GVII™-G600™

AIRPLANE FLIGHT MANUAL

GULFSTREAM AEROSPACE
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Gulfstream™
A GENERAL DYNAMICS COMPANY

RECORD OF REVISIONS

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LOG OF REVISION 3

Listed below are the highlights of Revision 3 along with their respective Section and Description of Change. Remove and insert all affected pages as listed in the List of Effective Pages and enter Revision 3 dated March 03/20 to the Log/ Record of Revisions Sheet.

SECTION	DESCRIPTION OF CHANGE
01-02-10	Runway, Slope and Wind Conditions – Added sub-step 3.d.
01-03-40	Airspeed Limitations – Added Step 15 and sub-steps a.,b., and c.
01-27-10	Normal Control Laws – Deleted Step 2. Added a new WARNING and a new NOTE to the end of the procedure.
01-34-40	Takeoff and Landing Data: Revised Step 1. Added a new Steps 3 and 4.
02-05-50	Landing – Deleted the NOTE prior to Step 4, and replaced it with a WARNING.
03-12-10	Zero Flaps or Partial Flaps Landings – Added new Step 11.b. Renumbered subsequent steps.
04-08-40	One Engine Inoperative Landing Procedure – Added a new WARNING prior to Step 8.c. Revised Step 8.c.
05-11-10	Threshold Speeds – In section 1 Introduction, revised Step 2; added a new WARNING and revised the NOTE at the end of the section.
05-11-20	Tire Speed and BKE Limited Maximum Landing Weight – In section 1 Introduction, revised the NOTE prior to Step 3. Revised the NOTE following Step 3.

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01-02-10: Runway, Slope, and Wind Conditions

1. **Runway Conditions**
   a. A runway is wet when more than 25 percent of the runway surface area (within the reported length and the width being used) is covered by any visible dampness or water that is ⅛ inch (3 mm) or less in depth. A damp runway that meets this definition is considered wet, regardless of whether or not the surface appears reflective.
   b. A runway is considered contaminated when more than 25 percent of the runway surface area (within the reported length and the width being used) is covered by any frost, ice, snow, slush or greater than 3mm of standing water.
2. **Maximum Slopes Approved for Takeoff and Landing Operations**
   a. +2% (uphill).
   b. -2% (downhill).
3. **Wind Conditions**
   a. Maximum tailwind component approved for takeoff and landing: 10 knots
   b. When operating in a flight control law mode other than normal (i.e., alternate, direct or backup), maximum crosswind component for landing: 10 knots
   c. Maximum tailwind component for landing with flaps 10° or less is zero knots.
   d. The maximum crosswind component for landing (including gusts) is 22 knots.
4. **Takeoff Crosswind Limits**
   a. Static Takeoff - 30 knots.

NOTE

For crosswinds above 30 knots, refer to 02-08-140, High Crosswind Takeoff Procedure.

5. **Surface Type**
   a. Smooth and/or grooved, hard-surfaced runways are approved.

01-02-20: High Elevation Airport Operations

1. **Maximum Approved Airport Pressure Altitude for Takeoff or Landing**

01-03-30: Maximum Operating Altitudes

1. **Maximum Operating Altitude**
   a. 51,000 feet.
2. **Maximum Operating Altitude with Rudder Failure or Jam**
   a. 35,000 feet.
3. **Maximum Operating Altitude with a Single Air Conditioning Pack Operating**
   a. 48,000 feet.
4. **Maximum Operating Altitude for Extension / Flight Landing Gear Extended**
   a. 20,000 feet.
5. **Maximum Operating Altitude For Extension / Flight with Flaps 10° or 20°**
   a. 25,000 feet.
6. **Maximum Operating Altitude For Extension / Flight with Flaps Down**
   a. 20,000 feet.
7. **Maximum Operating Altitude with Interior Baggage Compartment Door Open**
   a. 45,000 feet.

01-03-40: Airspeed Limitations

1. **Minimum Control Speed Air (V_{MCA})**
   a. Flaps 10° – 108 KCAS.
   b. Flaps 20° – 104 KCAS.
   c. V_{MCL} – 101 KCAS.
2. **Minimum Control Speed Ground (V_{MCG})**
   a. Flaps 10° – 105 KCAS.
   b. Flaps 20° – 112 KCAS.
3. **Maneuvering Speed (V_A)**
   a. Full application of pitch, roll or yaw controls should be confined to speeds below 206 KCAS.

NOTE

Rapid and large alternating control inputs, especially in combination with large changes in pitch, roll, or yaw, and full control inputs in more than one axis at the same time, should be avoided as they may result in structural failures at any speed, including below the maneuvering speed.

4. **Flaps Extended Speed (V_{FE})**
   a. 10° – 250 KCAS.
   b. 20° – 220 KCAS.
   c. Flaps Down – 180 KCAS.
5. **Maximum Landing Gear Extended Speed (V_{LE})**
   a. Maximum Landing Gear Extended Speed (V_{LE}) is the maximum speed at which the airplane can be safely flown with the landing gear extended.
   b. Do not exceed 250 KCAS with landing gear extended.
6. **Maximum Landing Gear Operation Speeds (V_{LO})**
   a. Maximum Landing Gear Operating Speed (V_{LO}) is the maximum speed at which it is safe to extend or retract the landing gear.
   b. Do not extend or retract the landing gear above 225 KCAS.
7. **Emergency Landing Gear Extension**
   a. Emergency Landing Gear Extension utilizes alternate means to extend the landing gear. Do not lower landing gear using the alternate system above 175 KCAS.
   b. With the landing gear extended utilizing the alternate system, do not exceed 225 KCAS.
8. **Maximum Operating Limit Speed (V_{MO} / M_{MO})**
   a. Maximum operating limit speed shall not be deliberately exceeded in any regime of flight (climb, cruise or descent). See Figure 2. Altitude/Mach Flight Envelope.
9. **Maximum Airspeed with Yaw Damper Failure**
   a. 285 KCAS / 0.90M.
10. **Turbulence Penetration Speed**
    a. At or above 10,000 feet: 270 KCAS / 0.85M, whichever is less.
    b. Less than 10,000 feet: 240 KCAS.
11. **Maximum Tire Groundspeed:**

a. 195 knots.

12. **Degraded Flight Control Law Mode**

a. When operating in a flight control law mode other than normal (i.e., alternate, direct or backup), do not exceed 285 KCAS / 0.90M maximum.

13. **Flight Control Surface Failure or Jammed Condition**

a. If any primary flight control surface or spoiler panel is failed, caused by either a component malfunction(s) or a hydraulic system failure, do not exceed 285 KCAS / 0.90M maximum.

14. **Gear / Flap Overspeed Indications**

NOTE

Flap and gear overspeed indications are only available with KCAS as the PFD speed selection.

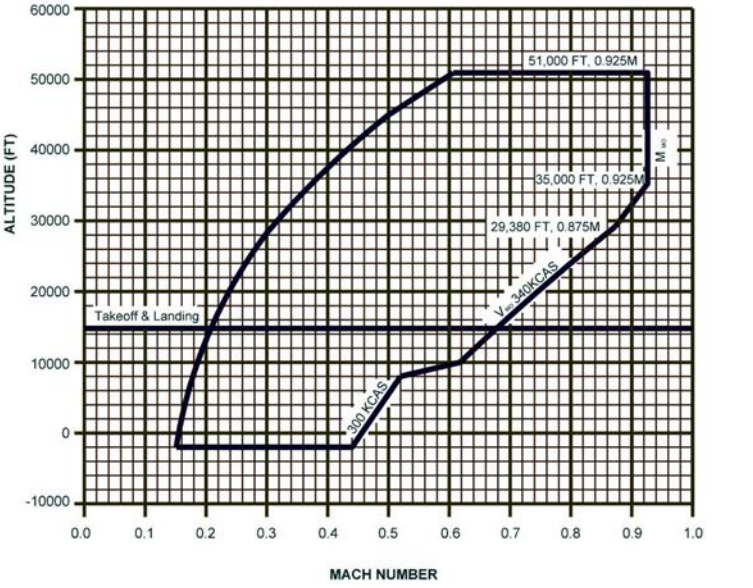
a. With Mach selected on the PFD, gear and/or flap extension is prohibited.

15. **Approach Speed**

a. Approach speed for normal approaches (Flaps 39) is V_{REF} + half the steady state wind plus the gust increment up to a maximum additive of 20 knots.

b. Minimum approach speed is V_{REF} + 5 knots

c. Approach Speed shall be maintained to the runway threshold and shall be used to determine landing performance except for abnormal flap approaches. Abnormal flap approaches must comply with the procedures in section 03-12-10, Zero Flaps or Partial Flaps Landings.



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Figure 2. Altitude/Mach Flight Envelope

01-27-10: Normal Control Laws

1. Continued flight at or above stick shaker activation AOA is prohibited.

WARNING

RAPID AND LARGE ALTERNATING PITCH CONTROL INPUTS, SUCH AS AN ABRUPT PULL-PUSH-PULL, MAY REDUCE THE AIRPLANE RESPONSE TO SUBSEQUENT CONTROL INPUTS TO LESS THAN WHAT MAY BE REQUIRED FOR NORMAL AIRPLANE HANDLING.

NOTE

AOA limiting may occur without stick shaker activation or display of FCC AOA Limiting (advisory) CAS message below 400 ft.

01-27-20: Degraded Control Laws

1. When operating in a flight control law mode other than normal (Alternate, Direct, or Backup), do not exceed 285 KCAS / .90M.
2. Flight into known icing conditions is prohibited when operating in a flight control law mode other than normal (Alternate, Direct or Backup). If the flight control law mode degrades from normal while in icing conditions, exit icing conditions as soon as possible.

NOTE

The AOA limiting / stall protection system is only available in the normal flight control mode. Stick shaker/stall warning is provided in Alternate mode at 0.85 AOA .

3. Intentional degradation from normal mode or disabling of any flight control system is prohibited.
4. Takeoff is prohibited when operating in a flight control law mode other than normal (Alternate, Direct, or Backup).

b. AFN, ADS-C and CPDLC are approved for oceanic and remote operation within the NAT and in areas outside of the NAT. The proper datalink capability must be noted on the filed ICAO flight plan: - block 10 should include “J” and “/D” and block 18 should include “DAT / SV”.

c. For operations using the NAT Strategic Lateral Offset Procedures (SLOP), the entry of a right 1 or 2 NM offset has a negligible effect on the FMS predictions at the next and next +1 waypoint. For larger than 2 NM offset, e.g. for a weather deviation, the FMS prediction assumes that the airplane will return to the original flight plan prior to the next waypoint. If this is not the case, the crew should advise ATC that the FMS predictions are to the original path and not to the offset path.

01-34-40: Takeoff and Landing Data (TOLD)

1. If the FMS TOLD database is not installed, TOLD performance calculations shall be accomplished by reference to performance data in AFM Chapter 5.

2. If entering an obstacle height (TSC/FMS/Perf Takeoff/Obst/Obstacle), the manually entered obstacle elevation must include a 35-foot additive.

3. TOLD calculations shall be checked for reasonableness against performance data in AFM Chapter 5.

4. The approach speed additive shall be entered into TOLD to calculate runway landing distance. Maximum landing weight shall be calculated in 05-11-20, Tire Speed and BKE Limited Maximum Landing Weight. Reduce maximum landing weight determined from Figure 5: Maximum Landing Gross Weight Limited by Fuseplug Release Energy, by 650 lb per knot of threshold speed additive.

01-34-50: Traffic Alert and Collision Avoidance System

1. **Single Engine Inoperative and TCAS**

   a. The use of TA/RA mode is prohibited with a single engine inoperative, select TA Only as operating mode.

01-34-60: Enhanced Flight Vision System (EFVS)

1. **EFVS General**

   a. The demonstrated performance of the installed EFVS Approach System meets the criteria of AC 20-167A for EFVS operations conducted in accordance with 14 CFR 91.176 (a) and 91.176 (b).

   b. For EFVS operations to touchdown and rollout, descending below DA/DH requires that visual references be distinctly visible and identifiable to

6.	Flight Observer Seat	Check
7.	Interior Doors	Verify Open

END

02-05-50: Landing

NOTE

When approach guidance is established on final approach, a subsequent deviation may not recapture in a timely manner unless the approach button is rearmed.

1.	SEAT BELT / NO SMOKE PASSENGER WARNING	Select
2.	Landing Gear / Lights	Down / 3 green

WARNING

FLAPS MUST BE SET AND EXTENDED TO 20° PRIOR TO SELECTION OF FLAPS TO DOWN.

3.	FLAPS	DOWN

WARNING

APPROACH SPEED IS V_{REF} +5 KNOTS; HOWEVER, IN STRONG WIND CONDITIONS, ADD TO V_{REF} 1/2 OF THE STEADY STATE WIND PLUS THE GUST INCREMENT TO A MAXIMUM ADDITIVE OF 20 KNOTS. APPROACH SPEED, INCLUDING ANY GUST ADDITIVE SHALL BE MAINTAINED TO THE THRESHOLD AND SHALL BE USED TO DETERMINE LANDING DISTANCE.

4.	Approach / Landing Airspeeds	Verify

Continued on next page →

CAUTION

AFTER TOUCHDOWN, PEDAL STEERING AND / OR RUDDER AERODYNAMIC CONTROL SHOULD BE USED TO MAINTAIN DIRECTIONAL CONTROL. DIFFERENTIAL BRAKING SHOULD AUGMENT PEDAL STEERING AS RUDDER EFFECTIVENESS DECREASES (IF REQUIRED).

CONSIDER LIMITING THRUST REVERSER USE IF LANDING SURFACE IS DEGRADED, OR CONTAMINATED TO PREVENT AIRCRAFT DAMAGE.

END

02-05-60: All Engines Operating Go-around Procedure

CAUTION

DO NOT ATTEMPT A GO-AROUND WITH LESS THAN 650 POUNDS OF FUEL INDICATED IN EITHER FUEL TANK.

1. TO/GA ..... Press
2. Throttles ..... Increase to go-around power
3. FLAPS ..... 20°
4. Airspeed ..... V_{REF} (Flaps 20°)
5. **When a positive rate of climb has been established:**
   a. Landing Gear ..... Up
6. **When airspeed is V_{REF} (Flaps 20°) + 20:**
   a. FLAPS ..... UP

END

03-12-10: Zero Flaps or Partial Flaps Landings

Displayed CAS and CA Messages

Flap Asymmetry (caution)
Flap Command Invalid (U) (caution)
Flaps Failed (U) (caution)

System Impacts

- **Autothrottle:** Use of autothrottle is prohibited during approach and landing with flaps 10° or less.
- **Landing:** Maximum tailwind component for landing with flaps 10° or less is zero knots.
- **Landing Distance:** Zero or partial flap landings will result in increased landing distance required.

Corrective Action

1.	Airplane	Plan a wide approach and select the longest available runway
2.	Approach Winds	Plan landing runway and approach that maximize headwinds during approach and landing
3.	Approach	Plan shallow approach (if possible)
4.	**Prior to Final Approach Fix:**	
	a. WAI	On
	b. Wing Temperature	Verify above 100°F
	c. AT Auto-Engage Inhibit (TSC/ Systems/AT Control)	Select
	d. GPWS FLAP INHIBIT (TSC/Aural Inhibits/TAWS Control)	Select

Continued on next page →

e.	Airspeed	200 KCAS minimum (until ready to configure)

5. **If WAI unavailable:**

a.	Flaps 0 V_{REF}	Increase by a factor of 1.27
b.	Flaps 0 Landing Distance	Increase by a factor of 1.57

CAUTION

LANDING WITH BRAKE ENERGY EXCEEDING 125.7 MFP MAY RESULT IN BRAKE FAILURE AND FIRE AFTER LANDING. CONSIDERATION SHOULD BE GIVEN TO AN ALTERNATE LANDING LOCATION.

c. Refer to 05-11-20, Tire Speed and BKE Limited Maximum Landing Weight

6.	Landing Distance	Calculate
7.	Landing Gear	Down
8.	Landing Checklist	Complete
9.	Autothrottle	Disconnect (Flaps 10° or less)
10.	Airspeed	Establish V_{REF}+ 5 prior to FAF

11. **Landing**

Continued on next page →

CAUTION

WHEN LANDING WITH PARTIAL FLAPS, A REDUCED FLARE IS REQUIRED. IT MAY BE NECESSARY TO APPLY A SLIGHT FORWARD PRESSURE ON THE SIDESTICK TO PUT THE NOSE WHEEL ON THE RUNWAY.

WHEEL FUSE PLUG RELEASE WILL LIKELY OCCUR DUE TO ADDED LANDING SPEED UNDER COMBINATIONS OF HIGH FIELD ELEVATION, NEAR MAX LANDING WEIGHT, AND HIGH OAT. CONSIDERATION SHOULD BE GIVEN TO ALERTING EMERGENCY RESPONSE CREWS DUE TO THE ELEVATED RISK OF BRAKEFIRE AND FUSE PLUG RELEASE.

a. Maximum Touchdown Groundspeed — 195 knots

b. Airspeed — Establish V_{REF} at the Runway Threshold

c. Thrust Reversers — Apply maximum

12. **If a go-around is required:**

a. Airspeed — Execute initial climb at V_{REF}

END

03-12-20: Loss of Flap Position Indication

System Impacts

- **Stall Protection:** Not available.
- **Landing Gear Warning:** Not available.

Corrective Action

1. Flap Position — Visually Identify

Continued on next page →

CAUTION

WAI MUST BE ACTIVATED AND HAVE REACHED AN OPERATING TEMPERATURE GREATER THAN 100°F PRIOR TO ENTRY INTO ICING CONDITIONS.

(3) WAI — On

(4) ECS System — Monitor

(5) Refer to 02-08-70, Fuel Balancing in Flight.

h. **If hydraulic pressure fails to indicate after restart:**

NOTE

Hydraulic pressurization indications may be delayed between 30 seconds and 5.5 minutes after a successful airstart. The procedures below will minimize the delay.

(1) Throttle (Affected Engine) — Increase above Idle

(2) Altitude — Descend below 15,000 feet

END

04-08-40: One Engine Inoperative Landing Procedure

System Impacts

- **Autothrottle:** Prohibited during single engine approach.
- **Hydraulic Systems:** Operation of speed brakes, flaps, landing gear, thrust reversers and brakes should occur as separate events, not simultaneously.
- **WAI:** Wing Anti-Ice operations with a single bleed source is restricted to single ECS pack operations.

Corrective Action

1. **If WAI is required:**

Continued on next page →

a. ECS Pack (Affected Engine) — OFF

b. Isolation Valve — Closed (Out)

CAUTION

WAI MUST BE ACTIVATED AND REACH AN OPERATING TEMPERATURE GREATER THAN 100°F PRIOR TO ENTRY INTO ICING CONDITIONS.

c. WAI — On

2. **If the left engine has failed:**

a. PTU — Armed / On

b. Aux Pump — Armed / Off

3. Fuel Balance — Monitor and Maintain

a. Refer to 02-08-70, Fuel Balancing In Flight.

4. FLAPS — 20°

5. Landing Gear / Lights — Down / 3 green

6. Hydraulics / Brake Accumulators — Check / 3000 PSI

7. SEAT BELT / NO SMOKE PASSENGER WARNING — Select

8. **Final Approach Fix**

a. Autothrottle — Disconnect

b. FLAPS — DOWN

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WARNING

APPROACH SPEED IS V_{REF} + 5 KNOTS; HOWEVER, IN STRONG WIND CONDITIONS, ADD TO V_{REF} 1/2 OF THE STEADY STATE WIND PLUS THE GUST INCREMENT TO A MAXIMUM ADDITIVE OF 20 KNOTS. APPROACH SPEED, INCLUDING ANY GUST ADDITIVE SHALL BE MAINTAINED TO THE THRESHOLD AND SHALL BE USED TO DETERMINE LANDING DISTANCE.

c. Approach/Landing Airspeeds — Verify

9. **Landing**

a. Operating Thrust Reverser — As required

b. **If a go-around is required:**

(1) Refer to 04-08-50, One Engine Inoperative Go-around Procedure.

10. **If airplane evacuation is necessary:**

a. Refer to 04-19-50, Emergency Airplane Evacuation.

END

04-08-50: One Engine Inoperative Go-around Procedure

Corrective Action

1. Autopilot — Disconnect
2. TOGA — Press
3. Throttle (Operating Engine) — Go-around power
4. FLAPS — 20°

Continued on next page →

05-11-10: Threshold Speeds

1 Introduction

1. Threshold speeds, V_{REF}, for landing distance are shown for normal flap setting 39° in Figure 1. Threshold Speed for Landing Distance, Flaps 39°, Wing Anti-Ice OFF and ON for Wing Anti-Ice OFF and ON operations. Abnormal flap settings 20° and 10° threshold speeds for Wing Anti-Ice OFF and ON conditions are shown in Figure 2. Threshold Speed for Landing Distance, Flaps 20°, Wing Anti-Ice OFF and ON and Figure 3. Threshold Speed for Landing Distance, Flaps 10°, Wing Anti-Ice OFF and ON. For the abnormal flap setting 0°, threshold speeds shown in Figure 4. Threshold Speed for Landing Distance, Flaps 0°, Wing Anti-Ice ON are effective for Wing Anti-Ice ON operations.
2. Final approach speeds are computed as the landing threshold speed plus appropriate speed margins. The final approach speed margin above the intended threshold speed must not be greater than that which can be bled off before the point of crossing the runway threshold.
3. Normally, landings will be conducted only at the landing flap setting of 39°. Additional charts are provided for reduced flap settings to be used when an abnormal landing at a reduced flap setting is required. The landing threshold speeds shown are effective throughout the certified weight, temperature and altitude range of the airplane.

WARNING

APPROACH SPEED IS V_{REF} + 5 KNOTS; HOWEVER, IN STRONG WIND CONDITIONS, ADD TO V_{REF} 1/2 OF THE STEADY STATE WIND PLUS THE GUST INCREMENT TO A MAXIMUM ADDITIVE OF 20 KNOTS. APPROACH SPEED, INCLUDING ANY GUST ADDITIVE SHALL BE MAINTAINED TO THE THRESHOLD.

CAUTION

TIRESPEED LIMITATIONS WILL BE EXCEEDED IF TOUCHDOWN IS MADE IN EXCESS OF 195 KNOTS GROUNDSPEED.

NOTE

If winds are reported 270/10G20, the V_{REF} additive is calculated utilizing 5 knots (half of the steady state) plus 10 knots (for the gust increment). The total V_{REF} additive is 5+10=15 knots.

Landing distance in 05-11-30, Landing Distance and maximum landing weight 05-11-20, Tire Speed and BKE Limited Maximum Landing Weight shall be calculated utilizing planned speed at the threshold.

2 Example

Determine the final approach and threshold speeds for landing at a normal flap (39°) setting.

Given:

- Landing Gross Weight = 58,000 pounds (26,308 kg)
- Airport Pressure Altitude = 2000 feet

Solution:

- Threshold Speed (V_{REF}) = 111 KIAS
- Final Approach Speed (V_{REF} +5 KIAS) = 116 KIAS

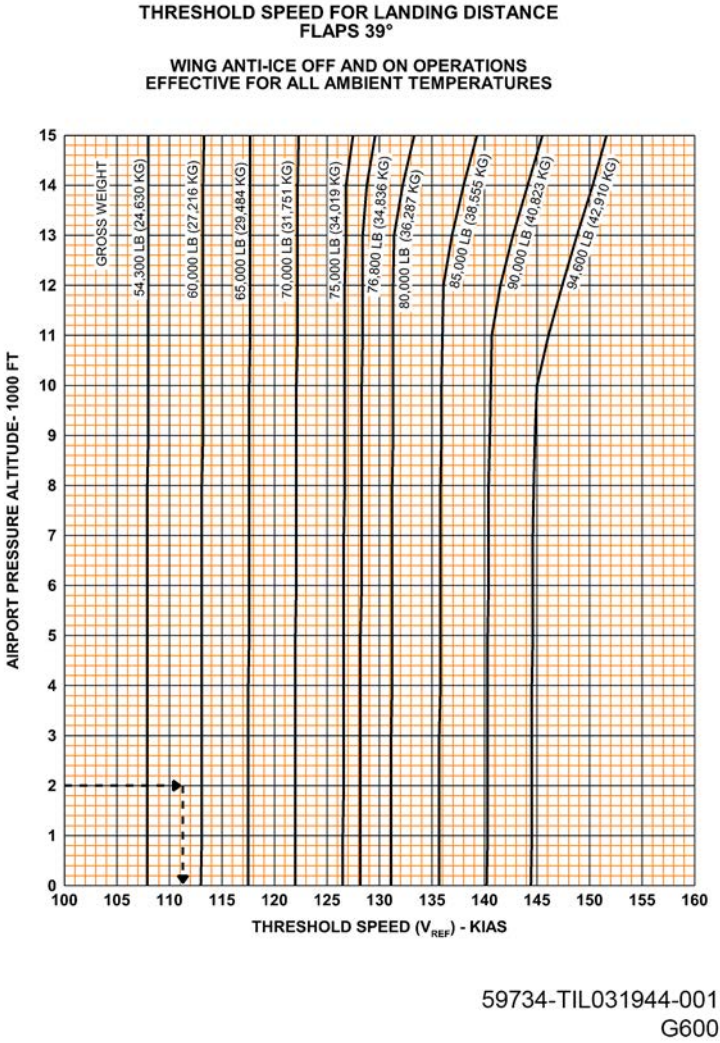


Figure 1. Threshold Speed for Landing Distance, Flaps 39°, Wing Anti-Ice OFF and ON

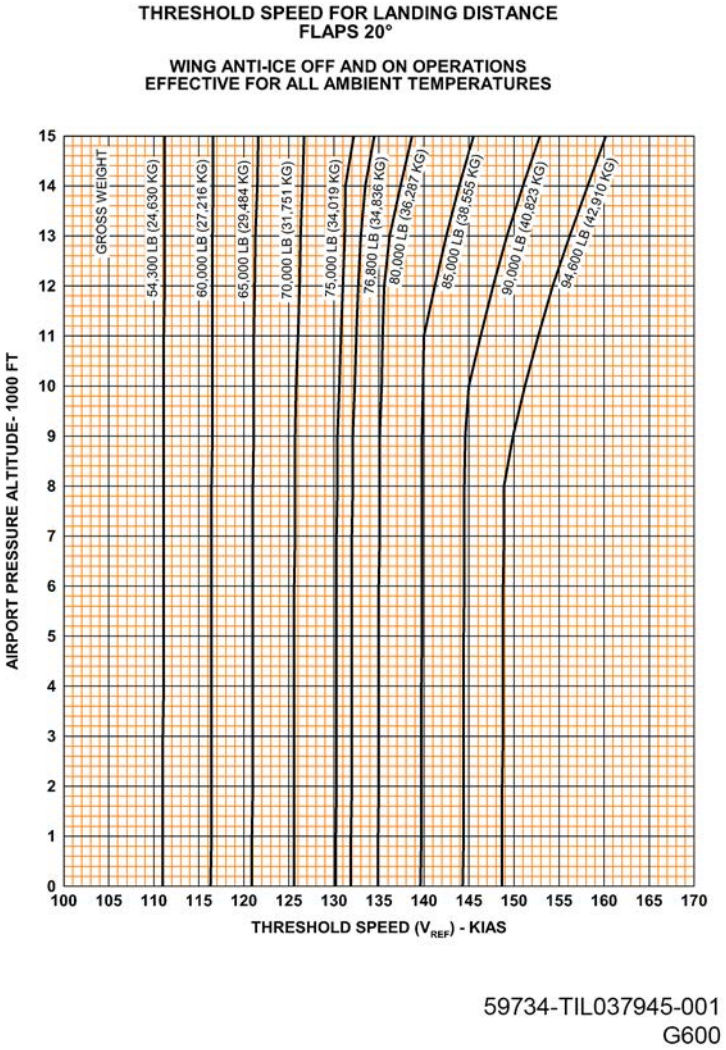


Figure 2. Threshold Speed for Landing Distance, Flaps 20°, Wing Anti-Ice OFF and ON

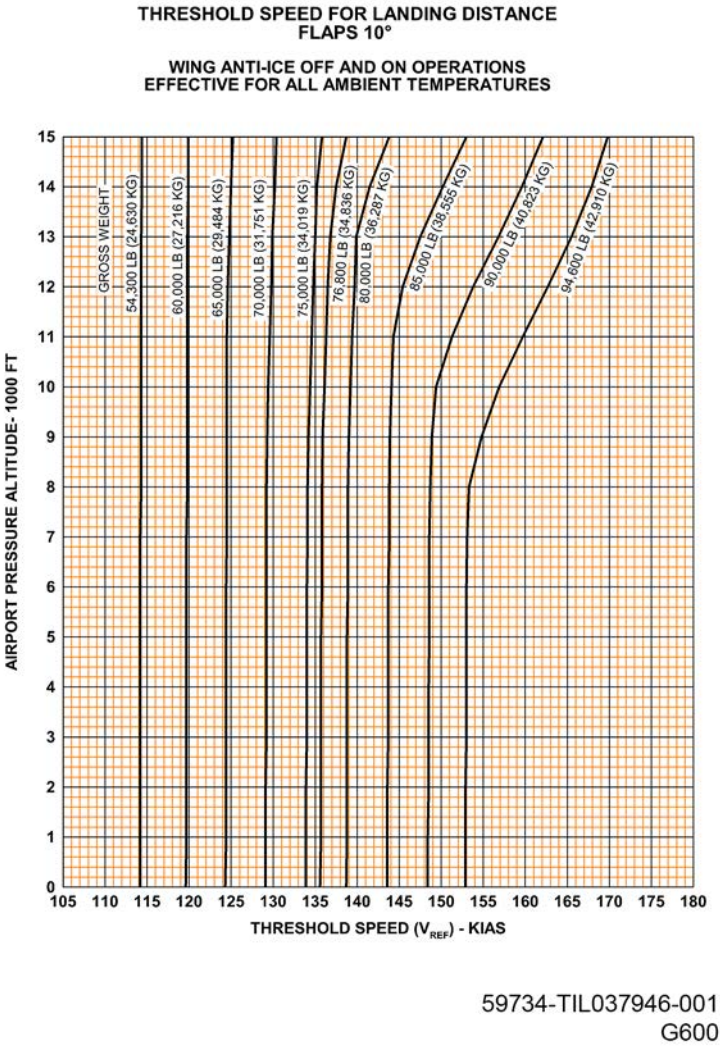


Figure 3. Threshold Speed for Landing Distance, Flaps 10°, Wing Anti-Ice OFF and ON

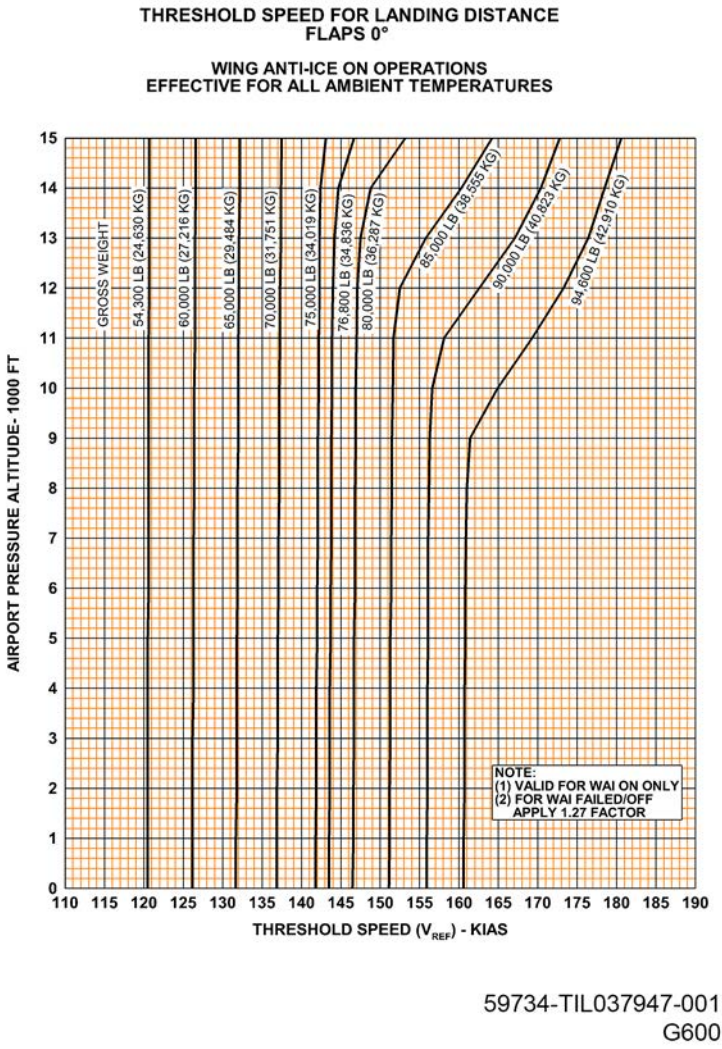


Figure 4. Threshold Speed for Landing Distance, Flaps 0°, Wing Anti-Ice ON

05-11-20: Tire Speed and BKE Limited Maximum Landing Weight

1 Introduction

1. Prior to determining the landing distance, the limiting maximum landing weight for the conditions must first be determined. In any case, the maximum landing weight may not exceed the maximum landing weight of 76,800 pounds (34,836 kg) for the airplane.
2. For a normal landing conducted at the normal flap setting of 39°, the maximum landing weight may be further limited by fuseplug release energy. On the GVII-G600, fuseplug release will occur at or above a landing brake kinetic energy of 84.2 MFP. There is no limitation due to tirespeed on maximum landing weight for a landing at the flap setting of 39°. The maximum landing weight for normal landings should be computed using the MAXIMUM LANDING GROSS WEIGHT LIMITED BY FUSEPLUG RELEASE ENERGY OF 84.2 MFP chart in Figure 5. Maximum Landing Gross Weight Limited by Fuseplug Release Energy of 84.2 MFP – Flaps 39°, Wing Anti-Ice OFF or ON for Wing Anti-Ice OFF or ON operations.

NOTE

Data are presented for a single engine operating at forward idle thrust. The use of reverse thrust will reduce the absorbed brake energy and provide margin to the fuseplug release energy.

To determine BKE limited maximum landing weight with Wing Anti-Ice failed, multiply computed maximum landing weight by a factor of 0.77. Factor is valid for normal flap settings.

Reduce Maximum Landing Weight determined from Figure 5. Maximum Landing Gross Weight Limited by Fuseplug Release Energy of 84.2 MFP – Flaps 39°, Wing Anti-Ice OFF or ON, by 650 lb per knot of threshold speed additive.

3. For an abnormal landing conducted at any reduced flap setting (less than 39°), a limitation on the maximum allowable landing weight can exist either due to the tirespeed limit (195.5 KTGS) or the brake kinetic energy limit (125.7 MFP). For landings at any reduced flap setting, the limited landing weight should be conservatively computed using the more restrictive of the Maximum Allowable Landing Gross Weight For Landing Brake Kinetic Energy Limit of 125.7 MFP chart in Figure 6. Maximum Allowable Landing Gross Weight Permitted by BKE Limit of 125.7 MFP - Abnormal Landing Flaps, and Maximum Allowable Landing Gross Weight Permitted By Tirespeed Limit of 195.5 KTGS in Figure 7. Maximum Allowable Landing Gross Weight Permitted by Tirespeed Limit of 195.5 KTGS - Abnormal Landing Flaps.

NOTE

To determine BKE limited maximum landing weight with Wing Anti-Ice failed, multiply computed maximum landing weight by a factor of 0.77. Factor is valid for abnormal flap settings.

To determine tirespeed limited maximum landing weight with Wing Anti-Ice failed, multiply computed maximum landing weight by a factor of 0.63. Factor is valid for abnormal flap settings only.

Reduce Maximum Landing Weight determined from Figure 6. Maximum Allowable Landing Gross Weight Permitted by BKE Limit of 125.7 MFP - Abnormal Landing Flaps, by 1050 lb per knot of threshold speed additive.

2 Examples

1. **Example 1:**
   Determine the maximum allowable landing weight for a normal landing (Flaps 39°).
   Given:
   - Airport Pressure Altitude = 2000 feet
   - Airport Ambient Temperature = 11°C (ISA +0°C)
   - Runway Slope = 0%
   - Wind Component = -10 knots (Tailwind)

   Solution:
   - BKE Limited Landing Weight = 85,554 pounds (38,807 kg)

   NOTE

   Since the BKE Limited Landing Weight is greater than the airplane Maximum Landing Weight, the Landing Weight limit in the normal configuration for these conditions is the Maximum Landing Weight of 76,800 pounds (34,836 kg).

2. **Example 2:**
   Determine the maximum allowable landing weight for a flaps-up landing (for abnormal use only when 39° flaps are not available). Wing Anti-Ice is operational.
   Given:
   - Airport Pressure Altitude = 15,000 feet
   - Airport Ambient Temperature = -20°C (ISA -5°C)

- Runway Slope = 0%
- Wind Component = -10 knots (Tailwind)

Solution:

- BKE Limited Landing Weight = 74,509 pounds (33,797 kg)
- Tirespeed Limited Landing Weight = 73,173 pounds (33,191 kg)

NOTE

For the given conditions, the maximum allowable landing weight is limited to 73,173 pounds (33,191 kg) based on the tirespeed limit.

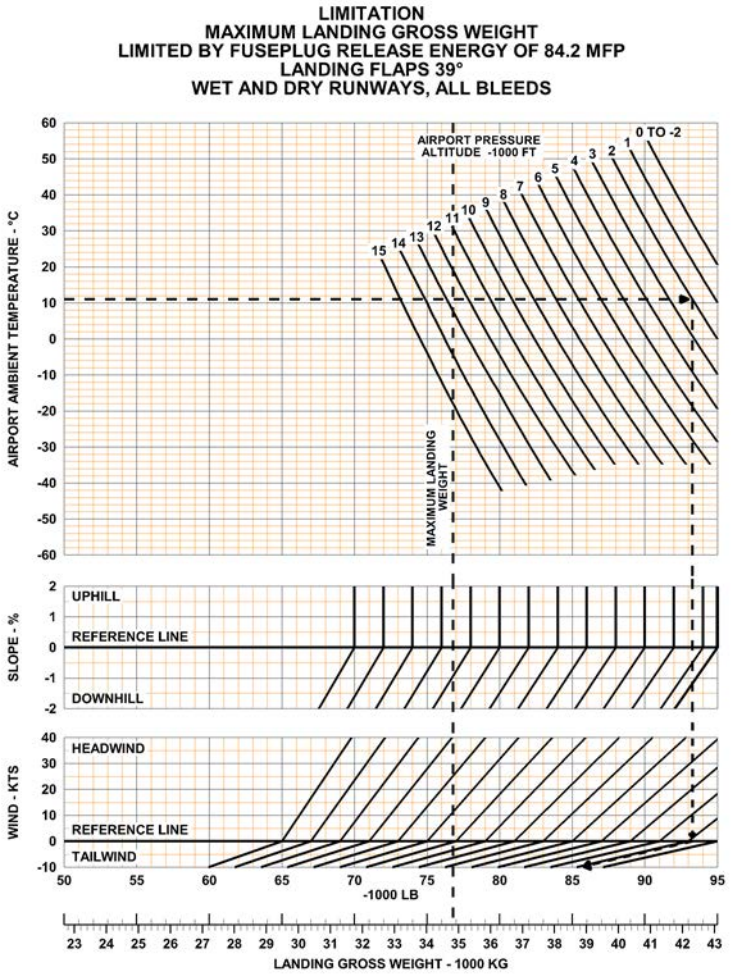
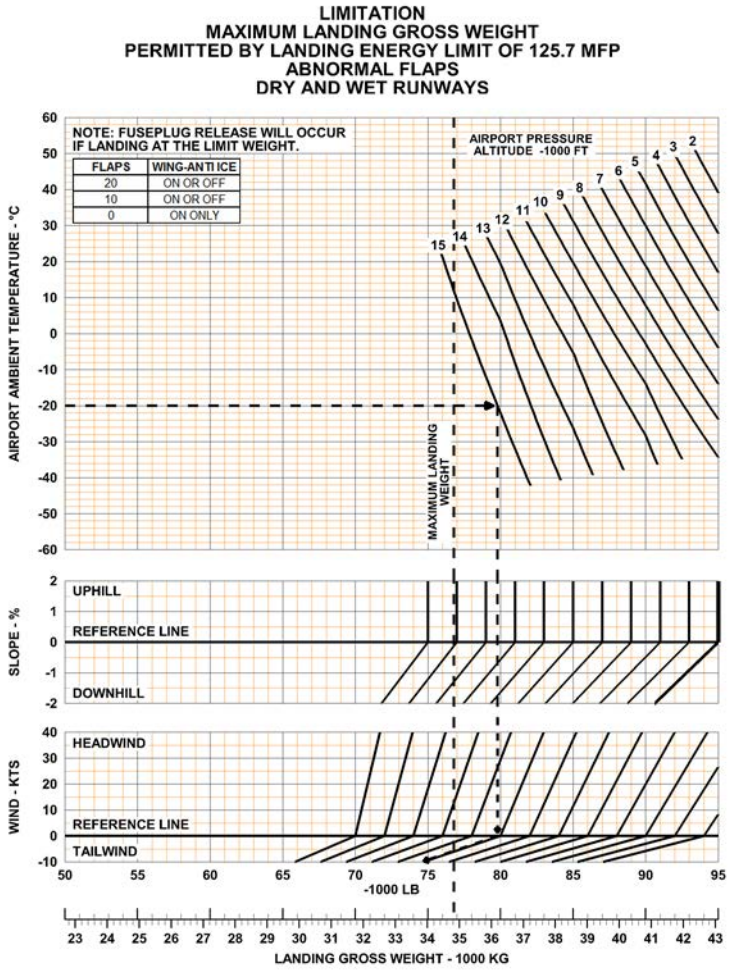
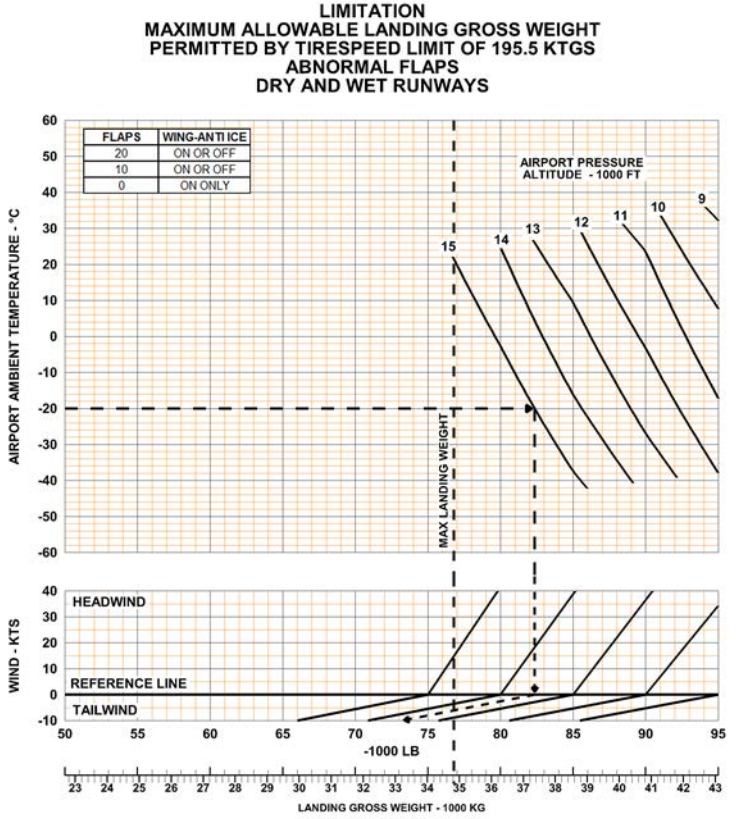


Figure 5. Maximum Landing Gross Weight Limited by Fuseplug Release Energy of 84.2 MFP – Flaps 39°, Wing Anti-Ice OFF or ON



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Figure 6. Maximum Allowable Landing Gross Weight Permitted by BKE Limit of 125.7 MFP - Abnormal Landing Flaps



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Figure 7. Maximum Allowable Landing Gross Weight Permitted by Tirespeed Limit of 195.5 KTGS - Abnormal Landing Flaps