

**State of Israel
Ministry of Transport
Civil Aviation Authority**

A5IL Revision 12 GULFSTREAM AEROSPACE LP 1125 WESTWIND ASTRA ASTRA SPX GULFSTREAM G100 GULFSTREAM G150 March 20, 2007
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TYPE CERTIFICATE DATA SHEET NO. A5IL

This Data Sheet which is part of Type Certificate No. A5IL prescribes conditions and limitations under which the aircraft for which the Type Certificate was issued meet(s) the airworthiness requirements of the Aviation Regulations (Certification Procedures for Aircraft and Parts thereof) – תקנות הטיס - תשל"ז - 1977

Type Certificate Holder (NOTE 10) :

**GULFSTREAM AEROSPACE LP
Ben Gurion International airport 70100
Israel**

Type Certificate Holder Record :

**Israel Aircraft Industries (IAI) transferred TC A5IL to
GULFSTREAM AEROSPACE LP on March 26, 2002.**

I. Model 1125 Westwind Astra (Transport Category) Approved August 21, 1985

Engines

2 AlliedSignal Engines (formerly Garrett Turbine Engines Company) TFE 731-3A-200G or TFE 731-3C-200G per FAA Type Certificate Data Sheet E6WE-13 (January 22, 1993).

Fuel

Conforming to Garrett Turbine Engine Company 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 LIMITATIONS SECTION of approved AFM.

Oil

Conforming to Garrett Turbine Engine Company Specification EMS 53110, Type II.

**Fuel Control
Computer**

Two Garrett Turbine Engine Company fuel computers P/N 2101144-5/-6.

Engine Limits

Static Thrust at Sea Level, LBS

- Maximum Continuous	3700
- Take-off (5 minutes)	3700

Maximum Continuous Permissible Engine Operating Speed
or the Engine Rotors, %RPM (RPM)

- Low pressure rotor (N1)	101.5 (21000)
- High pressure rotor (N2)	100.0 (29692)

Maximum Interstage Turbine Temperature (ITT), °C

	<u>-3A</u>	<u>-3C</u>
- Maximum Continuous	885	910
- Take-off (5 minutes)	907	910
During starting	907	910

Maximum Oil Inlet Temperature, °C

	<u>Up to 30,000 ft.</u>	<u>Above 30,000 ft.</u>
- Fan gearbox	127	140
- Fan gearbox transient for 2 minutes maximum	149	149
- Accessory gearbox	149	157

Oil Pressure, PSIG

Normal operating	38 to 46
- At idle, minimum	25
- Maximum	55

Maximum Bleed and Power Extraction

See Garrett Turbine Engine Company Installation Manual IM-8001

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<u>Airspeed</u>	<u>1125 BASIC</u>	<u>*1125 IW</u>
<u>Limits</u>		
-Vmo (Max operating) S.L. to 25000 ft.	360 KCAS	
- Mmo Above 25000 ft.	0.85 M	
- Mmo with Autopilot disengaged above 22500 ft	0.81 M	
*- Vmo (Max Operating) S.L. to 26360 ft		350 KCAS
*- Mmo Above 26360 ft		0.85 M
*- Mmo with Autopilot disengaged above 24130 ft.		0.81 M
- Va (Maneuvering)		
* - @ 24650 LBS:		
* - SL to 10000 ft.		233 KCAS
* - @ 37000 ft.		280 KCAS
* - Va varies linearly from 233 KCAS at 10000 ft. to 280 KCAS at 37000 ft.		
- @ 23500 LBS :		
- SL to 10000 ft.	233 KCAS	
- @ 37000 ft.	280 KCAS	
- Va varies linearly from 233 KCAS at 10000 ft. to 280 KCAS at 37000 ft.		
- @ 18000 LBS :		
- SL to 20000 ft.	204 KCAS	204 KCAS
- @ 41000 ft.	250 KCAS	250 KCAS
- Va varies linearly from 204 KCAS at 20000 ft. to 250 KCAS at 41000 ft.		
- Above 41000 ft.	0.85 M	0.85 M
- Vfe (Flaps 12° and slats 25°)	250 KCAS	250 KCAS
- Vfe (Flaps 20° and slats 25°)	225 KCAS	225 KCAS
- Vfe (Flaps Landing 40° and slats 25°)	180 KCAS	180 KCAS
- Vsb (Airbrakes Operation) No speed limitation		
- Vle and Vlo (L/G Extension & Operating Speed)	180 KCAS	180 KCAS
- Vmca (Flaps 12° and 20°)	92 KCAS	92 KCAS
- Vmcg (Flaps 12° and 20°)	89 KCAS	89 KCAS
- Tire limit ground speed : KTS (MPH)	182 KTS (210)	182 KTS (210)
* See NOTE 5		

II. Model Astra SPX (Transport Category) Approved December 19, 1995

Model ASTRA SPX differs from Model 1125 Westwind ASTRA in engines, avionics suite and addition of winglets.

III. Model GULFSTREAM G100 (Transport Category) approved June 30, 2002 (NOTE 11)

The "GULFSTREAM G100" is only a name change from the former "ASTRA SPX" applicable to aircraft serial Number 137 and subsequent. Model "GULFSTREAM 100" is identical to model "ASTRA SPX" except for the model designation.

The following data is common to both ASTRA SPX and GULFSTREAM G100 models :

<u>Engines</u>	2 AlliedSignal Engines TFE 731-40R-200G per FAA Type Certificate Data Sheet E1NM-1 (July 13, 1995)
<u>Fuel</u>	Conforming to AlliedSignal Engines 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 LIMITATIONS SECTION of approved AFM.
<u>Oil</u>	Conforming to AlliedSignal Engines Specification EMS 53110, Type II.
<u>Fuel Control</u> <u>Computer</u>	2 AlliedSignal Engines Digital Electronic Engine Controller P/N 2118882-3001, 2118882-3002 or 2118882-3003. Both engines must be equipped with the same p/n controller.

<u>Engine Limits</u>	Static Thrust at Sea Level, LBS		
	- Maximum Continuous	4250	
	- Take-off (5 minute)	4250	
	Maximum Continuous Permissible Engine Operating Speeds or the Engine Rotors, %RPM (RPM)		
	- Low pressure rotor (N1)	100.0 (21000)	
	- High pressure rotor (N2)	101.0 (31485)	
	Maximum Interstage Turbine Temperature (ITT), ° C		
	- Maximum Continuous	991	
	- Take-off (5 minutes)	991	
	- Take-off (5 minutes) with APR ON	1013	
	- During starting	991	
	Maximum Oil Inlet Temperature, ° C	<u>Up to 30,000 ft.</u>	<u>Above 30,000 ft.</u>
	- Fan gearbox	127	140
	- Fan gearbox transient for 2 minutes maximum	149	149
	- Accessory gearbox	149	157
	Oil Pressure, PSIG		
	- Normal operating	65 to 80	
	- At idle, minimum	50	
	- Maximum	100	
	Maximum Bleed and Power Extraction		
	- See AlliedSignal Engine Company Installation Manual IM-8010		
<u>Airspeed Limits</u>	-Vmo (Max operating) S.L. to 27600 ft.	350 KCAS	
	- Mmo Above 27600 ft.	0.87 M	
	- Mmo with Autopilot disengaged and Mach Trim inoperative Above 23900 ft.	0.81 M	
	- Va (Maneuvering)		
	- @ 24650 LBS:		
	- SL to 10000 ft.	233 KCAS	
	- @ 37000 ft.	280 KCAS	
	- Va varies linearly from 233 KCAS at 10000 ft. to 280 KCAS at 37000 ft.		
	- @ 18000 LBS :		
	- SL to 20000 ft.	204 KCAS	
	- @41000 ft.	250 KCAS	
	- Va varies linearly from 204 KCAS at 20000 ft. to 250 KCAS at 41000 ft.		
	- Above 41000 ft.	0.87 M	
	- Vfe (Flaps 12° and slats 25°)	250 KCAS	
	- Vfe (Flaps 20° and slats 25°)	225 KCAS	
	- Vfe (Flaps Landing 40° and slats 25°)	180 KCAS	
	- Vsb (Airbrakes Operation) No speed limitation		
	- Vle and Vlo (L/G Extension & Operating Speed)	180 KCAS	
	- Vmca (Flaps 12° and 20°)	100 KCAS	
	- Vmcg (Flaps 12° and 20°)	100 KCAS	
	- Tire limit ground speed : KTS (MPH)	182 KTS (210)	

DATA PERTINENT TO MODELS 1125 Westwind Astra, Astra SPX & GULFSTREAM G100**C.G. Range**

Approved center of gravity range is as shown in the following tables :
(Gear extension and retraction moment change is negligible)

<u>1125 Basic</u>	<u>1125 IW, ASTRA SPX, G100</u>
	(For 1125 IW, see NOTE 5)
12,100 LBS – 39.00% MAC	12,100 LBS – 39.00% MAC
12,100 LBS – 36.40% MAC	12,100 LBS – 36.40% MAC
12,900 LBS – 19.60% MAC	12,900 LBS – 19.60% MAC
16,500 LBS – 19.60% MAC	16,500 LBS – 19.60% MAC
21,250 LBS – 25.00% MAC	24,800 LBS – 25.00% MAC
23,650 LBS – 30.39% MAC	23,650 LBS – 32.97% MAC
23,650 LBS – 39.00% MAC	24,800 LBS – 39.00% MAC

LINEAR VARIATION BETWEEN POINTS**Datum**

Fuselage station 0 is located 92.78 inches forward of airstairs opening AFT frame.

Mean

86.26 inches with leading edge at Fuselage station 233.94

**Aerodynamic
Chord (MAC)****Levelling
Means**

Longitudinally : Place level on either seat rail at fuselage station 200 parallel
to A/C centerline.

Laterally : Place level on seat rails at fuselage station 200 at 90° to A/C
centerline.

**Maximum
Weights**

	<u>1125 BASIC</u>	<u>1125 IW</u>	<u>ASTRA SPX, G100</u>
- Ramp Gross Weight	23650 LBS	24800 LBS	24800 LBS
- Max Takeoff Weight	23500 LBS	24650 LBS	24650 LBS
- Max Landing Weight	20700 LBS	20700 LBS	20700 LBS
- Max Zero Fuel Weight	16000 LBS	17000 LBS	17000 LBS
For 1125 IW see NOTE 5.			

**Minimum
Crew**

2 (Pilot and Copilot).

**Maximum
Passengers**

Nine (See NOTE 9).

**Maximum
Baggage**

Central Tank Extension (CTE) status :	<u>LBS</u>	<u>ARM</u>
- CTE installed (full or empty)	370	358
- CTE not installed	1100	350

Fuel Capacity

(Density: 6.7 LBS/U.S.Gallon)	LH WING	CENTRAL TANK	CENTRAL TANK	RH WING
	<u>TANK</u>	<u>WITHOUT CTE</u>	<u>WITH CTE</u>	<u>TANK</u>
Total/Usable Fuel (LBS)	1936/1920	4857/4852	5530/5525	1936/1920
Arm (INCHES)	256.1	278.5	285.3	256.1
Unusable Fuel (LBS)	16	5	5	16
Arm (INCHES)	236.5	228.5	228.5	236.5
(See NOTE 1 for data on Fuel System)				

Oil Capacity

(Density: 8.2 LBS/US Gallon)	-3A & -3C Engine	-40R Engine		
	<u>TOTAL</u>	<u>USABLE</u>	<u>TOTAL</u>	<u>USABLE</u>
2 engine systems, Total, LBS	36	8	32	8
(See NOTE 1 for data on Oil System).				<u>ARM</u>
				394

Maximum Operating Altitude 45000 ft.

Other Operating Limitations Aircraft shall be operated according to operating limitations specified in approved Airplane Flight Manual (See NOTES 5, 6 and 7)

<u>Control Surface Movements</u>	<u>Surface</u>	<u>Travel (at trailing edge)</u>	<u>Tolerance</u>
Aileron		Up 15°	+0° -30
		Down 15°	+0° -45'
Aileron Trim		Up 5°	±1°
		Down 5°	
Rudder		Left 22°	±30'
		Right 22°	
Rudder Trim Tab		Left 11°30'	±2° -1°
		Right 11°30'	
Elevator		Up 22°	±30'
		Down 12°	
Elevator Gear Tab		Up 4°30'	±30'
		Down 9°30'	±15'
Stabilizer Trim (Leading edge)		Up 1°	±15'
		Down 12°	±30'
Airbrakes		Up 20°	1
Slats		Down 25°	1 -2°
Flaps		Max Down 40°	1 -1°30'

Manufacturer's Serial numbers Eligible

Models 1125 and 1125 IW,	S/N, 002, 004 thru 072, 074 thru 078
Model ASTRA SPX,	S/N 073, 079 thru 145
Model GULFSTREAM G100	S/N 137 and SUBS.

IV. Model GULFSTREAM G150 (Transport Category) approved November 7, 2005

The "GULFSTREAM G150" defined in Top Drawing 25G0009999 is a derivative model of the "GULFSTREAM G100".

Engines 2 Honeywell (formerly Allied Signal) TFE 731-40AR-200G FAA Type Certificate E1NM

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.

Oil Conforming to Honeywell Specification EMS 53110, Type 2.

Engine Limits

Static Thrust at Sea Level, LBS	
- Maximum Continuous	4420
- Take-off (5 minute)	4420
Maximum Continuous Engine Operating Speeds, (Engine Rotors):	%RPM (RPM)
- Low pressure rotor (N1)	100.0 (21000)
- High pressure rotor (N2)- APR Off	100.4 (31611)
- APR On	101.0(31800)
Maximum Interstage Turbine Temperature (ITT), ° C	
- Maximum Continuous	990
- Take-off (5 minutes)	1004
- Take-off (5 minutes) with APR ON	1022
- During starting	990

	Maximum Oil Temperature, ° C	<u>Up to 30,000 ft.</u>	<u>Above 30,000 ft.</u>
	- Fan gearbox	127	140
	- Fan gearbox transient for 2 minutes maximum	149	149
	- Accessory gearbox	149	157
	Oil Pressure, PSIG		
	- Normal operating	62 TO 83	
	- At idle, minimum	50	
	- Maximum	100	
	Maximum Bleed and Power Extraction		
	See Honeywell Installation Manual IM-8010		
Airspeed Limits (KIAS or KCAS)	-Vmo (Max operating) S.L. to 8000 ft.	310Kt	
	and increasing linearly from 8000.ft to 12000 ft to	330Kt	
	- Mmo Above 29260 ft.	0.85M	
	- Mmo with Autopilot disengaged and Mach Trim inoperative		
	Above 24770 ft.	0.78M	
	- Va (Maneuvering)		
	- Va varies linearly from 272 Kt at SL to 287 Kt at 20000 ft and		
	from 287 Kt at 20000 ft. to 330 Kt at 29260 ft.		
	- Vfe (Flaps 12° and slats 25°)	250 Kt	
	- Vfe (Flaps 20°)	225 Kt	
	- Vfe(Flaps Landing 40°)	180 Kt	
	- Vsb (Airbrakes Operation) No speed limitation		
	- Vle and Vlo (L/G Extension & Operating Speed)	180 Kt	
	- Vmca(Flaps 12° and 20°)	101 Kt	
	- Vmcg (Flaps 12° and 20°)	103 Kt	
	- Tire limit ground speed : KTS (MPH)	182 Kt (210)	
Maximum Operating Altitude		45000 ft.	
C.G. Range	Approved center of gravity range is as shown in the following tables : (Gear extension and retraction moment change is negligible)		
	13200 LBS - 37.00 % MAC		
	14330 LBS - 20.00 % MAC		
	18700 LBS - 20.00 % MAC		
	23700 LBS - 24.50 % MAC		
	26250 LBS - 30.60 % MAC		
	26250 LBS - 38.00 % MAC		
	22000 LBS - 38.00 % MAC		
	21700 LBS - 37.00 % MAC		
	Linear variation between points.		
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		
Mean Aerodynamic Chord (MAC)	86.26 inches with leading edge at fuselage station 317.087		
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.		
Maximum Weights	- Ramp Gross Weight	26,250 LBS	
	- Max Takeoff Weight	26,100 LBS	
	- Max Landing Weight	21,700 LBS	
	- Max Zero Fuel Weight	17,500 LBS	

Minimum Crew 2 (Pilot and Copilot)

Maximum Passengers : Nine - See Note 15

Maximum Baggage	<u>LBS</u> 1100	<u>ARM</u> 452		
Fuel Capacity	<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
(See NOTE 12 for data on Fuel System)				
Oil Capacity	(Density: 8.2 LBS/US Gallon) 2 engine systems, Total, LBS (See NOTE 12 for data on Oil System)	<u>TOTAL</u> 32	<u>USABLE</u> 8	<u>ARM</u> 496

Other Operating Limitations Aircraft shall be operated according to operating limitations specified in approved AFM see Note 16.

Control Surface Movements	<u>Surface</u>	<u>Travel (at trailing edge)</u>	<u>Tolerance</u>
Aileron		Up 15°	± 15'
		Down 15°	± 15'
Aileron Trim		Up 5°	+0° -1°
		Down 5°	+0° -1°
Rudder		Left 22°	±30'
		Right 22°	±30'
Rudder Trim Tab		Left 11°30'	+2° -1°
		Right 7.75°	±1°
Rudder Gear Tab		Left 7.75°	±1°
		Right 11°30'	+2° -1°
Elevator		Nose Up 22°30'	±30'
		Nose Down 12°	±15'
Elevator Gear Tab		Nose Up 3°	±30'
		Nose Down 18°	±30'
Stabilizer Trim (Leading edge)		Up 1°	±15'
		Down 12°	±30'
Airbrakes		Up 45°	±15'
		Down 25°	+1-2°
Flaps		Max Down 40°	+1 -1°30'

Manufacturer's Serial numbers Eligible Model GULFSTREAM G150 S/N 201 and subs.

Certification Basis

Model

1125

(including 1125 IW) (IAI Report 000/831708) :

As established per CAA letter A15/001-1156 dated 4 November 1984

- 14 CFR Part 25, effective Feb.1, 1965, including Amendments 25-1 thru 25-54.
- SFAR 27, effective Feb.1, 1974, including Amendments 27-1 thru 27-5.
- 14 CFR Part 36, effective Dec.1, 1969, including Amendments 36-1 thru 36-12.
- Special conditions for operation up to 45000 feet, per FAA S.C.No.25-ANM-5.
- Special conditions for ATTCS installation, per FAA S.C.No.25-ANM-5.
- Special conditions for flight in turbulent air.
- Exemption from FAR 25.1305(d)(3) Rotor Unbalance Indication.
- Exemption from FAR 25.832 Cabin Ozone Concentration.
- Compliance with ditching structural provisions of FAR 25.801(b) through (e) and 25.807(d) has been established.

- Equivalent Safety : FAR 25.729(e)(2) Landing Configuration Aural Warning
- Equivalent Safety : FAR 25.813(a) and 25.813(e) Emergency Exit Access, Lavatory Door (Mod 6016)
- Equivalent Safety : FAR 25.1305 Powerplant Instruments for APU (Mod 6043)

Models**ASTRA SPX & Gulfstream G100**

As established per CAAI Issue Paper G-1 dated April 12, 1995 (IAI Report 25W000/950561) :

- 14 CFR Part 25, effective Feb.1, 1965, including Amendments 25-1 through 25-54, except for Subpart B, Flight, Sections 25.21, thru 25.255 and Subpart E, Powerplant, Sections 25.901 through 25.945, and 25.1011 through 25.1207, where Amendments 25-1 thru 25-80 have been applied. In addition, the following specific regulations including Amendments 25-1 through 25-80 have been applied to the changes or the areas affected by the change per the derivative aircraft policy :

<u>Section</u>	<u>Title</u>
25.305	Strength and deformation
25.307	Proof of structure
25.571	Damage tolerance & fatigue evaluation of structure
25.625	Fitting factors
25.629	Aeroelastic stability requirements
25.961	Fuel system hot weather operation
25.994	Fuel system components
25.997	Fuel strainer or filter
25.1001	Fuel jettisoning system
25.1305	Powerplant instruments
25.1307	Miscellaneous equipment
25.1316	System lightning protection
25.1521	Powerplant limitations
25.1551	Oil quantity indication

In addition, section 25.729 Amendment 25-75 has been applied in lieu of the equivalent safety finding made for this section on the IAI Model 1125 Astra.

- 14 CFR Part 34, effective Aug.10, 1990, including amendments effective on the date of TC.
- 14 CFR Part 36, effective Dec. 1, 1969, including amendments 36-1 through 36-20.
- Special condition No. 25-ANM-5 for operation to 45000 feet and for the Automatic Takeoff Thrust Control System (ATTCS). Note: Compliance with section 25.904, as promulgated by Amendment 25-62, was required for the ATTCS in lieu of the Special condition 25-ANM-5.
- Special condition no. 25-ANM-104 for High Intensity Radiated Fields (HIRF)
- Compliance with ditching structural provisions of FAR 25.801(b) through (e) and 25.807(d) has been established.
- Equivalent Safety : FAR 25.813(a) and 25.813(e) Emergency Exit Access, Lavatory Door (Mod 6016).
- Equivalent Safety : FAR 25.1305 Powerplant Instruments for APU (Mod 6425).
- Equivalent Safety : FAR 25.1203(a) Fire Detector in Tail Pipe area of engine.

Model**Gulfstream G150****Airworthiness & Environmental Standards for components and areas not affected or not significantly affected by the change :**

The original Certification Basis for the model G100 shown on TCDS A5IL Rev.10 dated November 21, 2002

Airworthiness and Environmental Standards for components and areas significantly affected by the change :

14 CFR part 25, effective February 1, 1965, including amendments 25-1 through 25-107, except: 25.365, 25.841, 25.1447 as amended by 25-87.

25.831 as amended by 25-89.

25.981 as amended by 25-102.

25.103, 25.107, 25.111, 25.119, 25.121, 25.125, 25.143 (a)-(e), 25.145, 25.147, 25.149 (a)-(e), 25.161, 25.175, 25.177, 25.181, 25.201 (a) (b), 25.207, 25.231, 25.233, 25.237, 25.773, 25.1001, 25.1323, 25.1325, 25.1587, as amended by 25-108.

25.856 as amended by amendment 25-111

Special Conditions: The following Special Conditions applied to model GULFSTREAM G100 airplane "are applicable to the changes incorporated on the G150:
FAA 25 –ANM-104, High Intensity Radiated Fields (HIRF)

Equivalent Level of Safety Findings.

Section 25.812 (a)(1),(c),(d),(e) Emergency Lighting

Section 25.841 (b)(6) Cabin Pressurization – High Altitude Take-off and Landing Operations

Section 25.1121 (c) APU Exhaust System Installation.

Section 25.1203 (a) Fire Detection System within the Turbine Tailpipe Zone (applicability to G100 extended to G150)

Section 25.1305(c)(3) Digital Only Display of Turbine Engine High Pressure Rotor Speed (N₂)

Section 25.255 Compliance Requirements for High Speed Mistrim Conditions.

FAR.25.APPENDIX K Adoption of Draft Harmonized Rules for APU Certification.

Exemption

Section 25.901(c) Uncontrollable High Thrust Failure Conditions

Noise Standards 14 CFR part 36, effective December 1, 1969, including amendments 36-1 through 36-26 (STAGE 4)

Fuel Venting and Exhaust Emissions Standards 14 CFR part 34, effective September 10, 1990 including amendment 34-3

Optional Design Regulations The aircraft complies with the following :
Section 25.801 Ditching
Section 25.1419 Ice Protection

Production Basis

Production certificate No. PA-30.

Equipment

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

Model 1125 and 1125 IW – Master Equipment/Check Off List, Report No.25W100/841717.

Models ASTRA SPX, GULFSTREAM 100–Master Equipment/Check Off List, Report No.25W000/950560.

Model Gulfstream G150 - Master Equipment/Check Off List, Report No.25G000/051724.

NOTES:**Models other than G150**

- NOTE 1
- (a) Current weight and balance report including list of equipment included in certificated empty weight and loading instructions must be provided for each aircraft at the time of original certification.
 - (b) The airplane must be loaded so that the C.G. is within the specified limits at all times.
 - (c) The weight of fuel and oil systems fluid as defined below must be included in the empty weight of the airplane.

<u>FUEL SYSTEM</u>	<u>LBS</u>	<u>ARM</u>
- Unusable (drainable from tanks drain and lines), LBS (Gallons)	37 (5.5)	235.4
- Undrainable (trapped in tanks and lines), LBS (Gallons)	24 (3.6)	235.4

<u>OIL SYSTEM</u>	<u>-3A& -3C engine</u>	<u>-40 engine</u>	<u>ARM</u>
- Unusable drainable (systems) – Total, LBS	20	16	394
- Undrainable (systems) – Total, LBS	8	8	394

- NOTE 2 All required placards listed in the Limitations Section of the appropriate Airplane Flight Manual must be installed in the appropriate locations.

- NOTE 3
- (a) Mandatory replacement times, structural inspection intervals and related structural inspection procedures are presented in the CAAI approved Airworthiness Limitations Sections (ALS) of the Instructions for Continued Airworthiness applicable to each model.
P/N 25-1001-11-2 is applicable to model 1125 Westwind Astra including IW.
P/N G100-1001-1-2 is applicable to Models Astra SPX and Gulfstream 100 .
 - (b) Information essential to the proper servicing and maintenance of the aircraft models listed in this TCDS is contained in the Aircraft Maintenance Manual (AMM) Section of the Instructions for Continued Airworthiness
Gulfstream 100 AMM, P/N G100-1001-11-1 is applicable to all models.
Astra AMM, P/N 25W-1001-11-1 is applicable to models 1125 Astra Westwind, including IW, and Astra SPX.
 - (c) Service data entitled Gulfstream 100 is applicable also to model ASTRA SPX and 1125 Westwind Astra, subject to the stated model and Serial No. limitations.

- NOTE 4 ATTCS, when installed, shall comply with special conditions no.25-ANM-5 (see Certification Basis, for models 1125 and 1125 IW).

- NOTE 5 Aircraft incorporating Mod 5812 are eligible for maximum take off weight of 24650 Lbs and must be operated according to the approved Airplane Flight Manual marked P/N 25-1001-1 IW (Increased weight).

- NOTE 6 Airplane model 1125 with TFE731-3C engines installed, must be operated per Airplane Flight Manual Revision 18 or subsequent.

- NOTE 7
- (a) Airplane Model ASTRA SPX (Mod 6340) must be operated according to the ASTRA SPX approved Airplane Flight Manual (AFM) marked P/N SPX-1001-1 or to the GULFSTREAM 100 approved AFM marked P/N G100-1001-1 .
 - (b) Airplane Model GULFSTREAM 100 (Mod 6680) must be operated according to the Approved Airplane Flight Manual marked P/N G100-1001-1 .

- NOTE 8 Aircraft incorporating Mod 6541 or Mod 6546 may be operated without external paint, subject to the limitations and inspections defined in the Airworthiness Limitation Section, Temporary Revision ALS-1 dated October 1998, or later approved revision.

- NOTE 9 Carriage of passengers in aircraft incorporating Mod 6582 or Mod 6546 is prohibited, unless an approved interior and seating arrangement is installed.
- NOTE 10 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 11 Mod 6680 and Mod 20006 introduce the "GULFSTREAM 100" designation and makes the requisite changes to identification plates according to תקנות השיט תשל"ז 1977 (Registration of A/C and Markings) Sec.55 [equivalent to FAR 45.11(a) Amndt. 45-17 and FAR 45.13, Amndt. 45-20].

NOTES**Model G150**

- NOTE 12
- (a) Current weight and balance report including list of equipment included in certificated empty weight and loading instructions must be provided for each aircraft at the time of original certification.
 - (c) The airplane must be loaded so that the C.G. is within the specified limits at all times.
 - (c) The weight of fuel and oil systems fluid as defined below must be included in the empty weight of the airplane.
- | <u>FUEL SYSTEM</u> | <u>LBS</u> | <u>ARM (inch)</u> |
|---|------------|-------------------|
| - Unusable (drainable from tanks drain and lines),
LBS (Gallons) | 22.7 (3.4) | 343.8 |
| - Undrainable (trapped in tanks and lines), LBS (Gallons) | 22.4 (3.3) | 394.2 |
-
- | <u>OIL SYSTEM</u> | <u>LBS</u> | <u>ARM (inch)</u> |
|--|------------|-------------------|
| - Unusable drainable (systems) – Total | 16 | 496 |
| - Undrainable (systems) – Total | 8 | 496 |
- NOTE 13 All required placards listed in the Limitations Section of the appropriate Airplane Flight Manual must be installed in the appropriate locations.
- NOTE 14
- (a) Information essential to the proper servicing and maintenance of the aircraft is contained in the Aircraft Maintenance Manual AMM P/N G150-1001-3
 - (b) Mandatory replacement times, structural inspection intervals and related structural inspection procedures and Certification Maintenance Requirements are presented in the approved Airworthiness Limitation Section 05-10-10 of the AMM.
- NOTE 15 This Aircraft Type Certificate defines a configuration which does not include exterior painting of the aircraft and its interior furnishing and passenger provisions.
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 Basis of Certification
- NOTE 16 Airplane Model GULFSTREAM G150 must be operated according to the Approved Airplane Flight Manual marked P/N G150-1001-1.
- NOTE 17 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 18 Deleted.
- NOTE 19 Per the Approved Type Design, Model G150 complies with the Reduced Vertical Separation Minima (RVSM) technical requirements contained in FAR 91 Appendix G Section 2, provided MOD G15-10015 is implemented.
However, operational approval to fly in RVSM airspace must still be granted by the CAAI Operations Branch.

NOTE 20 Deleted

NOTE 21 In December 2006 Israel Aircraft Industries changed its name to Israel Aerospace Industries.

- END -