



TYPE-CERTIFICATE DATA SHEET

No. EASA.IM.A.228

for

Gulfstream G150

Type Certificate Holder:

GULFSTREAM AEROSPACE LP (GALP)

P.O. Box 1036

7019900 Airport City

Israel

For Models: G150



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SECTION 1: Gulfstream G150**I. General**

1. Type/ Model/ Variant	Gulfstream G150
2. Performance Class	A
3. Certifying Authority	Civil Aviation Authority State of Israel Ministry of Transport P.O. Box 1101 Airport City 70100 Israel
4. Manufacturer	Israel Aircraft Industries (IAI) Commercial Aircraft Group Ben Gurion International Airport 70100 Israel See Note 6
5. State of Design Authority Certification Application Date	22 September 2002
6. EASA Type Certification Application Date	1 December 2004
7. State of Design Authority Type Certificate Date	7 November 2005
8. EASA Type Certification Date	13 July 2007

II. Certification Basis

- Reference Date for determining the applicable requirements
22 September 2002
- State of Design Airworthiness Authority Type Certification Data Sheet No.
A5IL
- State of Design Airworthiness Authority Certification Basis
14 CFR Part 25, effective Feb.1, 1965, including Amendments 25-1 thru 25-54
- EASA Airworthiness Requirements
JAR-25, Change 15, effective October 01, 2000 for components and areas affected by the change.
CS 25 Subpart J Amdt 1: Auxiliary Power Unit Installation
CS 25.981 a,b) Amdt 1: Fuel Tank Ignition Prevention



SECTION 1: Gulfstream G150- continued

JAR AWO Change 1, effective 29 Nov.1985

According to EC 1702/2003 Annex Part 21, § 21A.101(b), GALP applied for reversion for the following paragraphs which have been substantiated by GALP (and whose acceptance has been part of the EASA validation). For details in respect of the Amdt used on certain Parts/paragraphs please refer to Gulfstream Doc 25G000/052058. Rev E

Reason for reversion: the "GULFSTREAM G150" is a derivative model of the "GULFSTREAM G100", therefore the certification basis for the unchanged portion of the model G150 is the same as the model G100

LIST OF REVERSIONS

FAR SECTION	SUB-SECTION	FAR SECTION TITLE	APPLICABLE TO ZONE / SYSTEM	G150 AMDT
101		PERFORMANCE – GENERAL		38
105		TAKEOFF		0
109		ACCELERATE-STOP DISTANCE		42
113		TAKEOFF DISTANCE & TAKEOFF RUN		23
115		TAKEOFF FLIGHT PATH		0
143	f	CONTROL & MANEUVER - GENERAL		42
149	h	MINIMUM CONTROL SPEED		72
201	c,d	STALL DEMONSTRATION		42
203		STALL CHARACTERISTICS		0
253		HIGH SPEED CHARACTERISTICS		72
305		STRENGTH & DEFORMATION	AFT FUSELAGE (*), VERTICAL TAIL, LANDING GEAR	54
305		STRENGTH & DEFORMATION	WING, NACELLE	77
307		PROOF OF STRUCTURE	AFT FUSELAGE, VERTICAL TAIL, LANDING GEAR	54
349			NACELLE, WING	23
371		GYROSCOPIC LOADS		0
391		CONTROL SURFACE LOADS- GENERAL	WING, VERTICAL TAIL	0
395		CONTROL SYSTEM	FLIGHT CONTROLS SYSTEM	23
397		CONTROL SURFACE LOADS	FLIGHT CONTROLS SYSTEM	38
415		GROUND GUST CONDITIONS	FLIGHT CONTROLS	0
427		UNSYMMETRICAL LOADS	AFT FUSELAGE, VERTICAL TAIL	23
445		AUXILLIARY AERODYNAMIC SURFACES	WINGLETS	0
473		GROUND LOADS CONDITIONS & ASSUMPTIONS	LANDING GEAR	23
479		LEVEL LANDING CONDITIONS	LANDING GEAR, NACELLE, WING, AFT FUSELAGE	23
481		TAIL DOWN LANDING CONDITIONS	LANDING GEAR, AFT FUSELAGE	0
483		ONE WHEEL LANDING CONDITIONS	LANDING GEAR	0
485		SIDE LOAD CONDITIONS	LANDING GEAR	0
491		TAKEOFF RUN	LANDING GEAR	0
493		BRAKED ROLL CONDITIONS	LANDING GEAR	23
499		NOSE WHEEL YAW	AFT FUSELAGE, LANDING GEAR	46
519		JACKING & TIE-DOWN PROVISIONS	LANDING GEAR	0
561		EMERG. LANDING CONDITION - GENERAL	AFT FUSELAGE	23



SECTION 1: Gulfstream G150- continued

FAR SECTION	SUB-SECTION	FAR SECTION TITLE	APPLICABLE TO ZONE / SYSTEM	G150 AMDT
693		JOINTS		0
697		LIFT AND DRAG DEVICES CONTROLS		46
701		FLAP & SLAT INTERCONNECTION		46
723		SHOCK ABSORPTION TESTS		46
725		LIMIT DROP TESTS		23
727		RESERVE ENERGY ABSORP. DROP TESTS		23
731		WHEELS		0
733		TIRES		48
735		BRAKES		48
783		DOORS		54
855		CARGO OR BAGGAGE COMPARTMENT	FLIGHT CONTROLS SYSTEM	32
857		CARGO COMPT. CLASSIFICATION	BAGGAGE COMPARTMENT	32
951		FUEL SYSTEM – GENERAL		38
979		PRESSURE FUELING SYSTEM		38
1351		ELECT. SYSTEMS & EQUIPT. – GENERAL		41
1416		PNEUMATIC DE-ICER BOOT SYSTEM		46
1419		ICE PROTECTION	AMDT 25-23 FOR BOOTS SYSTEM ONLY	23
1435		HYDRAULIC SYSTEMS		41

(*) AFT FUSELAGE IS DEFINED AFT OF STATION 10824 (FRAME 43)

5. Special ConditionsOriginal Special Conditions part of Certification Basis

- A-08 Adoption of FAA ISSUE papers SCs F-03 Hydrophobic Coating Windscreen
- B-03 Human Factors
- C-03 Fuel Tank Structural Integrity / Fuel Tank Access Covers
- C-04 Interaction of Systems and Structure
- D-06 Airworthiness Standards for Subsonic Transport Aeroplanes to be operated up to 45 000 ft
- D-13 Towbarless Towing, Nose Wheel Steering

6. Exemptions

N/A

7. Deviations

N/A

8. Equivalent Safety Findings

- A-08 Adoption of the following CAAI ISSUE papers ESF:
 - CI-1 Emergency Lighting Green Aircraft
 - F-07 Compliance Requirements for High Speed Mistrim
 - P-02 Digital only display of turbine engine high pressure rotor speed
 - P-03 Tailpipe Fire Detection
 - P-07 APU exhaust System Installation
- D-17 Fire protection of thermal and acoustic insulation material
- D-19 Cockpit indication, System pressure



SECTION 1: Gulfstream G150- continued**9. Environmental Protection**

Noise level:

ICAO Annex 16, Volume I, Amendment 7, Chapter 4 for Noise

Fuel and exhaust emissions:

ICAO Annex 16, Volume II (second Edition)

10. Operational Suitability Requirements

Master Minimum Equipment List (MMEL)

Certification basis as recorded in CRI A-MMEL is JAR-MMEL/MEL Amendment 1, Section 1, Subpart A and B.

11. Operational Suitability Requirements

Flight Crew Data (FCD)

CS-FCD, Initial Issue

12. Operational Suitability Requirements

Cabin Crew Data (CCD)

N/A

13. Operational Suitability Requirements

Simulator Data (SIMD)

N/A

14. Operational Suitability Requirements

Maintenance Certifying Staff Data (MSCD)

N/A

III. Technical Characteristics and Operational Limitations**1. Type Design Definition**

Build Standard Definition Document 25G000/061030

2. Description

G150 is a derivative of the Gulfstream model G100 retaining the wings, empennage, engines* and most of the systems. It will be used as a nine passenger executive jet with a maximum takeoff weight of 26100 lbs and a maximum operating altitude of 45000 feet.

* The G150 engines are the same as G100 engines except an increase of up to 6.5% in thrust achieved by modification of the Engine Electronic Control (EEC).

Due to this difference, engine designation is changed from TFE 731-40-R-200G to TFE 731-40AR-200G

3. Equipment

Master Equipment List Report # 25G000/051724 (See note 2)



SECTION 1: Gulfstream G150- continued**4. Dimensions**

Wingspan	16.94 meters [55.58 feet]
Fuselage length	17.35 meters [56.92 feet]
Fuselage Constant Diameter	1.75 meters [5.75 feet]

5. Engines

Two Honeywell (Formerly Allied Signal) TFE 731-40AR-200G,
EASA Data sheet No IM.E.011

6. Auxiliary Power Unit

One Honeywell APU Model RE100(CS) Oils : refer to applicable approved Manuals

7. Propellers

N/A

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

Engine Fuels: Conforming to Honeywell Specifications EMS 53111 (Jet A type), EMS 53112 (Jet A-1 & JP-8 types), EMS 53116 (JP-5 type) and EMS 53113 (Jet B & JP-4 types) as per Limitation section of the approved Airplane Flight Manual.

Other fluids: (Fuel, oil, additives) see maintenance manual for approved fluids.

9. Fluid Capacities

(Density 6.7 lbs per US Gallon)

	<u>Wing Tanks</u>	<u>Collectors</u>	<u>CTS</u>	<u>Fuselage</u>
Total/Usable Fuel (LBS)	3592/ 3574	116/105	1317/1315	5308/5306
Arm (INCHES)	342	334.8	310.6	388.2
Unusable Fuel (LBS)	18.6	11	1.6	1.8
Arm (INCHES)	342.1	348	310.7	388.4

Fuel System

	<u>LBS (gallons)</u>	<u>ARM (inch)</u>
- Unusable (drainable from tanks drain and lines)	22.7 (3.4)	343.8
- undrainable (trapped in tanks and lines)	22.4 (3.3)	394.2

10. Airspeed Limits

Refer to approved Airplane Flight Manual.

11. Flight Envelope

Maximum Operating Altitude 45.000 feet



SECTION 1: Gulfstream G150- continued**12. Operating Limitations****12.1 Approved Operations**

Refer to approved Airplane Flight Manual

12.2 Other Limitations

none

13. Maximum Certified Masses

	LBS	KG
RAMP GROSS WEIGHTS	26250	11907
MTOW	26100	11839
MLW	21700	9843
MZFW	17500	7938

14. Centre of Gravity Range

Refer to approved Airplane Flight Manual

15. Datum

Fuselage station 0 is located 135.65 inches forward of alignment points 14L / 14R

Points 14L / 14R are the protruding rivets heads located in FWD fuselage at STA. 135.65, bl ± 36.99, WL 35.00

16. Mean Aerodynamic Chord (MAC)

2,191m (86.26 inches) with leading edge at fuselage station 317.087

17. Levelling Means

Longitudinally: Place level on either seat rail at fuselage station 298.3 (FR 30) parallel to A/C centerline.

Laterally: Place level on seat rails at fuselage station 298.3 (FR 30) at 90° to A/C centerline.

18. Minimum Flight Crew

Two (2): Pilot and Co-pilot.

19. Minimum Cabin Crew

(in accordance with the emergency evacuation test)

N/A

20. Maximum Seating Capacity

The Aircraft is eligible for carriage of 9 passengers provided approved seating arrangement and related required passenger provisions are incorporated in accordance with the Certification Basis

21. Baggage/ Cargo Compartment

Cargo compartment loading:	LBS	ARM
	1100	452



SECTION 1: Gulfstream G150- continued**22. Wheels and Tyres**

Main Landing Gear (MLG) Each MLG incorporates twin 12 inch rims and 23X7/12PR tyres.
TSO-C62c/d, Pressure – 131 psi

Nose Landing Gear (NLG) The NLG incorporates twin 8 inch rims and 16X4.4/10PR tyres.
TSO-C62d, Pressure – 100 psi

23. ETOPS

N/A

IV. Operating and Service Instructions**1. Airplane Flight Manual (AFM)**

Gulfstream G150 Airplane Flight Manual – P/N G150-1001-1 Rev. 6 or later EASA approved revision

2. Instructions for Continued Airworthiness and Airworthiness Limitations

G150 Aircraft Maintenance Manual – P/N G150-1001-3 Revision 2 or later EASA approved revision

3. Weight and Balance Manual (WBM)

G150 Weight and Balance see AFM Sect. VIII

VI. Part-26 Compliance Information

Compliance with point 26.300(a) of Part-26 (REGULATION (EU) 2020/1159 dated 5 August 2020) is demonstrated by complying with points:

26.301 Compliance Plan for (R)TC holders

26.304 Corrosion prevention and control programme

26.305 Validity of Continuing Structural Integrity Program

VI. Notes

Note 1 Israel Aerospace Industries (IAI) LTD., Ben Gurion International Airport 70100, ISRAEL, is licensed by GULFSTREAM AEROSPACE LP to manufacture and obtain Airworthiness Certificates for the aircraft models listed in this Type Certificate Data Sheet.

Note 2 For equipment eligible for installation refer to Report 25G000/051724, latest revision, titled "G150 Master Equipment List" and Report 25G000/061030, latest revision, titled "G150 Type Design Definition for EASA Certification (Build Standard)."

The aircraft must be compliant with the below listed Type Certificate Modifications (TC MOD), or with the respective associated Service Bulletins (if applicable) as indicated in the table below:



SECTION 1: Gulfstream G150- continued

TC MOD Number	Service Bulletin Number	Description / Service Bulletin Title
G15-10013	Not applicable	G150 Software Version 3.2 Upgrade
G15-20018	Not applicable	Light Panel Dimmer Module (LPDM) for Overhead Panel (OHP) Balance
G15-20103	150-31-040	Indicating/Recording Systems - Overhead Panel, Rocker Switches - Replacement Of Existing Engraved Covers With New Improved Covers
G15-20104	150-31-077	Indicating / Recording Systems - Master Caution Panels - Installation of New Illuminated Panels
G15-20139	150-33-039	Lights - Windshield Ice Detection Lights - Correction of Ice Detection Light Power Circuits
G15-20148	150-11-076	Placards And Markings - Landing Gear Control Panel Assembly - Placard Replacement

Note: For convenience, Service Bulletin 150-00-099, titled "Aircraft General – Certification Requirements for European Union Registered Aircraft", was created to capture all of the requirements listed above under a single service bulletin as an alternate method for documenting / reporting compliance.

Note 3 This aircraft is certified without a furnished interior, i.e. in a "Green Aircraft" configuration. The Aircraft is eligible for carriage of up to 9 passengers provided approved seating arrangement and related required passenger provisions are incorporated in accordance with the EASA Certification Basis.
Cabin interior installations must be in accordance with IAI G150 Report 25G000/031685 titled "G150 Certification Specification for the "Green Aircraft – Completion Center Interface"

Note 4 EASA Certification is restricted to Aircraft complying with the configuration defined in Report 25G000/061030, latest revision, titled "G150 Type Design Definition for EASA Certification (Build Standard)."

Note 5 All required placards listed in the Limitation Section of the approved EASA Airplane Flight Manual must be installed in the appropriate locations in the airplane.

Note 6 In December 2006 Israel Aircraft Industries changed its name to Israel Aerospace Industries



SECTION: ADMINISTRATIVE**I. Acronyms and Abbreviations**

APU: Auxiliary Power Unit

CAAI: Civil Aviation Authority of Israel

CRI: Certification Review Item

EASA: European Aviation Safety Agency

ESF: Equivalent Safety Finding

JAR: Joint Aviation Requirement

INT/POL: JAA Interim Policy

SB: Service Bulletin

SC: Special Condition

S/N: Serial Number

II. Type Certificate Holder Record

GULFSTREAM AEROSPACE LP (GALP)

P.O. Box 1036

Airport City

7019900, Israel

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	13 July 2007	Initial Issue	Initial Issue, 13 July 2007
Issue 02	11 December 2015	address change (list of affected pages updated) name change of manufacturer added correction of applicable maintenance instructions correction of applicable operating and service instructions OSD update	
Issue 03	26 May 2025	New TCDS template used, VI. Part-26 Compliance Information added	

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