Issue: 14 Date: 19 August 2025



# TYPE-CERTIFICATE DATA SHEET

No. EASA.IM.A.595

for

Gulfstream GVII

# **Type Certificate Holder:**

**Gulfstream Aerospace Corporation** 

500 Gulfstream Rd Savannah, GA 31408 U.S.A.

For Model(s): GVII-G500 (G500)

GVII-G600 (G600)



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 1 of 27

Intentionally left blank



TCDS No.: IM.A.595

Issue: 14 Date: 19 August 2025

# **TABLE OF CONTENTS**

SECTION 1: GENERAL (ALL MODELS)	6
1. Airworthiness Category	6
2. Performance Class	6
3. Certifying Authority	6
4. Type Certificate Holder	6
5. Manufacturer	6
SECTION 2: GVII-G500	6
I. General	6
1. Type/ Model/ Variant	6
2. State of Design Authority Certification Application Date	6
3. EASA Type Certification Application Date	6
4. State of Design Authority Type Certificate Date	6
5. EASA Type Certification Date	6
(1) G500 is the commercial / marketing designation to identify Gulfstream GVII-G500	0 aircraft
model	6
II. Certification Basis	6
1. Reference Date for determining the applicable requirements	6
2. State of Design Airworthiness Authority Type Certification Data Sheet No	7
3. State of Design Airworthiness Authority Certification Basis	
4. EASA Airworthiness Requirements	7
5. Special Conditions	7
6. Exemptions	8
7. Deviations	8
8. Equivalent Safety Findings	8
9. Elect to Comply	9
10. Environmental Protection Standards	9
III. Technical Characteristics and Operational Limitations	9
1. Type Design Definition	9
2. Description	9
3. Equipment	9
4. Dimensions	9
5. Engines	9
6. Auxiliary Power Unit	10
7. Propellers	10
8. Fluids (Fuel, Oil, Additives, Hydraulics)	
9. Fluid Capacities	11
10. Airspeed Limits	11
11. Flight Envelope	11
12. Operating Limitations	11
13. Maximum Certified Masses	12
14. Centre of Gravity Range	12
16. Mean Aerodynamic Chord (MAC)	
17. Levelling Means	12
18. Minimum Flight Crew	
19. Minimum Cabin Crew	



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 3 of 27

Issue: 14 Date: 19 August 2025

20. Maximum Seating Capacity	
21. Baggage/ Cargo Compartment	
22. Wheels and Tyres	
23. Extended Diversion Time Operations (EDTO)	13
24. Interiors Installations	13
IV. Operating and Service Instructions	13
1. Airplane Flight Manual (AFM)	13
2. Instructions for Continued Airworthiness and Airworthiness Limitations	13
3. Weight and Balance Manual (WBM)	13
VI. Notes	
SECTION 3: GVII-G600	16
I. General	16
1. Type/ Model/ Variant	16
2. State of Design Authority Certification Application Date	
3. EASA Type Certification Application Date	
4. State of Design Authority Type Certificate Date	
5. EASA Type Certification Date	
(1) G600 is the commercial / marketing designation to identify Gulfstream GVII-G	
model	
II. Certification Basis	
1. Reference Date for determining the applicable requirements	
2. State of Design Airworthiness Authority Type Certification Data Sheet No	
3. State of Design Airworthiness Authority Type Certification Basis	
4. EASA Airworthiness Requirements	
5. Special Conditions	
•	
6. Exemptions	
7. Deviations	
8. Equivalent Safety Findings	
9. Elect to Comply	
10. Environmental Protection Standards	
III. Technical Characteristics and Operational Limitations	
1. Type Design Definition	
2. Description	
3. Equipment	
4. Dimensions	
5. Engines	
6. Auxiliary Power Unit	
7. Propellers	
8. Fluids (Fuel, Oil, Additives, Hydraulics)	20
9. Fluid Capacities	21
10. Airspeed Limits	21
11. Flight Envelope	21
12. Operating Limitations	21
13. Maximum Certified Masses	22
14. Centre of Gravity Range	22
16. Mean Aerodynamic Chord (MAC)	22
17. Levelling Means	
18. Minimum Flight Crew	
19. Minimum Cabin Crew	



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 4 of 27

Issue: 14 Date: 19 August 2025

20. Maximum Seating Capacity	22
21. Baggage/ Cargo Compartment	23
22. Wheels and Tyres	
23. Extended Diversion Time Operations (EDTO)	23
24. Interiors Installations	23
IV. Operating and Service Instructions	23
1. Airplane Flight Manual (AFM)	23
2. Instructions for Continued Airworthiness and Airworthiness Limitations	23
3. Weight and Balance Manual (WBM)	23
VI. Notes	24
SECTION: ADMINISTRATIVE	25
I. Acronyms and Abbreviations	25
II. Type Certificate Holder Record	25
III. Change Record	26

TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 5 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 1: GENERAL (ALL MODELS)**

This Data Sheet, which is part of Type Certificate No. IM.A.595, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the European Union Aviation Safety Agency.

1. Airworthiness Category

Large Aeroplanes

2. Performance Class

Α

3. Certifying Authority

Federal Aviation Administration (FAA) Atlanta Aircraft Certification Office

1701 Columbia Avenue

College Park Atlanta, GA 30337 United States of America

4. Type Certificate Holder

**Gulfstream Aerospace Corporation** 

P.O. Box 2206

Savannah, GA 31402-2206 United States of America

5. Manufacturer

**Gulfstream Aerospace Corporation** 

P.O. Box 2206

Savannah, GA 31402-2206 United States of America

# **SECTION 2: GVII-G500**

# I. General

1. Type/ Model/ Variant

GVII-G500 (G500)

2. State of Design Authority Certification Application Date

September 30, 2013

3. EASA Type Certification Application Date

September 30, 2013

4. State of Design Authority Type Certificate Date

July 20, 2018

5. EASA Type Certification Date

GVII-G500<sup>(1)</sup> 11 October 2019

(1) G500 is the commercial / marketing designation to identify Gulfstream GVII-G500 aircraft model.

## **II. Certification Basis**

1. Reference Date for determining the applicable requirements

September 30, 2013



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified.Page 6 of 27 Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

2. State of Design Airworthiness Authority Type Certification Data Sheet No.

T000021AT

3. State of Design Airworthiness Authority Certification Basis

14 CFR Part 25, effective February 1, 1965, including Amendments 25-1 through 25-137. Additional voluntary compliance with Amendment 25-143 for 25.975(a)(7) only as it pertains to fuel tank vents, and Amendment 25-144 for 25.773(e) only as it pertains to pilot compartment view with installed vision systems with transparent displays.

## 4. EASA Airworthiness Requirements

EASA Certification Specification (CS) 25, Amendment 13, effective as of June 14, 2013 and CS AWO effective October 17, 2003, except where identified below. Additional voluntary compliance with CS 25, Amendment 19: 25.603 [completions phase only], 25.788, Appendix S. Compliance against CS-ACNS, Subpart B, Section 2, and Subpart D, section 4. CS-ACNS, Airborne Communications, Navigation and Surveillance, Issue 3 Subpart E Section 3, dated 31 May 2021

The following part of the certification basis constitutes the minimum required safety level of CS 25.571 Amdt. Initial Issue. For changes that affect or introduce fatigue critical structures CS 25.571 Amdt. Initial Issue applies, plus:

- 1. For structures susceptible to widespread fatigue damage (WFD):
  - a. WFD evaluations must substantiate freedom from WFD up to the limit of validity (LOV);
  - b. Inspections and other maintenance actions upon which the LOV is dependent must be established and submitted to EASA for approval;
- 2. The baseline corrosion prevention and control programme must be amended or supplemented to address the influence of the change on the effectiveness of the programme, as necessary.
- Note 1: Points 1 and 2 do not apply to changes introduced by STC.
- Note 2: Points 1 and 2 do not apply to repairs.
- Note 3: CS 25.571 Amdt. Initial Issue or later does not include the above exceptions for STC and repair applicants any longer.
- Note 4: This TCDS entry does not invalidate the 21.A.101 process by which a later CS 25.571 amendment may become applicable.

# 5. Special Conditions



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified.Page 7 of 27 Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

<u>CRI</u>	<u>Subject</u>
A-MCSD-01	EASA OSD Maintenance Certifying Staff Data Certification Basis for
	Gulfstream GVII-G500
A-SIMD-01	EASA OSD Simulator Data for Gulfstream GVII-G500
B-01	Flight Envelope Protection
B-10	High Incidence Protection Function; Stall speeds, stall warning
D-25	High Altitude Operation
D-28	Single- and multiple-place side facing seats
D-42	Electronic Flight Control System: Control Surface Position Awareness
D-44	Leg Flail
E-08	Falling and blowing snow
E-41	Fire Extinguishing Plumbing and Wiring Connections
F-05	HIRF Protection
F-15	Data Link Recording
F-16	Security protection of Aircraft systems and networks
F-18	Flight Instrument External Probes – Qualification in Icing Conditions
F-32	Pilot Compartment View Requirement with Enhanced Flight Vision System
F-33	Non-rechargeable Lithium Battery Installations

# 6. Exemptions

Not Applicable

# 7. Deviations

<u>CRI</u> <u>Subject</u>

F-36 Compliance against CS 25.1322

# 8. Equivalent Safety Findings

<u>CRI</u>	Subject
B-12	Electronic Flight Control System: Out-of-Trim Characteristics
D-03	Flight Control System Failure Criteria
D-11	Emergency Exit Signs
D-13	Emergency Exits
D-17	Exits and seat encroachment*
D-27	Hydrophobic Coating
D-48	Combined Aircraft Pressurization Outflow and Positive Pressure
	Differential Relief Valves
D-50	Use of Reduced Vertical Bunsen Burner Flammability Requirements for
	Interior Materials
E-03	Thrust reverse testing
E-12	Fan Zone Fire classification
E-30	Green Arc PWP Instrument
E-33	TRAS compartment absence of fire detect sys
E-36	APU Subpart J (Cover CRI)
E-37	Engine Control in Icing
E-40	Ignition Switches
F-24	Vertical Acceleration for flight data recorder
F-37	Use of an Electric-Only Direction Indicator for Standby Instrumentation



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified.Page 8 of 27 Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

FAA ELOS TD-01-2019-0050-F-15 – Vibration/Buffeting Compliance Criteria for External Modifications Installed on Gulfstream GVII-Series Aircraft

\*FAA ELOS TC-01-2010-0024-C-7-GVI Rev. 1 - Encroachment into Emergency Exits (for 25.813(c)(2)(ii) aspects of CRI D-17)

## 9. Elect to Comply

CS 36 Amendment 4
NPA 2013-07 Chapter IV (CS 25.571) (CRI C-02)
CS 25.1316, Amendment 17
CS 25 Appendix S, Amendment 19
CS 25.603 [for the Completions STC] and CS 25.788, Amendment 19

#### 10. Environmental Protection Standards

Noise: See TCDSN no. EASA.IM.A.595

Fuel Venting: CS-34 amendment 1, ICAO Annex 16, Volume II, Third edition, Amendment 7,

Part II, chapter II.

## **III. Technical Characteristics and Operational Limitations**

# 1. Type Design Definition

Gulfstream, GVII-G500 Aircraft Level Configuration Control Document, 72P0000000-001, revision D or later approved revision, and Aircraft Service Change 07 Configuration Control Document 72A0400007-001 Rev B or later approved revision, and post-TC modifications as defined in Report GVII-GER-3687, [GVII EASA Post-Type Certification Modifications (EASA Type Design)], later approved revision.

## 2. Description

Twin turbo-fan, long range, large aeroplane

#### 3. Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

## 4. Dimensions

Wingspan 26.30 metres [86.29 feet]
Fuselage Length 27.78 metres [91.13 feet]
Fuselage Width at Constant Section 2.57 metres (8.42 feet (101 inches))

## 5. Engines

Two (2) Pratt & Whitney Canada Turbofan Engines Model: PW814GA (EASA Engine Type Certificate No. IM.E.096), see the Engine Type Certificate Data Sheet EASA.IM.E.096 dated 31 August 2017. See Note 1



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified.Page 9 of 27 Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

# 6. Auxiliary Power Unit

One (1) Honeywell HGT400[G] EASA accepts FAA Approval to TSO C77b per FAA Letter 140L-17-121; Complies with EASA CS-APU.

# 7. Propellers

Not Applicable

# 8. Fluids (Fuel, Oil, Additives, Hydraulics)

Fuels: Pratt & Whitney Canada Turbofan Engines Refer to the applicable approved manuals.

Kerosene Type				
American	British	Canadian		
ASTM D 1655, Jet A ASTM D 1655 Jet A-1 MIL-T-83133 (JP-8)	DEF. STAN. 91-91 DEF. STAN. 91-87	CAN/CGSB-3.23		
French N/A	CIS GOST 10227-86, RT GOST 10227-86, TS-1 (with/without Decree 118)	People's Republic of China (P.R.C.) GB 6537-2018 (No. 3 Jet Fuel) including the fuel additives limited to the concentrations stated in Annex A of GB 6537-2018 (see Chinese Fuel Additives note below)		
JP-5 Type				
American	British	Canadian		
MIL-DTL-5624	DEF STAN 91-86	CAN/GCSB -3.24		
French				
DCSEA 144B				

For required use of anti-icing additives and emergency use of alternate fuel types, refer to the approved Airplane Flight Manual.

NOTE: Approved Chinese Fuel Additives

- 1. Static Dissipater additive: Stadis 450
- 2. Antioxidant: 2,6-ditertiary-butyl-4-methyl-phenol
- 3. Icing Inhibitor: Ethylene Glycol Monomethyl Ether or Diethylene Glycol Monomethyl Ether
- 4. Metal Deactivator: N,N'-disalicylidene 1,2-propanediamine



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 10 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

The following Chinese fuel additives are not approved for use on this Gulfstream aircraft model: Static Dissipater additive T1502 and antifriction additives T1602.

Oils

Refer to the applicable approved manuals

**Hydraulics** 

Refer to the applicable approved manuals.

#### 9. Fluid Capacities

See applicable GVII-G500 Airplane Flight Manual.

## 10. Airspeed Limits

 $V_{MO}/M_{MO} = 340KCAS / 0.925M$ 

## 11. Flight Envelope

Maximum Operating Altitude: 15,545 Metres (51,000 feet)

#### 12. Operating Limitations

# 12.1 Approved Operations

The airplane is approved for the following kinds of operation, both day and night, provided the required equipment is installed and approved in accordance with the applicable regulations/specifications:

- Visual (VFR)
- Instrument (IFR)
- Icing Conditions
- Low Weather Minima (CAT I Operations)
- RVSM (Reduced Vertical Separation Minimums) [CS ACNS subpart E section 2]
- Wet and contaminated runway operations (Appendix D data to FAA approved AFM)

# 12.2 Other Limitations

Runway slope +/- 2%

Maximum Take-off and Landing Tailwind Component – 10 knots

When operating in a flight control law mode other than normal, maximum crosswind component for landing: 10 knots

Maximum tailwind component for landing with flaps 10° or less is zero knots

Maximum Operating Altitude – 15,545 metres (51,000 feet) pressure altitude

Normal take-off crosswind limit – 22 knots

See GVII-G500 Airplane Flight Manual (AFM) for complete list of limitations



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 11 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

#### 13. Maximum Certified Masses

Configuration	Maximum Taxi Weight	Maximum Take-off Weight	Maximum Landing Weight	Maximum Zero Fuel Weight
G500	36,287 kg	36,106 kg	29,189 kg	23,632 kg
G500	80,000 lbs	79,600 lbs	64,350 lbs	52,100 lbs

# 14. Centre of Gravity Range

See the approved Airplane Flight Manual

#### 15. Datum

For Weight and Balance purposes, the zero datum is 100 inches forward of the radome

# 16. Mean Aerodynamic Chord (MAC)

4.0894 metres [161 inches] (L.E. of MAC = Fuselage Station 14.7955 metres (582.5 inches))

# 17. Levelling Means

Longitudinal: Lugs at left nose wheel well door longeron STA 163.0 & 174.0

Lateral: Lugs on rear face of bulkhead STA 148.5 in nose wheel well See GVII-G500 Aircraft Maintenance Manual (AMM) for level procedure

# 18. Minimum Flight Crew

Two (2): Pilot and Co-Pilot

# 19. Minimum Cabin Crew

No Required

## 20. Maximum Seating Capacity

Total number of occupants shall not exceed 22.

The number of passengers shall not exceed 19 as determined by emergency exit requirements, nor shall the number of passengers exceed the number of seating accommodations approved for take-off and landing.

Note: Type Certificate EASA.IM.A.595 considers a "green" aircraft (aircraft without an approved cabin interior) configuration only. Cabin interior installations (including passenger seating



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 12 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

configurations up to 19 passengers are subject to completion STCs being EASA approved prior to any operation with passengers.

## 21. Baggage/ Cargo Compartment

Gulfstream G500 Weight and Balance Manual revision 1 dated August 2019 or later approved versions

## 22. Wheels and Tyres

Nose wheels TSO C135a, Tyres Twin 12 x 7.5 R 10 (TSO C62e) nominal pressure 182 psi (+/-9 psi) Main wheels TSO C135a, Tyres Twin H34 x 9.5 R 18 (TSO C62e) nominal pressure 223 psi (+/- 10 psi)

See Aircraft Maintenance Manual for proper servicing of tyres

# 23. Extended Diversion Time Operations (EDTO)

The GVII-G500 aircraft model has been demonstrated compliant with the design and reliability requirement for 180 min ETOPS flights required by EU regulation 965/2012, CAT.OP.MPA.140 and SPA.ETOPS.100, however this implies no operations approval. This must be sought from the Aviation Authority of the country of registry of the individual aircraft.

#### 24. Interiors Installations

GVII cabin interior installations must be in accordance with Gulfstream report GVII-GER-0149 "GVII-G500 and GVII-G600 Interior Certification Requirements Document".

# **IV. Operating and Service Instructions**

# 1. Airplane Flight Manual (AFM)

For aircraft fitted with ASC 007:

Gulfstream GVII-G500, FAA approved Flight Manual ref. GAC-AC-GVII-G500-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref. EASA-GVII-G500-2016-01, latest approved revisions.

For aircraft fitted with ASC 901, ASC 022, ASC 025, ASC 001A:

Gulfstream GVII-G500, FAA approved Flight Manual ref. GAC-AC-GVII-G500-OPS-0002, *GVII-G500 Airplane Flight Manual for Aircraft with ASC 901, ASC 022, ASC 025, ASC 001A,* as applicable and EASA approved Airplane Flight Manual Supplement ref. EASA-GVII-G500 (Issue 1)-2020-01, latest approved revisions

# 2. Instructions for Continued Airworthiness and Airworthiness Limitations

Maintenance criteria to comply with the certification maintenance requirements are provided in Chapter 5 of the GVII-G500 Aircraft Maintenance Manual.

For aircraft fitted with ASC 007 or *with ASC 901, ASC 022, ASC 025, ASC 001A*: Component life limitations are provided in Section 05-10-10, Chapter 5 of the GVII-G500 Aircraft Maintenance Manual (AMM).

## 3. Weight and Balance Manual (WBM)



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 13 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

For aircraft fitted with ASC 007 or *with ASC 901, ASC 022, ASC 025, ASC 001A*: Gulfstream GVII-G500 Weight and Balance Manual revision 1 dated August 2019 or later approved versions.

**Note 1**: A current Weight and Balance Report must be in each aircraft at the time of original airworthiness certification.

**Note 2**: Airplane operation must be in accordance with the EASA approved Airplane Flight Manual. All placards required by either the EASA approved Flight Manual, the applicable operating rules, or the Certification Basis must be installed in the airplane.

# V. Operational Suitability Data (OSD)

The Operational Suitability Data elements listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.IM.A.595 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

### 1. Master Minimum Equipment List

- a. In agreement with TIP revision 5.1 FAA document, GVII-G500 MMEL, revision 01, dated 21 June 2019, is deemed to grant an equivalent safety level as the CS-MMEL, initial issue dated 31 January 2014
- b. Required for entry into service by EU operator.

#### 2. Flight Crew Data

- a. The Flight Crew data has been approved as per the defined Operational Suitability Data Certification Basis and as documented in reference "EASA-OSD-FC-GVII-GAC, Initial Issue" at the latest applicable revision.
- b. Required for entry into service by EU operator.

# 3. Maintenance Certifying Staff

- a. The Maintenance Certifying Staff data has been approved as per the defined Operational Suitability Data Certification Basis and as documented in reference "GVII-OSD-MCS-001" at the latest applicable revision.
- b. Required for entry into service by EU operator.

#### 4. Simulator Data

- a. The Simulator Data has been approved as per the defined Operational Suitability Data Certification Basis and as documented in reference "GVII-GER-3543" at the latest applicable revision.
- b. Required for entry into service by EU operator.

# VI. Part 26 Compliance Information

For the aircraft variants in this section, compliance with point 26.300(a) of Part 26 is demonstrated by complying with points:

- 26.301 Compliance Plan for (R)TC holders
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control program
- 26.305 Validity of the continuing structural integrity program



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 14 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 2: GVII-G500 - continued**

# VII. Notes

Note 1: Engines for EU delivery must be identified as an -01 Engine Standard as denoted on the data plate.

Note 2: GVII-G500 Aircraft for EU delivery must have ASC number 007 incorporated.



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 15 of 27

Issue: 14 Date: 19 August 2025

## **SECTION 3: GVII-G600**

#### I. General

1. Type/ Model/ Variant

GVII-G600 (G600)

2. State of Design Authority Certification Application Date

December 18, 2013

3. EASA Type Certification Application Date

July 20, 2014

4. State of Design Authority Type Certificate Date

June 28, 2019

**5. EASA Type Certification Date** 

GVII-G600<sup>(1)</sup> 11 May 2020

(1) G600 is the commercial / marketing designation to identify Gulfstream GVII-G600 aircraft model.

## **II. Certification Basis**

1. Reference Date for determining the applicable requirements

20 July, 2014

2. State of Design Airworthiness Authority Type Certification Data Sheet No.

T000021AT

3. State of Design Airworthiness Authority Certification Basis

14 CFR Part 25, effective February 1, 1965, including Amendments 25-1 through 25-138. Additional voluntary compliance with Amendment 25-143 for 25.975(a)(7) only as it pertains to fuel tank vents, and Amendment 25-144 for 25.773(e) only as it pertains to pilot compartment view with installed vision systems with transparent displays.

# 4. EASA Airworthiness Requirements

EASA Certification Specification (CS) 25, Amendment 14, effective as of December 19, 2013 amended by the following:

- CS 25.729(f) Amdt 13 - CS 25.734 Amdt 13 - CS 25.735(I) Amdt 13

and CS AWO effective October 17, 2003, except where identified below. Additional voluntary compliance with CS 25, Amendment 19: 25.603 [completions phase only], 25.788, Appendix S. Compliance against CS-ACNS, Subpart B, Section 2, and Subpart D, section 4.

CS-ACNS, Airborne Communications, Navigation and Surveillance, Issue 3 Subpart E Section 3, dated 31 May 2021

The following part of the certification basis constitutes the minimum required safety level of CS 25.571 Amdt. Initial Issue. For changes that affect or introduce fatigue critical structures CS 25.571 Amdt. Initial Issue applies, plus:

1. For structures susceptible to widespread fatigue damage (WFD):



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 16 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 3: GVII-G600 - continued**

a. WFD evaluations must substantiate freedom from WFD up to the limit of validity (LOV);

b. Inspections and other maintenance actions upon which the LOV is dependent must be established and submitted to EASA for approval;

2. The baseline corrosion prevention and control programme must be amended or supplemented to address the influence of the change on the effectiveness of the programme, as necessary.

Note 1: Points 1 and 2 do not apply to changes introduced by STC.

Note 2: Points 1 and 2 do not apply to repairs.

Note 3: CS 25.571 Amdt. Initial Issue or later does not include the above exceptions for STC and repair applicants any longer.

Note 4: This TCDS entry does not invalidate the 21.A.101 process by which a later CS 25.571 amendment may become applicable.



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 17 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 3: GVII-G600 - continued**

## 5. Special Conditions

CRI Subject A-MCSD-01 EASA OSD Maintenance Certifying Staff Data Certification Basis for Gulfstream GVII-G500 EASA OSD Simulator Data for Gulfstream GVII-G500 A-SIMD-01 B-01 Flight Envelope Protection B-10 High Incidence Protection Function; Stall speeds, stall warning G600-D-16 Flight Crew Sleeping Facility D-25 High Altitude Operation D-28 Single- and multiple-place side facing seats D-42 Electronic Flight Control System: Control Surface Position Awareness D-44 Leg Flail E-08 Falling and blowing snow E-41 Fire Extinguishing Plumbing and Wiring Connections F-05 **HIRF Protection** F-15 **Data Link Recording** F-16 Security protection of Aircraft systems and networks Flight Instrument External Probes - Qualification in Icing Conditions F-18 F-32 Pilot Compartment View Requirement with Enhanced Flight Vision System F-33 Non-rechargeable Lithium Battery Installations

## 6. Exemptions

Not Applicable

#### 7. Deviations

<u>CRI</u> <u>Subject</u>

F-36 Compliance against CS 25.1322

# 8. Equivalent Safety Findings

<u>CRI</u>	Subject
B-12	Electronic Flight Control System: Out-of-Trim Characteristics
G600-C-07	Proof of Structure
D-03	Flight Control System Failure Criteria
D-11	Emergency Exit Signs
D-13	Emergency Exits
D-17	Exits and seat encroachment
D-27	Hydrophobic Coating
D-48	Combined Aircraft Pressurization Outflow and Positive Pressure
	Differential Relief Valves
D-50	Use of Reduced Vertical Bunsen Burner Flammability Requirements for
	Interior Materials
E-03	Thrust reverse testing
E-12	Fan Zone Fire classification
E-30	Green Arc PWP Instrument
E-33	TRAS compartment absence of fire detect system
E-36	APU Subpart J (Cover CRI)
E-37	Engine Control in Icing



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 18 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 3: GVII-G600 - continued**

E-40 Ignition Switches

F-24 Vertical Acceleration for flight data recorder

F-37 Use of an Electric-Only Direction Indicator for Standby Instrumentation

FAA ELOS TD-01-2019-0050-F-15 – Vibration/Buffeting Compliance Criteria for External Modifications Installed on Gulfstream GVII-Series Aircraft

\*FAA ELOS TC-01-2010-0024-C-7-GVI Rev. 1 - Encroachment into Emergency Exits (for 25.813(c)(2)(ii) aspects of CRI D-17)

## 9. Elect to Comply

CS 36 Amendment 4

NPA 2013-07 Chapter IV (CS 25.571) (CRI C-02)

CS 25.1316, Amendment 17

CS 25 Appendix S, Amendment 19

CS 25.603 [for the Completions STC] and CS 25.788, Amendment 19

## 10. Environmental Protection Standards

Noise: See TCDSN no. EASA.IM.A.595

Fuel Venting: CS-34 amendment 1, ICAO Annex 16, Volume II, Third edition, Amendment 7,

Part II, chapter II.

## **III. Technical Characteristics and Operational Limitations**

# 1. Type Design Definition

Gulfstream, GVII-G600 Aircraft Level Configuration Control Document, 73P0000000-001, revision C or later approved revision, and Aircraft Service Change 07 Configuration Control Document 73A0400007-001 Rev C or later approved revision and post-TC modifications as defined in Report GVII-GER-3607, [Gulfstream GVII EASA Post-Type Certification Modifications (EASA Type Design)], later approved revision. Aircraft with Serial Numbers 73001 through 73034 do not require ASC 803 to be implemented as a prerequisite to ASC 007; but, must implement the related changes in accordance with maintenance program requirements. Aircraft serial numbers 73035 and subsequent will comply with ASC 803 from production and will satisfy the prerequisite requirement for ASC 007.

# 2. Description

Twin turbo-fan, long range, large aeroplane

# 3. Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

#### 4. Dimensions

Wingspan 28.96 metres [95.00 feet] Fuselage Length 29.29 metres [96.11 feet]



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 19 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 3: GVII-G600 - continued**

Fuselage Width at Constant Section 2.57 metres (8.42 feet (101 inches))

# 5. Engines

Two (2) Pratt & Whitney Canada Turbofan Engines Model: PW815GA (EASA Engine Type Certificate No. IM.E.096), see the Engine Type Certificate Data Sheet EASA.IM.E.096 dated 31 August 2017. See Note 1

## **6. Auxiliary Power Unit**

One (1) Honeywell HGT400[G] EASA accepts FAA Approval to TSO C77b per FAA Letter 140L-17-121; Complies with EASA CS-APU.

## 7. Propellers

Not Applicable

# 8. Fluids (Fuel, Oil, Additives, Hydraulics)

Fuels: Pratt & Whitney Canada Turbofan Engines Refer to the applicable approved manuals.

Kerosene Type				
American British Canadian				
ASTM D 1655, Jet A ASTM D 1655 Jet A-1 MIL-T-83133 (JP-8)	DEF. STAN. 91-91 DEF. STAN. 91-87	CAN/CGSB-3.23		
French N/A	CIS GOST 10227-86, RT GOST 10227-86, TS-1 (with/without Decree 118)	People's Republic of China (P.R.C.) GB 6537-2018 (No. 3 Jet Fuel) including the fuel additives limited to the concentrations stated in Annex A of GB 6537-2018 (see Chinese Fuel Additives note below)		
JP-5 Type				
American	British	Canadian		
MIL-DTL-5624	DEF STAN 91-86	CAN/GCSB -3.24		
French				
DCSEA 144B				

For required use of anti-icing additives and emergency use of alternate fuel types, refer to the approved Airplane Flight Manual.



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 20 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 3: GVII-G600 - continued**

NOTE: Approved Chinese Fuel Additives

- 1. Static Dissipater additive: Stadis 450
- 2. Antioxidant: 2,6-ditertiary-butyl-4-methyl-phenol
- 3. Icing Inhibitor: Ethylene Glycol Monomethyl Ether or Diethylene Glycol Monomethyl Ether
- 4. Metal Deactivator: N,N'-disalicylidene 1,2-propanediamine

The following Chinese fuel additives are not approved for use on this Gulfstream aircraft model: Static Dissipater additive T1502 and antifriction additives T1602.

Oils

Refer to the applicable approved manuals

**Hydraulics** 

Refer to the applicable approved manuals.

#### 9. Fluid Capacities

See applicable GVII-G600 Airplane Flight Manual.

#### 10. Airspeed Limits

 $V_{MO}/M_{MO} = 340KCAS / 0.925M$ 

#### 11. Flight Envelope

Maximum Operating Altitude: 15,545 Metres (51,000 feet)

#### 12. Operating Limitations

12.1 Approved Operations

The airplane is approved for the following kinds of operation, both day and night, provided the required equipment is installed and approved in accordance with the applicable regulations/specifications:

- Visual (VFR)
- Instrument (IFR)
- Icing Conditions
- Low Weather Minima (CAT I Operations)
- RVSM (Reduced Vertical Separation Minimums) [CS ACNS subpart E section 2]
- Wet and contaminated runway operations (Appendix D data to FAA approved AFM)

#### 12.2 Other Limitations

Runway slope +/- 2%

Maximum Take-off and Landing Tailwind Component – 10 knots



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 21 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 3: GVII-G600 - continued**

When operating in a flight control law mode other than normal, maximum crosswind component for landing: 10 knots

Maximum tailwind component for landing with flaps  $10^{\circ}$  or less is zero knots Maximum Operating Altitude – 15,545 metres (51,000 feet) pressure altitude Normal take-off crosswind limit – 22 knots

See GVII-G600 Airplane Flight Manual (AFM) for complete list of limitations

#### 13. Maximum Certified Masses

Configuration	Maximum Taxi Weight	Maximum Take-off Weight	Maximum Landing Weight	Maximum Zero Fuel Weight
G600	43,091 kg	42,910kg	34,836 kg	26,054 kg
9900	95,000 lbs	94,600 lbs	76,800 lbs	57,440 lbs

#### 14. Centre of Gravity Range

See the approved Airplane Flight Manual

## 15. Datum

For Weight and Balance purposes, the zero datum is 100 inches forward of the radome

## 16. Mean Aerodynamic Chord (MAC)

4.5502 metres [179.41 inches] (L.E. of MAC = Fuselage Station 15.2357 metres (599.83 inches))

# 17. Levelling Means

Longitudinal: Lugs at left nose wheel well door longeron STA 163.0 & 174.0 Lateral: Lugs on rear face of bulkhead STA 148.5 in nose wheel well See GVII-G600 Aircraft Maintenance Manual (AMM) for level procedure

## 18. Minimum Flight Crew

Two (2): Pilot and Co-Pilot

## 19. Minimum Cabin Crew

No Required

#### 20. Maximum Seating Capacity

Total number of occupants shall not exceed 22.

The number of passengers shall not exceed 19 as determined by emergency exit requirements, nor shall the number of passengers exceed the number of seating accommodations approved for take-off and landing.

Note: Type Certificate EASA.IM.A.595 considers a "green" aircraft (aircraft without an approved cabin interior) configuration only. Cabin interior installations (including passenger seating



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 22 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 3: GVII-G600 - continued**

configurations up to 19 passengers are subject to completion STCs being EASA approved prior to any operation with passengers.

## 21. Baggage/ Cargo Compartment

Gulfstream G600 Weight and Balance Manual revision 1 dated August 2019 or later approved versions

#### 22. Wheels and Tyres

Nose wheels TSO C135a, Tyres Twin 12 x 7.5 R 10 (TSO C62e) nominal pressure 182 psi (+/-9 psi) Main wheels TSO C135a, Tyres Twin H34 x 9.5 R 18 (TSO C62e) nominal pressure 223 psi (+/- 10 psi)

See Aircraft Maintenance Manual for proper servicing of tyres

# 23. Extended Diversion Time Operations (EDTO)

The GVII-G600 aircraft model has been demonstrated compliant with the design and reliability requirement for 180 min ETOPS flights required by EU regulation 965/2012, CAT.OP.MPA.140 and SPA.ETOPS.100, however this implies no operations approval. This must be sought from the Aviation Authority of the country of registry of the individual aircraft.

#### 24. Interiors Installations

GVII cabin interior installations must be in accordance with Gulfstream report GVII-GER-0149 "GVII-G500 and GVII-G600 Interior Certification Requirements Document".

# **IV. Operating and Service Instructions**

# 1. Airplane Flight Manual (AFM)

For aircraft fitted with ASC 007:

Gulfstream GVII-G600, FAA approved Flight Manual ref. GAC-AC-GVII-G600-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref. EASA-GVII-G600-2018-01, latest approved revisions.

# 2. Instructions for Continued Airworthiness and Airworthiness Limitations

Maintenance criteria to comply with the certification maintenance requirements are provided in Chapter 5 of the GVII-G600 Aircraft Maintenance Manual.

For aircraft fitted with ASC 007:

Component life limitations are provided in Section 05-10-10, Chapter 5 of the GVII-G600 Aircraft Maintenance Manual (AMM).

## 3. Weight and Balance Manual (WBM)

For aircraft fitted with ASC 007:

Gulfstream GVII-G600 Weight and Balance Manual revision 1 dated August 2019 or later approved versions.



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 23 of 27

Issue: 14 Date: 19 August 2025

# **SECTION 3: GVII-G600 - continued**

**Note 1**: A current Weight and Balance Report must be in each aircraft at the time of original airworthiness certification.

**Note 2**: Airplane operation must be in accordance with the EASA approved Airplane Flight Manual. All placards required by either the EASA approved Flight Manual, the applicable operating rules, or the Certification Basis must be installed in the airplane.

## V. Operational Suitability Data (OSD)

The Operational Suitability Data elements listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.IM.A.595 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

### 1. Master Minimum Equipment List

- a. In agreement with TIP revision 5.1 FAA document, GVII-G600 MMEL, revision 01, dated 21 June 2019, is deemed to grant an equivalent safety level as the CS-MMEL, initial issue dated 31 January 2014
- b. Required for entry into service by EU operator.

#### 2. Flight Crew Data

- a. The Flight Crew data has been approved as per the defined Operational Suitability Data Certification Basis and as documented in reference "EASA-OSD-FC-GVII-GAC, Initial Issue" at the latest applicable revision.
- b. Required for entry into service by EU operator.

## 3. Maintenance Certifying Staff

- a. The Maintenance Certifying Staff data has been approved as per the defined Operational Suitability Data Certification Basis and as documented in reference "GVII-OSD-MCS-001" at the latest applicable revision.
- b. Required for entry into service by EU operator.

# 4. Simulator Data

- a. The Simulator Data has been approved as per the defined Operational Suitability Data Certification Basis and as documented in reference "GVII-GER-3735" at the latest applicable revision.
- b. Required for entry into service by EU operator.

# VI. Part 26 Compliance Information

For the aircraft variants in this section, compliance with point 26.300(a) of Part 26 is demonstrated by complying with points:

- 26.301 Compliance Plan for (R)TC holders
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control program
- 26.305 Validity of the continuing structural integrity program

#### VII. Notes

Note 1: GVII-G600 Aircraft for EU delivery must have ASC number 007 incorporated.



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 24 of 27

Issue: 14 Date: 19 August 2025

# **SECTION: ADMINISTRATIVE**

## **I. Acronyms and Abbreviations**

AFM Airplane Flight Manual

AMM Aircraft Maintenance Manual

APU Auxiliary Power Unit
ASC Aircraft Service Change

ASTM American Society for Testing and Materials

CFR Code of Federal Regulations
CRI Certification Review Item
CS Certification Specification

EASA European Union Aviation Safety Agency

ETOPS Extended-Range Twin-Engine Operational Performance Standards

FAA Federal Aviation Administration

GA Georgia

ICAO International Civil Aviation Organization

KCAS Knots Calibrated Airspeed

Kg Kilograms Lbs U.S. Pounds

M Mach

MAC Mean Aerodynamic Chord

MMO Maximum Operating Limit Speed (Mach)

No Number

OSD Operational Suitability Data PSI Pressure per Square Inch

PW Pratt & Whitney

Ref Reference

**RVSM** Reduced Vertical Separation Minimums

STA Station

STC Supplemental Type Certificate

TC Type Certificate

USA United States of America

VMO Maximum Operating Limit Speed (KCAS)

WBM Weight and Balance Manual

# **II. Type Certificate Holder Record**

Gulfstream Aerospace Corporation 500 Gulfstream Road, Savannah, GA 31408 United States of America



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 25 of 27

Issue: 14 Date: 19 August 2025

# **III. Change Record**

Issue	Date	Changes	TC issue
Issue 01	11 October 2019	Initial Issue	Initial Issue
Issue 02	21 October 2019	Section I, Paragraph IV: Typo corrected	
Issue 03	18 February 2020	Section I, Paragraph IV, 2 limitation added	
Issue 04	15 April 2020	Section I, Paragraph III, CIS fuel types added	
Issue 05	8 May 2020	Derivative model GVII-G600 added	GVII-G600
Issue 06	21 July 2020	Section 3, Paragraph III, CIS fuel types added	
		Section 3, Paragraph IV, 1 Airplane Flight Manual	
		(AFM): Typo corrected	
		Section 2, Paragraph II, 10 Environmental	
		Protection Standards: Updated	
		Section 3, Paragraph II, 10 Environmental	
		Protection Standards: Updated	
	40.44		
Issue 07	18 March 2021	Section 2, Paragraph II, 8 Equivalent Safety	
		Findings: CRI D-50 added	
		Section 3, Paragraph II, 8 Equivalent Safety	
		Findings: CRI D-50 renumbered	
		Section 2, Paragraph IV, Paragraphs 1, 2, 3: Added GVII-G500, FAA approved Flight Manual ref. GAC-	
		AC-GVII-G500-OPS-0002, GVII-G500 Airplane Flight	
		Manual for Aircraft with ASC 901, ASC 022, ASC	
		025, ASC 001A, as applicable and	
		EASA approved Airplane Flight Manual	
		Supplement ref. EASA-GVII-G500 (Issue 1)-2020-	
		01, latest approved revisions	
Issue 08	12 August 2021	Section 2: Page 8, Added FAA ELOS TC-01-2010-	
		0024-C-7-GVI R1	
		Section 3: Page 18, Added FAA ELOS TC-01-2010-	
		0024-C-7-GVI R1	
		Section 24: Added Gulfstream Report Number	
		GVII-GER-0149	
Issue 09	20 September	Section 3, Paragraph II, 4 EASA Airworthiness	
	2021	Requirements: Removed reversion to CS 25.963(e)	
		Amdt 13	
Issue 10	19 December	Section 2, Paragraph III, 9 Fluid Capacities:	
	2022	Removed content from this section and added	
		reference to applicable GVII-500 AFM	
		Section 3, Paragraph III, 9 Fluid Capacities:	
		Removed content from this section and added	
	100	reference to GVII-600 AFM	
Issue 11	16 October 2023	Section 2, Paragraph II, Page 8, Equivalent Safety	
		Findings: Added FAA ELOS TD-01-2019-0050-F-15	
		Section 3, Paragraph II, Page 17, Equivalent Safety	
		Findings: Added FAA ELOS TD_01-2019-0050-F-15	



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 26 of 27

Issue: 14 Date: 19 August 2025

Issue	Date	Changes	TC issue
Issue 12	2 May 2025	Section 2, Paragraph III, added Chinese fuel	
		specification and additives for GVII-G500	
		Section 3, Paragraph III, added Chinese fuel	
		specification and additives for GVII-G600	
Issue 13	27 June 2025	Section 2, added Part 26 compliance information	
		for GVII-G500	
		Section 3, added Part 26 compliance information	
		for GVII-G600	
Issue 14	19 August 2025	Section 2, Paragraph II. Certification Basis, 4. EASA	
		Airworthiness Requirements, added CS-ACNS	
		Issue 3, Subpart E Section 3 to the GVII-G500	
		certification basis	
		Section 3, Paragraph II. Certification Basis, 9. Elect	
		to Comply, added CS-ACNS Issue 3, Subpart E	
		Section 3 to the GVII-G600 certification basis	



TE.CERT.00051-001 © European Union Aviation Safety Agency, 2025. All rights reserved. ISO9001 Certified. Page 27 of 27