

Maximum bleed and power extraction:

- See Honeywell Installation Manual IM-8001

Airspeed Limits:

	<u>1125 BASIC</u>	<u>*1125 IW</u>
- V_{mo} (Max Operating) S.L. to 25000 ft.	360 KCAS	
- M_{mo} Above 25000 ft.	0.85 M	
- M_{mo} with Autopilot disengaged above 22500 ft.	0.81 M	
- V_{mo} (Max Operating) S.L. to 26360 ft.		350 KCAS
- M_{mo} Above 26360 ft.		0.85 M
- M_{mo} with Autopilot disengaged above 24130 ft.		0.81 M
- V_a (Maneuvering)		
- At 23500 LBS:		
- SL to 10000 ft	233 KCAS	
- At 37000 ft	280 KCAS	
- V_a varies linearly from 233 KCAS at 10000 ft to 280 KCAS at 37000 ft.		
- At 24650 LBS:		
- SL to 10000 ft		233 KCAS
- At 37000 ft		280 KCAS
- V_a varies linearly from 233 KCAS at 10000 ft. to 280 KCAS at 37000 ft.		
- At 18000 LBS:		
- SL to 20000 ft	204 KCAS	204 KCAS
- At 41000 ft	250 KCAS	250 KCAS
- V_a varies linearly from 204 KCAS at 20000 ft to 250 KCAS at 41000 ft.		
- Above 41000 ft	0.85M	0.85 M
- V_{fe} (Flaps 12° and slats 25°)	250 KCAS	250 KCAS
- V_{fe} (Flaps 20° and slats 25°)	225 KCAS	225 KCAS
- V_{fe} (Flaps Landing 40° and slats 25°)	180 KCAS	180 KCAS
- V_{sb} (Airbrakes Operation) No speed Limitation		
- V_{le} and V_{lo} (L/G Extension and Operating Speed)	180 KCAS	180 KCAS
- V_{mca} (Flaps 12° and 20°)	92 KCAS	92 KCAS
- V_{mcg} (Flaps 12° and 20°)	89 KCAS	89 KCAS
- Tire Limit Ground Speed: KTS (MPH)	182 (210)	182 (210)

* SEE NOTE 4

II. Model Astra SPX (Transport Category) Approved January 8, 1996

The Model Astra SPX is a derivative of the Model 1125 Westwind Astra. The changes include: installation of Honeywell (formerly AlliedSignal) TFE 731-40R-200G engines; installation of winglets and minor structural modifications to the wing; installation of Collins pro-line 4 avionics; and a new Airplane Flight Manual to take credit for the aerodynamic and performance improvements.

III. Model Gulfstream 100 (Transport Category) Approved August 9, 2002

The Model Gulfstream 100 type design is identical to the Model Astra SPX type design except for the model designation. The only difference is the model designation (name) used on the data plate and associated manuals. The type design of the Model Gulfstream 100 includes all of the mandatory type design changes applied to the Astra SPX as of the date of approval.

IV. Model Gulfstream G150 (Transport Category) Approved November 7, 2005

The "GULFSTREAM G150" is a derivative model of the former "GULFSTREAM G100". The changes include:

- A 5.5% increase of maximum takeoff weight
- A 12-inch increase in the passenger cabin width
- A 16 inch fuselage "Plug" aft of rear pressure bulkhead
- A modified cockpit and nose section with enhanced pilot accommodation and visibility
- COLLINS PROLINE 21 avionics in lieu of the COLLINS PROLINE 4
- Modification of the Engine Electronic Control (EEC) to achieve an increase of up to 6% in thrust
- Systems adaptations associated with the aforementioned modifications

Data Pertinent to Models Astra SPX and Gulfstream 100

<u>Engines.</u>	Two Honeywell Engines (formerly AlliedSignal) TFE 731-40R-200G per FAA Type Certificate Data Sheet E1NM		
<u>Fuel.</u>	Conforming to Honeywell Specifications EMS 53111 (Jet A type), EMS 53112 (Jet A-1 & JP-8 types), EMS 53113 (Jet B & JP-4 types), and EMS 53116 (JP-5 type) as per LIMITATIONS SECTION of approved AFM.		
<u>Oil.</u>	Conforming to Honeywell Specification EMS 53110 type 2.		
<u>Engine Limits.</u>	Static thrust at sea level, LBS		
	- Maximum continuous		4,250
	- Take-off (5 minutes)		4,250
	Maximum continuous permissible engine operating speeds for 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 (2 minutes)	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 Honeywell Installation Manual IM-8010		
<u>Airspeed Limits:</u>	- V _{mo} (Max Operating) S.L. to 27600 ft.		350 KCAS
	- M _{mo} Above 27600 ft.		0.87 M
	- M _{mo} with Autopilot disengaged and Mach Trim inoperative above 23900 ft.		0.81 M
	- V _a (Maneuvering)		
	- At 24650 LBS:		
	- S.L. to 10000 ft		233 KCAS
	- At 37000 ft		280 KCAS
	- V _a varies linearly from 233 KCAS at 10000 ft to 280 KCAS at 37000 ft.		
	- At 18000 LBS:		
	- S.L. to 20000 ft		204 KCAS
	- At 41000 ft		250 KCAS
	- V _a varies linearly from 204 KCAS at 20000 ft to 250 KCAS at 41000 ft.		
	- Above 41000 ft		0.87M
	- V _{fe} (Flaps 12° and slats 25°)		250 KCAS
	- V _{fe} (Flaps 20° and slats 25°)		225 KCAS
	- V _{fe} (Flaps Landing 40° and slats 25°)		180 KCAS
	- V _{sb} (Airbrakes Operation) No speed Limitation		
	- V _{le} and V _{lo} (L/G Extension and Operating Speed)		180 KCAS
	- V _{mca} (Flaps 12° and 20°)		100 KCAS
	- V _{mca} (Flaps 12° and 20°)		100 KCAS
	- Tire Limit Ground Speed: KTS (MPH)		182 (210)

Data Pertinent to all Models except Gulfstream G150C.G. Range.

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

<u>1125 BASIC</u>	<u>*1125 IW, Astra SPX & Gulfstream 100</u>
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	21,250 LBS – 25.00 % MAC
23,650 LBS – 30.39 % MAC	24,800 LBS – 32.97 % MAC
23,650 LBS – 39.00 % MAC	24,800 LBS – 39.00 % MAC

LINEAR VARIATION BETWEEN POINTS

* SEE NOTE 4

Datum.

Fuselage Station 0, is located 92.78 inches forward of airstairs opening aft frame.

Mean Aerodynamic Chord (MAC).

86.26 inches with leading edge at Fuselage Station 233.94.

Leveling 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 Weight:

	<u>1125 BASIC</u>	<u>1125 IW, Astra SPX. & Gulfstream 100</u>
- Ramp Gross Weight	23650 lbs	24800 lbs
- Max Takeoff Weight	23500 lbs	24650 lbs
- Max Landing Weight	20700 lbs	20700 lbs
- Max Zero Fuel Weight	16000 lbs	17000 lbs

Minimum Crew.

Two (Pilot and Copilot)

Maximum Passengers.

Nine

Maximum Baggage.

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

Fuel Capacity.

Fuel Tanks	<u>LH WING</u>	<u>CENTER (w/o CTE)</u>	<u>CENTER (w/ CTE)</u>	<u>RH WING</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

Density: 6.7 LBS/U.S. Gallon
See Note 1 for data on Fuel System

Oil Capacity.

	<u>*TOTAL (LBS)</u>	<u>*USABLE(LBS)</u>	<u>ARM(INCHES)</u>
-3A & -3C Engines	36	8	394
-40R Engines	32	8	394

*For Both Engines Combined
Density: 8.2 LBS/U.S. Gallon
See Note 1 for Data on Oil System)

Maximum Operating Altitude. 45,000 ft.

Other Operating Limitations. Aircraft shall be operated according to operating limitations specified in approved airplane flight manual. (See notes 4 and 6.)

Control Surface Movements.

<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°
	Down	25°	+ 1°-2°
Flaps	Max Down	40°	+1°-1°30'

Manufacturer's Serial Numbers Eligible. Models 1125 Westwind Astra and 1125 IW - S/N 002, 004 thru 72, and 074 thru 078
Model Astra SPX - S/N 073, 079 thru 145.
Model Gulfstream 100 - S/N 146 and subsequent

Import Requirements. A U.S. Airworthiness Certificate may be issued on the basis of an Israeli Certificate of Airworthiness for Export signed by a representative of the Civil Aviation Administration of Israel (CAAI) containing the following statement: "The airplane covered by this certificate has been examined, tested and found to conform to the type design approved under FAA Type Certificate No. A16NM, and to be in condition for safe operation".

Data Pertinent to Model GULFSTREAM G150

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 LIMITATIONS SECTION of approved AFM

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 Permissible Engine Operating Speeds for the Engine Rotors, %RPM (RPM)		
Low pressure rotor (N1)		100.0 (21000)
High pressure rotor (N2)		100.4 (31611)
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

	<u>Up to 30,000 ft.</u>	<u>Above 30,000 ft</u>
Maximum Oil Inlet Temperature, ° C		
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:

-V _{MO} (Max operating) S.L. to 8000 ft.	310KCAS
and increasing linearly from 8000.ft to 29260 ft to	330KCAS
- M _{MO} Above 29260 ft.	0.85M
- M _{MO} with Autopilot disengaged and Mach Trim inoperative above 24770 ft.	0.78M
- V _A (Manoeuvring):	
- V _A varies linearly from 272KCAS at S.L. to 287 KCAS at 20000ft.	
- V _A varies linearly from 287 KCAS at 20000 ft. to 330 KCAS at 29300 ft.	
- Above 29300 ft.	0.85 M
- V _{FE} (Flaps 12° and slats 25°)	250 KCAS
- V _{FE} (Flaps 20° and slats 25°)	225 KCAS
- V _{FE} (Flaps Landing 40° and slats 25°)	180 KCAS
- V _{SB} (Airbrakes Operation) No speed limitation	
- V _{LE} and V _{LO} (L/G Extension & Operating Speed)	180 KCAS
- V _{MCA} (Flaps 12° and 20°)	101 KCAS
- V _{MCG} (Flaps 12° and 20°)	103 KCAS
- Tire limit ground speed : KTS (MPH)	182 KTS (210)

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

86.26 inches with leading edge at fuselage station 317.087

Aerodynamic Chord (MAC)**Levelling**

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

Means

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 7

Maximum Baggage	LBS	ARM (INCHES)
	1100	452

Fuel Capacity	LH / RH Wing tanks	Collectors	CTS	Fuselage
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 1 for data on Fuel System)

Oil Capacity	(Density: 8.2 LBS/US Gallon) 2 engine systems, Total, LBS (See NOTE 1 for data on Oil System)	<u>TOTAL</u> 32	<u>USABLE</u> 8	<u>ARM</u> 496
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Maximum Operating Altitude 45000 ft.

Other Operating Limitations Aircraft shall be operated according to operating limitations specified in approved Airplane Flight Manual see Note 5.

The FAA pilot type rating has not been determined. No U.S. G-150 pilot certificates may be issued until this is accomplished.

Instructions for Continued Airworthiness are incomplete. The aircraft will be eligible for return to service when the ICA are complete and accepted.

Control Surface Movements	<u>Surface</u>	<u>Travel (at trailing edge)</u>	<u>Tolerance</u>
Aileron		Up	± 15°
		Down	± 15°
Aileron Trim		Up	+0° -1°
		Down	+0° -1°
Rudder		Left	±30°
		Right	±30°
Rudder Trim Tab		Left	+2° -1°
		Right	+2° -1°
Rudder Gear Tab		Left	±1°
		Right	±1°
Elevator		Nose Up	±30°
		Nose Down	±15°
Elevator Gear Tab		Nose Up	±30°
		Nose Down	±30°
Stabilizer Trim (Leading edge)		Up	±15°
		Down	±30°
Airbrakes		Up	±15°
Slats		Down	+1-2°
Flaps		Max Down	+1 -1°30'

**Manufacturer's
Serial numbers
Eligible**

Model GULFSTREAM G150 S/N 201 and subs.

Import Requirements A US Airworthiness Certificate may be used on the basis of an Israeli Certificate of Airworthiness for Export signed by a representative of the Civil Aviation Administration of Israel (CAAI) containing the following statement: "The airplane covered by this certificate has been examined, tested and found to conform to the type design approved under FAA Type Certificate No A16NM, and to be in condition for safe operation"

Certification Basis.**Models 1125 Westwind Astra and 1125 IW**

- 14 CFR Part 21.29
- 14 CFR Part 25, effective February 1, 1965, including Amendments 25-1 through 25-54.
- SFAR 27, effective February 1, 1974, including Amendments 27-1 through 27-5.
- 14 CFR Part 36, effective December 1, 1969, including Amendments 36-1 through 36-12.
- Special conditions for operation up to 45000 feet, per FAA S.C. No. 25-ANM-5.
- Special conditions for Automatic Takeoff Thrust Control System (ATTCS) installation, per FAA S.C. No. 25-ANM-5.
- Exemption No. 3692 from FAR 25.1305 (d) (3) Rotor Unbalance Indication.
- 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 Installation (mod 6043)

Models Astra SPX and Gulfstream 100

- 14 CFR Part 21.29
- 14 CFR Part 25, effective February 1, 1965, including Amendments 25-1 through 25-54, plus Subpart B, Flight, Sections 25.21 through 25.255, and Subpart E, Powerplant, Sections 25.901 through 25.945, and 25.1011 through 25.1207, including Amendments 25-1 through 25-80, which have been applied to the changes or the areas affected by the change per the FAA derivative aircraft policy. 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 FAA 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

Further, 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 Westwind Astra.

- 14 CFR Part 34, effective September 10, 1990.
- 14 CFR Part 36, effective December 1, 1969, including Amendments 36-1 through 36-20.
- Special Condition No. 25-ANM-104 for High Intensity Radiated Fields (HIRF).
- Special Condition No. 25-ANM-5 for operation to 45,000 feet and for ATTCS. Note: Compliance with Section 25.904, as promulgated by Amendment 25-62, was required for the ATTCS system in lieu of the Special Condition 25-ANM-5.
- An equivalent safety finding exists with respect to Section 25.1203(a) Fire detection system within the turbine tailpipe zone. In addition, the following equivalent safety findings, previously made for the IAI Model 1125 Westwind Astra under the provisions of Section 21.21(b)(1), are also applicable to the IAI Model Astra SPX:

Section 25.813(a) and (e)	Emergency exit access, lavatory door
Section 25.1305	Powerplant instruments for APU installation

- Compliance with the following optional requirements has been established:

Section 25.801	Ditching
Section 25.1419	Ice Protection

Certification Basis.Model Gulfstream G150**1A. Airworthiness & Environmental Standards for components and areas not affected or not significantly affected by the change :**

The certification basis for the unchanged portion of the model G150 is the same as the Model G100 as shown in the relevant G100 section above.

1B. Airworthiness and Environmental Standards for components and areas affected by the change for the basic G150 :

14 CFR part 25, effective February 1, 1965, including amendments 25-1 through 25-108, except for the following paragraphs which are complied with at the identified amendment level.

FAR 25	SUB-SECTION	FAR SECTION TITLE	ALLPICABLE 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 (*), HORIZONTAL STABILIZER, VERTICAL TAIL, LANDING GEAR	54
305		STRENGTH & DEFORMATION	WING, NACELLE	77
307		PROOF OF STRUCTURE	AFT FUSELAGE, HORIZONTAL STABILIZER, VERTICAL TAIL, LANDING GEAR, WING, NACELLE	54
321		FLIGHT LOADS - GENERAL	AFT FUSELAGE, NACELLE, VERTICAL TAIL, WING	23
333		FLIGHT ENVELOPE	AFT FUSELAGE, NACELLE, VERTICAL TAIL, WING	0
335		DESIGN AIRSPEED	AFT FUSELAGE, NACELLE, VERTICAL TAIL, WING	23
341		GUST LOADS	AFT FUSELAGE, NACELLE, VERTICAL TAIL, WING	0
343		DESIGN FUEL & OIL LOADS	AFT FUSELAGE, NACELLE, VERTICAL TAIL, HORIZONTAL STABILIZER, WING	18
345		HIGH LIFT DEVICES		46
349		ROLLING CONDITIONS	NACELLE, WING	23
351		YAWING CONDITIONS	AFT FUSELAGE, NACELLE, VERTICAL TAIL, HORIZONTAL STABILIZER	46
361		ENGINE TORQUE		46
363		SIDE LOAD ON ENGINE MOUNT		23
371		GYROSCOPIC LOADS		0
373		SPEED CONTROL DEVICES		0
391		CONTROL SURFACE LOADS- GENERAL	WING, VERTICAL TAIL	0
395		CONTROL SYSTEM	WING, VERTICAL TAIL, FLIGHT CONTROLS SYS.	23
397		CONTROL SURFACE LOADS	WING, VERTICAL TAIL, HORIZONTAL STABILIZER, FLIGHT CONTROL SYS.	38
415		GROUND GUST CONDITIONS	VERTICAL TAIL, HORIZONTAL SABILIZER, FLIGHT CONTROLS SYS.	0
427		UNSYMETRICAL LOADS	AFT FUSELAGE, VERTICAL TAIL	23
445		AUXILLIARY AERODYNAMIC SURFACES	WINGLETS	0
459		SPECIAL DEVICES	SLATS	0
473		GROUND LOADS CONDITIONS & ASSUMPTIONS	LANDING GEAR, NACELLE, WING, AFT FUSELAGE, VERTICAL TAIL, HORIZONTAL SABILIZER	23
479		LEVEL LANDING CONDITIONS	LANDING GEAR, NACELLE, WING, AFT FUSELAGE	23
481		TAIL DOWN LANDING CONDITIONS	LANDING GEAR, NACELLE, WING, AFT FUSELAGE	0
483		ONE WHEEL LANDING CONDITIONS	AFT FUSELAGE, LAND GEAR, NACELLE, WING	0

FAR 25	SUB-SECTION	FAR SECTION TITLE	ALLPICABLE TO ZONE / SYSTEM	G150 AMDT
485		SIDE LOAD CONDITIONS	LANDING GEAR, NACELLE, WING, AFT FUSELAGE	0
491		TAKEOFF RUN	LANDING GEAR, NACELLE, WING, AFT FUSELAGE	0
493		BRAKED ROLL CONDITIONS	AFT FUSELAGE, LANDING GEAR	23
499		NOSE WHEEL YAW	AFT FUSELAGE, LAND GEAR	46
561		EMERG. LANDING CONDITION - GENERAL	AFT FUSELAGE, NACELLE	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	e	DOORS		54
855		CARGO OR BAGGAGE COMPARTMENT	AFT FUSELAGE	32
856		THERMAL ACOUSTIC INSULATION MATERIALS		111
857		CARGO COMPT. CLASSIFICATION	AFT FUSELAGE	32
951		FUEL SYSTEM - GENERAL		38
979		PRESSURE FUELING SYSTEM		38
981		FUEL TANK (IGNITION PREVENTION)		(**)
1351		ELECT. SYSTEMS & EQUIPT. - GENERAL		41
1416		PNEUMATIC DE-ICER BOOT SYSTEM		46
1419		ICE PROTECTION		0
1435		HYDRAULIC SYSTEMS		41

Notes:

(*) Aft fuselage is defined Aft of Station 10824 (frame 43)

(**) GALP elected to comply with 25.981 at amendment 25-102 except for paragraph 25.981 (c)

2. Special Conditions:

5 –ANM-104, High Intensity Radiated Fields (HIRF) (applicability to G100 extended to G150)
 25.562 (25-294-SC) Dynamic test requirements for single place side facing seats
 25.773 (b) Pilot Compartment View (Hydrophobic coating)

NOTE: The FAA Special Conditions referenced above may be accessed at internet location:

http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgSC.nsf/MainFrame?OpenFrameSet

3. Equivalent Level of Safety Findings:

Section 25.812 (a)(1), (c), (d), (e)	Emergency Lighting
Section 25.831 (g)	Ventilation System Failures – Cabin Temperature and Humidity
Section 25.841 (b6)	Cabin Pressurization – High Altitude Take-off and Landing Operations
Section 25.1203 (a)	Fire Detection System within the Turbine Tailpipe Zone (applicability to G100 extended to G150)
Section 25.1305 (c3)	Digital Display Only of Turbine Engine High Pressure Rotor Speed (N2)
FAR.25.APPENDIX K	Adoption of Draft Harmonized Rules for APU Certification
Section 25.255(a)	Maneuvering stability and controllability in a mistrim condition
Section 25.1121(c)	Exhaust system components separated by fireproof shields

NOTE: The FAA Equivalent Level of Safety Memos referenced above may be accessed at internet location:
http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgELOS.nsf/MainFrame?OpenFrameSet

4. Exemptions

Section 25.785 (b)	Dynamic test requirements for multiple place side facing seats
Section 25.901 (c)	Uncontrollable High Engine Thrust

The FAA Exemptions referenced above may be accessed at internet location:
http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgEX.nsf/MainFrame?OpenFrameSet

5. Optional Design Regulations:

Compliance with the following optional requirements has been established:

Section 25.801	Ditching
Section 25.1419	Ice Protection

6 Noise Standards 14 CFR part 36, effective December 1, 1969, including amendments 36-1 through 36-24 (Stage 3)

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

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.
 Models 1125 Westwind Astra and 1125 IW - Master Equipment List Report No. 25W100/841717.
 Model Astra SPX and Gulfstream 100 - Master Equipment List Report No. 25W000/950560
 Model GULFSTREAM G150–Master Equipment List Report # 25G000/051724

Service Information. Service bulletins, structural repair manuals, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is Civil Aviation Administration of Israel (CAAI) approved, are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

NOTES:

- NOTE 1. **For all models except Gulfstream G150:**
- 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.
 - 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 (Gallons)</u>	<u>ARM</u>
- Unusable (drainable from tanks, drain and lines)		37 (5.5)	235.4
- Undrainable (trapped in tanks and lines)		24 (3.6)	235.4
<u>OIL SYSTEM</u>		<u>Total (LBS)</u>	<u>ARM</u>
		<u>-3A & -3C engines</u>	<u>-40 engine</u>
- Unusable Drainable (systems)	20	16	394
- Undrainable (systems)	8	8	394

For Gulfstream G150:

<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 2. All required placards listed in the Limitations Section of the Airplane Flight Manual must be installed in their proper locations.

NOTE 3. Information essential to the proper servicing and maintenance of the aircraft is contained in the Maintenance Manual Section of the Instructions for Continued Airworthiness Manual marked 25W-1001-11-1 or G100-1001-11-1 for Model 1125 Westwind Astra, 1125 IW, and Astra SPX airplanes, and marked G100-1001-11-1 for Model Gulfstream 100 airplanes. Mandatory replacement times, structural inspection intervals and related structural inspection procedures, and Certification Maintenance Requirements are presented in the approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness Manual marked 25-1001-11-2 for Model 1125 Westwind Astra and 1125 IW, marked 25X-1001-11-2 or G100-1001-1-2 for Model Astra SPX, and marked G100-1001-1-2 for Gulfstream 100 airplanes.

Gulfstream G150

(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 4. Airplane Model 1125 Westwind Astra incorporating MOD 5812 are eligible for maximum take off weight of 24650 LBS and must be operated per Approved Airplane Flight Manual marked 25W-1001-1-IW (Increased Weight).

NOTE 5. Airplane Model 1125 Westwind Astra must be operated per Approved Airplane Flight Manual marked 25W-1001-1. Airplane Model 1125 Westwind Astra with Honeywell TFE 731-3C engines installed (MOD 6333), must be operated per Approved Airplane Flight Manual marked 25W-1001-1 Revision 18 or subsequent. Airplane Model Astra SPX (MOD 6340) must be operated per Approved Airplane Flight Manual marked SPX-1001-1 or G100-1001-1. Airplane Model Gulfstream 100 (MOD 6680) must be operated per Approved Airplane Flight Manual marked G100-1001-1. Airplane Model GULFSTREAM G150 must be operated according to the Approved Airplane Flight Manual marked P/N G150-1001-1.

- NOTE 6. Airplane Model Astra SPX incorporating MOD 6541 or MOD 6546 and Gulfstream G150 may be operated without external paint, subject to the limitations and inspections defined in the Airworthiness Limitations Section Temporary Revision ALS-1 dated October 1998 or later approved revision.
- NOTE 7. Carriage of passengers in aircraft incorporating MOD 6546 or MOD 6582 and Gulfstream G150 is prohibited unless an approved interior and seating arrangement is installed. 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 8. Israel Aircraft Industries LTD. (IAI), located at Ben Gurion International Airport 70100, Israel, is licensed by Gulfstream Aerospace LP to manufacture and obtain Airworthiness Certificates for the Model aircraft listed in this Type Certificate Data Sheet for serial number 146 and subsequent.
- NOTE 9. MOD 6680 introduces the "Gulfstream 100" Model designation and makes the requisite changes to identification plates and manuals. The "Gulfstream 100" is only a name change from former "Astra SPX".
- NOTE 10. The G150 s/n 201 and subsequent are considered capable for RVSM operation pending CAAI approval of G150 data package showing compliance with the technical requirements of FAA Document 91- RVSM.

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