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SECTION 1: GENERAL

1. Data Sheet No: EASA.IM.A.228
2. Airworthiness Category: Large Aeroplanes
3. Performance Category: See Operating Rules
4. Certifying Authority: Civil Aviation Administration of Israel (CAAI)
5. Type Certificate Holder: Gulfstream Aerospace LP (GALP)
C/O Israel Aerospace
Industries Ltd DPT 4199
Ben Gurion International Airport 70100 Israel
6. Manufacturer: Israel Aerospace Industries Commercial Group
Ben Gurion International Airport 70100 Israel

SECTION 2: Gulfstream G150

I. General

1. Aeroplane: Gulfstream G150
(see Note 1)

II. Certification Basis

1. Reference Application Date for EASA Certification: Sept 22, 2002
2. EASA Certification Date: July 13, 2007
3. EASA Certification Basis: JAR 25, change 15

3.1 EASA Mandatory Requirements (as per CRI A-01 as follows:)

Applicable Requirements at the Reference Date, i.e. September 22, 2002:

JAR-25, Change 15, effective October 01 , 2000 for components and areas affected by the change.

JAR AWO Change 1, effective 29 Nov.1985

CS 36 Aircraft Noise (ICAO Annex 16 Vol 1, - 3rd edition, July 1993 on aircraft noise, Amdt 7) GALP elects to comply with Chapter 4 of ICAO Anx. 16 Vol 1, - 3rd edition, July 1993 on aircraft noise, Amdt 7.

CS 34 Aircraft Engine Emissions and fuel venting (ICAO Annex 16 Vol 2 - 2nd edition, July 1999.

According to EC 1702/2003 Annex Part 21, 321.101(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. RevE

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		UNSYMETRICAL 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

FAR SECTION	SUB-SECTION	FAR SECTION TITLE	APPLICABLE TO ZONE / SYSTEM	G150 AMDT
561		EMERG. LANDING CONDITION - GENERAL	AFT FUSELAGE	23
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

NOTES:

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

3.1.1 Special Conditions issued in accordance with Paragraph 21A.16B of Part21

The following Special Conditions as defined by CAAI Issue papers respective JAA Interim Policies have been identified as part of the EASA Type Certification Basis of the Gulfstream Aerospace G150 Corporate Jet.

3.1.1.1 Novel or Unusual Design Features

none

3.1.1.2 Unconventional Use

none

3.1.1.3 General Experience

CRI B-03	Human Factors	Part 21.16, JAA INTERIM POLICY 25/14
CRI C-03	Fuel Tank Structural Integrity / Fuel Tank Access Covers	JAR 25.561, 25.721, 25.963
CRI C-04	Interaction of Systems and Structure	JAR 25.302 ,JAR 25.629, NPA 25 C199 Rev 1
CRI D-06	Airworthiness Standards for Subsonic Transport Aeroplanes to be operated up to 45 000 ft	JAR 25 Advisory Material/Policy Ref.: INT/POL/25/16 Issue 1
CRI D-13	Towbarless Towing, Nose Wheel Steering	JAR 25X745(d); INT POL 25/13
CRI A-08	<i>Adoption of FAA ISSUE papers SCs</i> F-03	Hydrophobic Coating Windscreen

3.1.2 Equivalent Safety Findings

CRI D-17	Fire protection of thermal and acoustic insulation material	JAR 25.853
CRI D-19	Cockpit indication, System pressure	JAR-25.1436 b) 2)
CRI A-08	<i>Adoption of CAAI ISSUE papers ESF</i>	
	CI-1	Emergency Lighting Green Aircraft
	F-07	Compliance Requirements for High Speed Mistrim
	P-07	APU exhaust System Installation
	P-03	Tailpipe Fire Detection
	P-02	Digital only display of turbine engine high pressure rotor speed

3.1.3 Deviations (Exemptions) to be petitioned for

None

3.1.4 Environmental Requirements

CS 36 Aircraft Noise (ICAO Annex 16 Vol 1, - 3rd edition, July 1993 on aircraft noise, Amdt 7) GALP elects to comply with Chapter 4 of ICAO Anx. 16 Vol 1, - 3rd edition, July 1993 on aircraft noise, Amdt 7.

CS 34 Aircraft Engine Emissions and fuel venting (ICAO Annex 16 Vol 2 - 2nd edition, July 1999.

3.1.5 Elect to Comply JAA Requirements

CS 25 Subpart J Amdt 1: Auxiliary Power Unit Installation
CS 25.981 a ,b) Amdt 1: Fuel Tank Ignition Prevention

3.1.6 Additional National Design Requirements & Additional National Administrative Requirements for Issuance of a Certificate of Airworthiness for Large Aeroplanes

none

3.1.6.1 Additional National Requirements for Type Certification

For the time being, no dedicated Additional National Requirements for Type Certification are defined by EU member states. For the non-EU member states being JAA members, this ANRs have to be defined and coordinated by EASA.

3.1.7 Additional National Design Requirements for operational approval

See also CRI A-05 titled "Additional National Design Requirements for Operational Approval".

3.1.7.1 For Operation in European B –RNAV Airspace compliance with EASA AMC 20-4 (former JAA ACJ 20X4) has to be shown.

3.1.7.2 For Operation in NAT MNPS Airspace compliance with the following documents is considered as an adequate means of compliance :

- ICAO MNPS Airspace Operators Manual
- ICAO DOC 7030

Remark: Other EASA Member States / responsible Authorities may specify different requirements for operational approval .

3.1.8 Interpretative Material / Means of Compliance

<u>List of Certification Review Items related to Interpretative Material / Means of Compliance</u>			
CRI A-02	EASA validation programme	LODs,TVP Procedures	
CRI A-06	Build Standard Definition	JAR 21.31(b)	
CRI B-01	Flight in Icing Conditions	JAR 25.1419	ACJ 25.1419
CRI B-02	Performance information, Contaminated Runways	JAR 25X1591	AMJ 25X1591; ACJ 25.1583(k)
CRI B-05	Stall Warning Device	JAR 25.207; ACJ 25.207	
CRI C-01	Emergency Landing Conditions and Landing Gear	JAR 25.561(a)(c)(d) and 25.721	
CRI D-02	Green Aircraft	various	TGM/GEN/06
CRI D-03	Wheels and Tyres Failure Analysis	JAR 25.729(f) and JAR 25.1309	
CRI D-15	High Elevation Airfield Operation	JAR 25.841 (a) (b) (6), JAR 25.1447(c) (1)	Advisory Material / Policy Ref.: ACJ 25.1447(c) (1)
CRI F-01	HIRF Protection	INT/POL/25/2	
CRI F-02	Lightning Protection - Direct Effects	JAR 25X899, INT/POL/25/3 Issue 1	
CRI F-03	Lightning Protection - Indirect Effects	JAR 25.581, 25X899,25.954, 25.1309 INT/POL/25/4 Issue 2	
CRI F-04	Liquid Crystal Displays	JAR 25.1301, .1303, .1309, .1309, .1316, .1321,.1322	AMJ, .1333, .1431, AMJ 25- 11
CRI F-05	Integrated Standby Instrument System (ISIS)	JAR 25.1301, .1303, .1309, .1316, .1321,.1322 ,.1323,.1333, .1325,.1331,.1333,.1431	AMJ 25-11
CRI F-06	Programmed Logic Devices	JAR 25.1301,.1309	AMJ 25-1309
CRI F-07	Systems for Specified Operational Use	JAR 25.1301, 25.1303, 25.1307, 25.1309, 25.1321, 25.1322, 25.1331, 25.1431, 25.1457, 25.1459, 25.1541, 25.X1524, 25.1583	ACJ/AMJ, AMJ 25.11,
CRI F-08	Installation of In-Seat Power Supply Systems (ISPSS) for Portable Electrical Devices (PED)	JAR 25. 869(a), 25.1351(a), 1353(d), 1357, X1360(a) and 1431(d),	TGM 25/10
CRI F-10	Software	JAR 25.1309	

Note: The list of Differences between CFR14 Part 25 Amdt. 108 and JAR-25 Change 15 is given in CRI A-02, the ACG Team Involvement Program.

III Technical Characteristics and Operational Limitations

1. General:

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.

1.1 Type Design Definition:

Build Standard Definition Document 25G000/061030

1.2 Equipment:

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

1.3 Engines: Two Honeywell (Formerly Allied Signal) TFE 731-40AR-200G, EASA Data sheet No IM.E.011, Issue 2

1.3.1 Engine Limits:

Static thrust at sea level: LBS

- take-off (5mn) (with and without APR) 4420
- maximum continuous 4420

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

Other engine limitations: See the relevant Engine Type Certificate Data Sheet.

1.4 Fuel

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.

1.5 Limit Speeds

Refer to approved Airplane Flight Manual.

1.6 Centre of Gravity Range

Refer to approved Airplane Flight Manual.

1.7 Maximum Certified Weights LBS KG

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

1.8 Fuel Quantity
(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

1.9 Minimum Flight Crew:
Two (2): Pilot and Co-pilot

1.10 Maximum Certified Passenger 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

1.11 Cargo compartment loading:	LBS	ARM
	1100	452

1.12 Environmental Flight Envelope:
Refer to approved Airplane Flight Manual.

1.13 Other Limitations:
Refer to approved Airplane Flight Manual.

1.14 Auxiliary Power Unit (APU):
One Honeywell APU Model RE100(CS) Oils : refer to applicable approved Manuals

1.15 Equipment:
The equipment required by the applicable requirements shall be installed.

1.16 Service Information:

Service Bulletins, Continuing Airworthiness Instructions, including Airworthiness Directives (AD's) and the Structural Repair Manual and Major Repairs, which contain a statement that the document is Civil Aviation Administration of Israel (CAAI) approved, are accepted by the EASA and considered EASA approved, taking into account the EASA Certification Basis and the EASA approved Type Design of the aeroplane.

1.17 Maintenance Instructions:

Information essential to the proper servicing and maintenance of the aircraft is contained in the Manufacturer's Manual section of the Instructions for Continued Airworthiness Manual P/N G150-1001-3.

Mandatory replacement times, structural inspection intervals and related structural inspection procedures and Certification Maintenance Requirements are presented in the approved Airworthiness Limitations Section 05-10-10 of the AMM.

IV Operating and Service Instructions

1. Operating Instructions:

EASA Gulfstream G150 Airplane Flight Manual
G150 Weight and Balance Manual
G150 JAA Master Minimum Equipment List

2. Service Instructions

G150 Aircraft Maintenance Manual
Airworthiness Limitations Aircraft Maintenance Manual Chapter 5
Certification Maintenance Requirements Report 25G041/051580
Aircraft Maintenance Manual Chapter 5
Structural Repair Manual
Customer Bulletins
Maintenance Operations Letters
Illustrated Parts Catalogue
Wiring Diagram Manual

V 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)."

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.