
TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00038

for

Gulfstream GVI

Type Certificate Holder

Gulfstream Aerospace Corporation

500 Gulfstream Road

Savannah

Georgia 31408

United States of America

Model(s): GVI (G650)
Issue: 2
Date of issue: 25 January 2023

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Section 1 GVI

I. General

This Type-Certificate Data Sheet (TCDS) is the concise definition of the type-certificated product accepted and or approved by the CAA in the UK for the affected types and models.

This TCDS includes:

1. Details of the type design that affect the TCDS that have been approved or accepted by the CAA in the UK since 01 January 2021.
2. Details of the type design that affected the TCDS and were approved or accepted by EASA before 01 January 2021, and were incorporated into EASA TCDS EASA.IM.A.169 at Issue 7 dated 23 October 2020 and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

1. Type / Variant or Model

- a) Type: Gulfstream GVI
- b) Model: GVI (G650)
- c) Variant: N/A

2. Airworthiness Category

Large Aeroplanes

3. Performance Class

A

4. Certifying Authority

Federal Aviation Administration (FAA)
Atlanta Aircraft Certification Office
1701 Columbia Avenue
College Park
Atlanta
Georgia 30337
United States of America

5. Type Certificate Holder

Gulfstream Aerospace Corporation
500 Gulfstream Road
Savannah
Georgia 31408
United States of America

6. Manufacturer

Gulfstream Aerospace Corporation
500 Gulfstream Road
Savannah
Georgia 31408
United States of America

7. State of Design Authority Certification Application Date

18 September 2007

8. EASA Type Certification Application Date

18 September 2007

9. State of Design Authority Type Certificate Date

G650⁽¹⁾ 07 September 2012

G650ER⁽²⁾ 07 October 2014

10. EASA Type Certification Date

G650⁽¹⁾ 21 December 2012

G650ER⁽²⁾ 01 April 2016

(1) G650 is the commercial / marketed designation to identify Gulfstream GVI aircraft model.

(2) G650ER (ER standing for Extended Range) is the commercial / marketed designation to identify Gulfstream GVI aircraft model having received the Gulfstream modification 'Gross Weight Increase', supported by the embodiment of the Gulfstream ASC 014. The G650ER is not considered as new aircraft model or variant.

II. Certification Basis

1. Reference Date for determining the applicable requirements

18 September 2007

2. State of Design Airworthiness Authority Type Certification Data Sheet Number

T00015AT

3. State of Design Airworthiness Authority Certification Basis

14 CFR part 25, Airworthiness Standards: Transport Category Airplanes, effective February 1, 1965, including Amendments 25-1 through 25-120 and 25-122, 25-124, 25-132, and 25-144*.

Amendment 25-118 was not published and therefore has no applicability.

*Amendment 25-144 only applies to 14 CFR 25.773(e) for EFVS to Land and associated subsystems.

4. EASA Airworthiness Requirements

EASA Certification Specification (CS) 25, Amendment 2, effective as of October 02, 2006, except where identified below.

Certification Specification All Weather Operations (CS AWO), Book 1 and 2 published October 17, 2003.

5. Special Conditions

<u>CRI</u>	<u>Subject</u>
B-101	High Incidence Protection Function
C-102	Limit engine torque loads sudden engine stoppage
C-103	Design Roll Manoeuvre requirement
C-104	Automatic speed protection for design dive speed (dive speed definition)
D-06	Pilot view "Hydrophobic coatings"
D-07	Towbarless Towing
D-09	Application of ARAC proposal 25.671
D-15	Side facing seats and Divans
D-23	Installation of Flight Crew Sleeping Facility
D-24	Airworthiness standards for Subsonic Transport aeroplanes to be operated above of 41,000 ft
D-26	Isolated compartments
D-29	Control surface position awareness/Electronic flight control systems
E-04	Fuel tank safety
E-05	Freezing fog
E-07	Uncontrollable high thrust
E-12	Water/Ice in Fuel System
E-13	Fuel Quantity Indicating System

Section 1: GVI, continued

<u>CRI</u>	<u>Subject</u>
E-101	In flight verification of fire detector circuitry
E-102	Inflight engine re-start
E-103	Fuel vent system Fire Protection
F-05	High Intensity Radiated Fields (HIRF) Protection
F-06	Lightning Protection - Direct Effects (EL)
F-07	Lightning Protection - Indirect Effects (IEL)
F-44	Controller Pilot Data Link Communication (CPDLC)
F-45	Flight Data recorders including Data Link Recording
F-55	In Seat Power Supply Systems (ISPSS)
F-101	Control Surface Position Awareness
F-102	Yaw Oscillations
F-104	Pilot Compartment View Requirements with an Enhanced Flight Vision System
F-105	Electronic Flight Control System Mode Annunciation
F-106	Operation without normal electrical power
F-108	Security of Network Server Systems
F-110	Installation of non-rechargeable lithium battery

6. Exemptions

Not Applicable.

7. Deviations

<u>CRI</u>	<u>Subject</u>
D-22	Doors between passenger compartments
E-18	Uncontrollable thrust increase

8. Equivalent Safety Findings

The following table lists the Equivalent Safety Finding requests made by Gulfstream which are specific to the GVI model.

<u>CRI</u>	<u>Subject</u>
B-12	Steep Approach and Landing Capability
C-105	Widespread Fatigue damage limits of validity
D-16	Emergency Exit Locator Signs
D-20	Emergency exit and encroachment
E-03	APU mounting system fireproofness
E-104	Fuel Filter Indication System
E-105	Turbine Engine tailpipe Fire Detection
E-106	Oil fire detection system
E-107	Digital-only Display of Engine HP Rotor speed
E-108	Flammable Fluid Carrying Components in Nacelle Areas Behind the Firewall
F-39	Standby (Magnetic) Compass Removal

<u>FAA ELOS</u>	<u>Subject</u>
TC8700AT-T-C-7 Rev. 2	“Encroachment into Emergency Exits”

9. Elect to Comply

<u>CRI</u>	<u>Subject</u>
B-07	CS 25.1419 Amdt 3 “Flight in Icing Conditions”
C-04	CS 25.561 ; 25.721 ; 25.963 Amdt 3 “Fuel Tank Integrity and Access Covers

Section 1: GVI, continued

<u>NPA</u>	<u>Subject</u>
NPA 15/2004	CS 25.1302 Amdt 3 “Human Factors”
NPA 02/2006	CS 25.783 Amdt 4 “Doors”
NPA 18/2004	CS 25.1329 Amdt 4 “Flight Guidance Systems”
NPA 2008-13	CS 25.856 Amdt 6 “Thermal/Acoustic Insulation Materials”

10. Environmental Protection Standards

For aircraft not fitted with ASC 014 :

- Noise: ICAO Annex 16, Volume I, Amendment 8 (Fourth Edition), Part II, Chapter 4;
- Emissions: ICAO Annex 16, Volume II, Amendment 6 (Third Edition), Part II, Chapter 2, Prevention of intentional fuel venting

For aircraft fitted with ASC 014 or ASC 014 and (ASC 026, ASC 027, ASC 028, ASC 029, or ASC 082) :

- Noise : ICAO Annex 16, Volume I, Amendment 10 (Sixth Edition), Part II, Chapter 4;
- Emissions : ICAO Annex 16, Volume II, Amendment 6 (Third Edition), Part II, Chapter 2, Prevention of intentional fuel venting.

For details of the certified noise levels see TCDSN no. UK.TC.A.00038

III. Technical Characteristic and Operating Limitations

1. Type Design Definition

Gulfstream drawing 60P0000000-001, GVI Aircraft Level Configuration Control Document, revision M, or later approved revision, (EASA Project No. IM.A.169), and Aircraft Service Change (ASC) 10 Configuration Control Document 60A3101001-001 Rev A or later approved revision.

Post-TC major design changes approved by EASA prior to 01 January 2021 and by the UK CAA from 01 January 2021 are listed in Report GVI-GER-0049 “UK CAA GVI POST-TYPE CERTIFICATION MODIFICATIONS”.

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	30.36 meters [99.62 feet]
Fuselage Length	30.41 meters [99.78 feet]
Fuselage Width at Constant Section	2.74 meters [9.00 feet]

5. Engines

Two (2) Rolls Royce Deutschland Ltd & Co. KG Turbofan Engine Models: BR700-725A1-12 (CAA Engine Type Certificate No. EASA.E.018)

Engine Limits:

Engine Limits	GVI
Data Sheet EASA E.018	BR700-725A1-12
Static thrust at sea level (Standard Day)	75.2 kN (16,900 lbs)

Section 1: GVI, continued

Other engine limitations: See the CAA Engine Type Certificate Data Sheet EASA.E.018.

6. Auxiliary Power Unit

One (1) Honeywell RE220(GVI) CAA accepts (under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement) the existing EASA approval JTSO 6615.

For aircraft not fitted with ASC 014 :

Limitations and Operating Procedures - See the FAA approved Flight Manual ref GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650-2012-01, latest CAA approved or accepted revisions.

For aircraft fitted with ASC 014 :

Limitations and Operating Procedures – See the FAA approved Flight Manual ref GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650ER-2015-01, latest CAA approved or accepted revisions.

7. Propellers

Not Applicable.

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

Fuels: Rolls-Royce Deutschland Ltd. & Co. KG Turbofan engines
Refer to the applicable approved manuals.

Kerosene Type (AVTUR, JP8) NATO Code F24/F34/F35		
American	British	Canadian
ASTM D1655, Jet A ASTM D1655, Jet A-1 MIL-T-83133, JP-8 MIL-DTL-83133, JP8	DEF STAN 91-87 DEF STAN 91-91	CAN/CGSB-3.23
French	CIS	Chinese
DCSEA 134/A	TS-1 & RT (GOST 10227, AM 1) GSTU 320.001149943.007-97 (RT Type) GSTU 320.001149943.011-99 (TS-1 Type)	GB 6537-2006 including the fuel additives limited to the concentrations stated in Annex A of GB 65372006 (see Chinese Fuel Additives note below)

NOTE:

The following Chinese fuel additives are approved for use on this Gulfstream aircraft model:

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:

1. Static Dissipater additive T1502
2. Antifriction additives T1601 or T1602

Oils:

Refer to the applicable approved manuals.

Hydraulics:

Refer to the applicable approved manuals.

9. Fluid Capacities

For aircraft not fitted with ASC 014, the following fuel capacities apply:

Tanks	Pounds	U.S. Gallons*	Kilograms*	Litres*
Right	22,100	3,298	10,024	12,486
Left	22,100	3,298	10,024	12,486
Total	44,200	6,597	20,048	24,972

For aircraft fitted with ASC 014, the following fluid capacities apply: :

Tanks	Pounds*	U.S. Gallons*	Kilograms*	Litres*
Right	24,100	3,597	10,931	13,616
Left	24,100	3,597	10,931	13,616
Total	48,200	7,194	21,863	27,233

* Fuel Density is 6.700 Pounds / U.S. Gallon and 0.8028 Kilograms / Litre

See applicable Weights and Balance Manual

10. Airspeed Limits

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

For aircraft not fitted with ASC 014 :

For other airspeed limits, see the FAA approved Flight Manual ref GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650-2012-01, latest CAA approved or accepted revisions (Section 1)

For aircraft fitted with ASC 014:

For other airspeed limits, see the FAA approved Flight Manual ref GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650ER-2015-01, latest CAA approved or accepted revisions. (Section 1).

11. Flight Envelope

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

For aircraft not fitted with ASC 014:

See the FAA approved Flight Manual ref GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650-2012-01, latest CAA approved or accepted revisions.

For aircraft not fitted with ASC 014:

See the FAA approved Flight Manual ref GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650ER-2015-01, latest CAA approved or accepted revisions.

12. Operating Limitations

Gulfstream GVI (G650)

For aircraft not fitted with ASC 014:

See the FAA approved Flight Manual ref GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650-2012-01, latest CAA approved or accepted revisions.

For aircraft outfitted with ASC 109 (CAT II Operations):

See the FAA approved Flight Manual Supplement G650-2017-04, latest CAA approved or accepted revisions.

For aircraft outfitted with ASC 101 (Steep Approach and Landing Capability):

See the FAA approved Flight Manual Supplement GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement EASA-G650-2012-01 and EASA-G650-2021-01, latest CAA approved or accepted revisions.

Gulfstream GVI (G650ER)

Section 1: GVI, continued

For aircraft fitted with ASC 014:

See the FAA approved Flight Manual ref GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650ER-2015-01, latest CAA approved or accepted revisions.

For aircraft outfitted with ASC 109 (CAT II Operations):

See the FAA approved Flight Manual Supplement G650ER-2017-04, latest CAA approved or accepted revisions.

For aircraft outfitted with ASC 101 (Steep Approach and Landing Capability):

See the FAA approved Flight Manual Supplement GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement EASA-G650ER-2015-01 and EASA-G650ER-2021-01, latest CAA approved or accepted revisions.

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)
- Low Weather Minima (CAT II Operations, ASC 109)
- RVSM
- Wet and contaminated runway operations (Appendix D data to FAA approved AFM)
- Steep Approach and Landing Capability

12.2 Other Limitations

Runway slope $\pm 2\%$

Maximum Takeoff and Landing Tailwind Component – 10 knots

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

Maximum demonstrated crosswind component for takeoff and landing is 28 knots.

When operating in a flight control law mode other than Normal (i.e. Alternate, Direct, or Backup), maximum crosswind component for Landing is 10 knots.

13. Maximum Certified Masses

Configuration	Maximum Taxi Weight	Maximum Take-off Weight	Maximum Landing Weight	Maximum Zero Fuel Weight
G650	45,359 kg	45,177 kg	37,874 kg	27,442 kg
	100,000 lbs	99,600 lbs	83,500 lbs	60,500 lbs
G650ER (ASC 014)	47,173 kg	46,991 kg	37,874 kg	27,442 kg
	104,000 lbs	103,600 lbs	83,500 lbs	60,500 lbs
G650ER (ASC 14 +ASC 26)	33,974 kg	33,974 kg	33,974 kg	27,442 kg
	74,900 lbs	74,900 lbs	74,900 lbs	60,500 lbs
G650ER (ASC 14 +ASC 27)	40,823 kg	40,823 kg	37,874 kg	27,442 kg
	90,000 lbs	90,000 lbs	83,500 lbs	60,500 lbs
G650ER (ASC 14 +ASC 28)	43,091 kg	43,091 kg	37,874 kg	27,442 kg
	95,000 lbs	95,000 lbs	83,500 lbs	60,500 lbs
G650ER (ASC 14 + ASC 29)	45,359 kg	45,177 kg	37,874 kg	27,442 kg
	100,000 lbs	99,600 lbs	83,500 lbs	60,500 lbs
G650ER (ASC 14 + ASC 82)	45,681 kg	45,550 kg	37,874 kg	27,442 kg
	100,710 lbs	100,310 lbs	83,500 lbs	60,500 lbs

Section 1: GVI, continued

Note: The maximum weight limits may be less as limited by centre of gravity, fuel density and fuel loading limits, as given in the EASA approved Airplane Flight Manual Supplement (See Section 1).

For aircraft not fitted with ASC 014:

See the FAA approved Flight Manual ref GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650-2012-01, latest CAA approved or accepted revisions. (Section 1).

For aircraft fitted with ASC 014 :

See the FAA approved Flight Manual ref GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650ER-2015-01, latest CAA approved or accepted revisions (Section 1).

For aircraft fitted with ASC 014 and (ASC 026, ASC 027, ASC 028, ASC 029, or ASC 082):

See the FAA approved Flight Manual ref AFMS EASA-G650-2016-01 or AFMS EASA-G650ER-2016-02, latest CAA approved or accepted revisions.

14. Centre of Gravity Range

For aircraft not fitted with ASC 014:

See the FAA approved Flight Manual ref GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650-2012-01, latest CAA approved or accepted revisions.(Section 1).

For aircraft fitted with ASC 014 :

See the FAA approved Flight Manual ref GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650ER-2015-01, latest CAA approved or accepted revisions (Section 1).

15. Datum

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

16. Mean Aerodynamic Chord (MAC)

4.756 meters [187.24 inches]

17. Levelling Means

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

Lateral: Lugs on rear face of bulkhead STA 148.5 in nose wheel well

18. Minimum Flight Crew

Two (2): Pilot and Co-Pilot

19. 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 UK.TC.A.00038 considers a “green” aircraft (aircraft without an approved cabin interior) configuration only. Cabin interior installations (including passenger seating configurations up to 19 passengers are subject to completion STCs being CAA approved prior to any operation with passengers.

20. Baggage/ Cargo Compartment

For aircraft not fitted with ASC 014:

Gulfstream G650 Weight and Balance Manual Issue 3, dated April 2012 or later approved revisions.

For aircraft fitted with ASC 014:

Gulfstream G650ER Weight and Balance Manual revision 1 dated April 2015 or later approved revisions.

21. Wheels and Tyres

Nose wheels TSO C135a, Tyres Twin 21 x 7.25-10 bias ply (TSO C62e) nominal pressure 216 psi.

Main wheels TSO C135a, Tyres Twin H37.5 x 12.0 R 19 (TSO C62e) nominal pressure 216 psi.

See Aircraft Maintenance Manual for proper servicing of tyres.

22. Extended Diversion Time Operations (EDTO)

The following EDTO capabilities granted by EASA are valid for Commercial Air Transport Operations.

Operational approval must be sought from the UK Civil Aviation Authority.

The GVI aircraft model has been demonstrated compliant with the design and reliability requirement for 180min diversion time from an adequate aerodrome without ETOPS.

23. EVS and HUD Operations

The GVI Type Design has been shown to be operable in accordance with Commission Regulation (EU) No 965/2012, paragraphs SPA.LVO.100 and CAT.OP.MPA.110 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019, however this implies no operations approval.

It has been demonstrated compliant with the appropriate design and reliability requirements defined in CRI F-51.

Operational approval must be sought from the UK Civil Aviation Authority.

24. Interiors Installations

GVI cabin interior installations must be in accordance with Gulfstream report GVI-GER-6855 "GVI Interior Certification Requirements Document"

IV. Operating and Service Instructions

1. Airplane Flight Manual (AFM)

Gulfstream GVI (G650)

For aircraft not fitted with ASC 014:

Gulfstream GVI (G650) AFM, FAA approved Flight Manual ref GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650-2012-01, latest CAA approved or accepted revisions.

For aircraft outfitted with ASC 109 (CAT II Operations):

See the FAA approved Flight Manual Supplement G650-2017-04, latest CAA approved or accepted revisions.

For aircraft outfitted with ASC 101 (Steep Approach and Landing Capability):

See the FAA approved Flight Manual Supplement GAC-AC-G650-OPS-0001 and EASA approved Airplane Flight Manual Supplement EASA-G650-2012-01 and EASA-G650-2021-01, latest CAA approved or accepted revisions.

Gulfstream GVI (G650ER)

For aircraft fitted with ASC 014 :

Gulfstream GVI (G650ER) FAA approved Flight Manual ref GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement ref EASA-G650ER-2015-01, latest CAA approved or accepted revisions.

For aircraft outfitted with ASC 109 (CAT II Operations):

See the FAA approved Flight Manual Supplement G650ER-2017-04, latest CAA approved or accepted revisions.

For aircraft outfitted with ASC 101 (Steep Approach and Landing Capability):

See the FAA approved Flight Manual Supplement GAC-AC-G650ER-OPS-0001 and EASA approved Airplane Flight Manual Supplement EASA-G650ER-2015-01 and EASA-G650ER-2021-01, latest CAA approved or accepted revisions.

2. Instructions for Continued Airworthiness and Airworthiness Limitations

For aircraft not fitted with ASC 014:

Component life limitations are provided in Section 05-10-10, Chapter 5 of the GVI (G650) Aircraft Maintenance Manual.

Maintenance criteria to comply with the certification maintenance requirements are provided in Chapter 5 of the GVI (G650) Aircraft Maintenance Manual.

Section 1: GVI, continued

For aircraft fitted with ASC 014:

Component life limitations are provided in Section 05-10-10, Chapter 5 of the GVI (G650ER) Aircraft Maintenance Manual.

Maintenance criteria to comply with the certification maintenance requirements are provided in Chapter 5 of the GVI (G650ER) Aircraft Maintenance Manual.

3. **Weight and Balance Manual (WBM)**

For aircraft not fitted with ASC 014:

Gulfstream G650 Weight and Balance Manual Issue 3 dated April 2012 or later approved revisions (see Note 1).

For aircraft fitted with ASC 014:

Gulfstream G650ER Weight and Balance Manual revision 1 dated April 2015 or later approved revisions (see Note 1).

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 approved Airplane Flight Manual. All placards required by either the 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 EASA under the EASA Type Certificate EASA.IM.A.169 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014, and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

1. **Master Minimum Equipment List**

- a) Master Minimum Equipment List (MMEL), reference : EASA-MMEL-AC-G650-OPS-0004 dated 7 January 2013, as per the defined Operational Suitability Data Certification Basis, recorded in the Operational Review Item (ORI) n°4 Issue 2, or later CAA approved or accepted revisions.
- b) Required for entry into service by UK operator.

2. **Flight Crew Data**

- a) The Flight Crew Data (FCD), reference : EASA-OSD-FC-GVI-GAC-002, Revision 3, dated 23 Jun 2022, as per the defined Operational Suitability Data Certification Basis recorded in the same document [Section 2].
- b) Required for entry into service by UK operator.
- c) Pilot Type Rating: GVI.

3. **Cabin Crew Data**

Not applicable.

VI. **Notes**

Note 1: GVI Aircraft for UK delivery must have ASC number 010 incorporated.

Section 2 Administration

I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
A/C	Aircraft
AFM	Airplane Flight Manual
APU	Auxiliary Power Unit
ASC	Aircraft Service Change
ASTM	American Society for Testing and Materials
ATA	Air Transport Association
AWO	All Weather Operations
CAA	(United Kingdom) Civil Airworthiness Authority
CFR	Code of Federal Regulations
CG	Centre of Gravity
CRI	Certification Review Item
CS	Certification Specification
EASA	European Union Aviation Safety Agency
EDTO	Extended Diversion Time Operations
ELOS	Equivalent Level of Safety
ETOPS	Extended-Range Twin-Engine Operational Performance Standards
FAA	Federal Aviation Administration
GA	Georgia
HIRF	High Intensity Radiated Field
HUD	Head Up Display
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
JAA	Joint Aviation Authorities
KCAS	Knots Calibrated Airspeed
Kg	Kilograms
Lbs	U.S. Pounds
M	Mach
MAC	Mean Aerodynamic Chord
M _{MO}	Maximum Operating Limit Speed (Mach)
MTOM	Maximum Take-off Mass
No	Number
OSD	Operational Suitability Data
PSI	Pounds per Square Inch (pressure)

Acronym / Abbreviation	Definition
PW	Pratt & Whitney
Ref	Reference
RR	Rolls-Royce
RVSM	Reduced Vertical Separation Minima
STA	Station
STC	Supplemental Type Certificate
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet for Noise
TCH	Type Certificate Holder
USA	United States of America
VFR	Visual Flight Rules
V _{MO}	Maximum Operating Limit Speed (KCAS)
WBM	Weight and Balance Manual

II. Type Certificate Holder Record

TCH Record

Gulfstream Aerospace Corporation
 500 Gulfstream Road
 Savannah
 Georgia 31408
 United States of America

Period

Present. No changes.

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	10 Jun 2022	<p>The content of the initial issue of this UK CAA TCDS was taken from EASA TCDS No. EASA.IM.A.169 Issue 7 dated 23 October 2020 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the Gulfstream VII accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement, except as listed below:</p> <ul style="list-style-type: none"> • Section 1.II.8: Removed reference to Equivalent Safety Finding CRI D-27. Added FAA ELOS TC8700AT-T-C-7 Rev. 2 –Encroachment into Emergency Exits. • Section 1.III.12.1 Category II operations ASC 109 added • Section 1.III.24: Added section 24 making reference to Gulfstream Report Number GVI-GER-6855. • Section 1.IV.1 AFMS for CAT II Operations (ASC 109) Added <p>Editorial changes/Changes to reflect EU Exit:</p> <ul style="list-style-type: none"> • Section 1.I: Explanatory note added. • Section 1.I.1: Type / Variant or Model added. • Section 1.I.5: Type Certificate Holder address added. • Section 1.I.6: Manufacturer address updated. • Section 1.II.3: State of Design Airworthiness Authority Certification Basis added. • Section 1.II.10: TCDSN number updated to UK reference, and minor corrections and enhancements to text embodied. • Section 1.III.1: Type Design definition for post-type certification modifications revised. • Section 1.III.5: Reference made to CAA engine type certificate. • Section 1.III.6: wording added to specify CAA acceptance of EASA JTSO 6615 approval. • Section 1.III.8: Engine manufacturer name updated • Section 1.III.19: TCDS reference updated, and added reference to UK CAA. • Section 1.III.22: Wording updated to reflect EU Exit. • Section 1.III.23: Wording updated to reflect EU Exit. • Section 1.V: Approval statement updated to reflect acceptance of EASA Approved OSD under UK-EU Trade and Cooperation Agreement. • Section 1.V.1, 2: wording updated to 'UK Operator'. • Section 1.VI: Note 1 referring to requirement for ASC 010 to be incorporated on aircraft for UK delivery. • Section 2.1: Additional Acronyms and Abbreviations added. 	Issue 1 10 Jun 2022

Section 2: Administration, continued

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
2	25 Jan 2023	<p>The following section revisions were made at Issue 2, adding data application to the Gulfstream GVI as validated by the CAA under project UK.MAJ.000185.</p> <p>Section 1.II.8: Equivalent Safety Finding, CRI B-12, Steep Approach and Landing Capability added.</p> <p>Section 1.V.2: Change to the Operational Suitability Data – Flight Crew Data (OSD-FCD) revised from issue 2 to 3.</p>	Issue 2 25 Jan 2023

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