGGAGE DOOR ACCESS | | 45,000' | |
| ▪ WAI ON W/SINGLE BLEED | | FL320 | |
| ▪ RUDDER JAMMED | | 35,000' | |
| ▪ YAW DAMPER FAILED | | | |
| ▪ FLAPS 10° / 20° | | 25,000' | |
| ▪ LDG GEAR / FLAPS DOWN | | 20,000' | |
| ▪ MAX LDG FIELD ELEV | | 15,000' | |
| AUTOPILOT (AGL) | | | |
| ▪ MIN ENGAGE | | 200' | |
| ▪ MIN DISENGAGE (ILS/LPV) | | 90' | |
| ▪ MIN DISENGAGE (OTHERS) | | 200' | |
| ▪ MAX COUPLED GO LOSS | | 50' | |
| G500: MIN DISENGAGE HEIGHT ON PARTIAL FLAP ILS/LPV IS 130' AGL | | | |
| APU: | | | |
| ▪ GUARANTEED START | | 37,000' | |
| ▪ OPERATING ALTITUDE | | 45,000' | |
| ▪ ASSISTED AIRSTART | | 30,000' | |

| ICING / TEMPERATURES: | | | | | | |
|---|--|--|-------------|---------------|-------------|----------------|
| ENG OPS: | | | | | | |
| ▪ MIN FOR START | | | -40°C | | | |
| ▪ MIN FOR OPERATION | | | -50°C | | | |
| COWL & WAI ON: | | | | | | |
| ▪ GROUND | | -40°C < SAT < 10°C + VISIBLE MOISTURE | | | | |
| ▪ FLIGHT | | -40°C < TAT < 10°C + VISIBLE MOISTURE | | | | |
| ▪ MIN ENG FUEL TEMP FOR TAKEOFF | | | +9°C | | | |
| ▪ MIN OIL TEMP TO EXCEED IDLE THRUST | | | 10°C | | | |
| ▪ TAKEOFF W/WAI | | PREHEAT 4 TO 20 MINS PRIOR VERIFY HEATED TO 130° ± 10°C | | | | |
| ▪ ICE SHEDDING - GND | | 2 SECS @ 60%+ N1, EVERY 10 MINS | | | | |
| ▪ ICE SHEDDING - FLT | | AUTOMATIC (MANUAL NOT RECOMMENDED) | | | | |
| ▪ GND OPS IN FREEZING FOG | | > -9°C: MAX OF 60 MINS + CAI ON < -9°C: MAX OF 30 MINS + CAI ON | | | | |
| ▪ TACTILE ICING CHECK | | OAT < 10°C + VISIBLE MOISTURE OR WING FUEL TEMP < 0°C + MOISTURE | | | | |
| ▪ MIN SPEED WITH WAI & FLAPS UP | | 200 KIAS | | | | |
| ▪ FLAPS OR GEAR IN ICING CONDITIONS | | RESTRICTED TO TAKEOFF, APPROACH, AND LANDING ONLY | | | | |
| WINDS: | | | | | | |
| ▪ MAX TAILWIND - T/O & LND | | 10 KTS | | | | |
| ▪ MAX TAILWIND - FLAPS ≤ 10° | | 0 KTS | | | | |
| ▪ MAX LANDING CROSSWIND | | 22 KTS | | | | |
| ▪ MAX STATIC T/O CROSSWIND | | 30 KTS | | | | |
| SEE HIGH CROSSWIND T/O PROCEDURE FOR XW > 30 KTS | | | | | | |
| ENGINE WIND ENVELOPE: | | XW (KTS) | TW (KTS) | | | |
| ▪ ENGINE START | | 40 | 25 | | | |
| ▪ ENG RUN (> 30% N1) | | 25 | 20 | | | |
| ▪ TAXI (< 30% N1) | | 40 | 40 | | | |
| ▪ STATIC TAKEOFF | | 30 | 10 | | | |
| STARTER DUTY: | | | | | | |
| ▪ ENGINE | | THREE 3 MIN ATTEMPTS, 15 SECS AFTER EACH, THEN COOL FOR 10 MINS | | | | |
| ▪ APU | | THREE ATTEMPTS, 1 MIN AFTER EACH, THEN COOL FOR 1 HOUR | | | | |
| G-VII PERFORMANCE CONSIDERATIONS | | | | | | |
| MIN LANDING FACTORS: | DRY | WET | RCC 4/3/2/1 | | | |
| ▪ DISPATCH (PART 91K) ¹ | 1.25 | 1.44 | | | | |
| ▪ ENROUTE ² | 1.29 1.33 1.44 ³ 1.46 ³ | 1.15 | 1.15 | | | |
| <small>¹ PER AFM 05-11-30 ² PER AOM 05-09-20 ³ DOWNSLOPES STEEPER THAN -1%</small> | | | | | | |
| TOLD CALCULATOR | CAPABILITY | APPENDIX A DATA | SID CLIMB | VREF ADDITIVE | RCC 4/3/2/1 | APPROACH CLIMB |
| ▪ PLANE PERFORMANCE | | | | ✓ | | |
| ▪ ARINC DIRECT | | ✓ | | ✓ | ✓ | |
| ▪ APG IPREFLIGHT | | ✓ | | ✓ | ✓ | ✓✓ |
| ▪ AIRCRAFT FMS | | | ✓✓ | ✓✓ | ✓✓ | |
| ▪ MANUAL CHARTS | | ✓✓ | ✓✓ | ✓✓ | ✓✓ | ✓✓ |