



Products (FAR 21.29). Effective August 1, 1995 and after, these products are to be considered domestic products for the purpose of certification, and Federal Aviation Regulation 21.21 becomes appropriate.

Effective May 28, 1999, certain models identified as "B" series that had been previously certified by the UK Civil Aviation Authority were added to Type Certificate A3EU and this Data Sheet. The process for type certification of these aircraft is considered analogous to issuance of export airworthiness approvals, with exceptions, as allowed under 14 CFR 21.325(c). Under that section the requirements that are not met and the differences in configuration, if any, between the product to be exported and the related type certificated product, are listed on the export airworthiness approval as exceptions. The UK certificated "B" series aircraft can be considered to be the US approved type certificated "A" series with exceptions. The UK approved "B" series are eligible to receive FAA airworthiness certificates and registration for operation in the United States as a US approved "B" series when modified to comply with US standards (i.e. the modification eliminates the exception; see NOTE 50) and when all Airworthiness Directives applicable to the equivalent "A" series have been incorporated.

The box in the upper right corner of page 1 identifies the FAA Approved Series and Models. The FAA has accepted the responsibility for the promulgation to International Civil Aviation Organization (ICAO) Contracting States of airworthiness information for all such products in accordance with Annex 8. The Type Certificate Holder designated in this data sheet holds Type Design authority for the production of data associated with all such products.

**I. Hawker Siddeley Model DH.125 Series 1A (Transport Aircraft), Approved September 25, 1964 (See NOTE 14)**  
**Hawker Siddeley Model HS.125 Series 1B (Transport Aircraft), Approved May 28, 1999 (See NOTES 14 & 52)**

<u>Engines</u>	2 Bristol Siddeley Viper 521 turbine engines.	
<u>Fuel</u>	Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22 Type 2, ASTM D.1655 Jet B. (See NOTE 4).	
<u>Engine Limits</u>	Take-off static thrust, standard day, sea level conditions (unrestricted) lbs.	3,120
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,120
	Maximum permissible engine rotor operating speed	100% (13,760 r.p.m.)
	Maximum permissible turbine outlet gas temperature:	
	Take-off (unrestricted)	695°C
	Maximum continuous	695°C
	Maximum for acceleration	695°C
	Starting maximum gas temperature	800°C
	Maximum permissible oil inlet temperature:	
	Continuous operation (See NOTE 13)	125°C
	Maximum permissible air bleed extraction of primary engine airflow	7.5%
<u>Airspeed Limits (IAS)</u>	V <sub>MO</sub> (Maximum operating) from sea level to 26,800 feet	290 knots
	M <sub>MO</sub> (Maximum operating) 26,800 ft. and above	0.735 M
	V <sub>A</sub> (Maneuvering)	
	Sea level	181 knots
	10,000 ft.	182 knots
	20,000 ft.	183 knots
	30,000 ft.	195 knots
	40,000 ft.	212 knots
	Straight line variation between points shown.	

**I. Model DH.125 Series 1A, Model HS.125 Series 1B** (cont'd)

V <sub>FE</sub> (Flap speeds)	
<u>Deflection</u>	
15°	210 knots
25°	160 knots
50° or 45° (See NOTE 23)	145 knots

V <sub>LO</sub> (Landing gear operation)	
Retract	210 knots
Extend	210 knots

V <sub>LE</sub> (Landing gear extended)	210 knots
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V <sub>MC</sub> (Minimum control speed)	
V <sub>MCA</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	93 knots
V <sub>MCG</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	94 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage lower skin immediately aft of the equipment bay access hatch.

Standard Mean Chord (SMC)

90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

C.G. Range

(Gear and Flaps Retracted)

Wt. Lbs.	<u>Fwd of Datum</u>				<u>Aft of Datum</u>			
	<u>In-Flight</u>		<u>T.O. &amp; Land</u>		<u>Autopilot disengaged</u>		<u>Autopilot engaged</u>	
	% SMC	In.	% SMC	In.	% SMC	In.	% SMC	In.
21,200	22.40	0.55	23.60	(0.54)*	33.80	9.80	32.60	8.70
20,550	-	-	-	-	34.30	10.20	33.00	9.00
19,000	-	-	-	-	34.10	9.95	32.80	8.82
17,800	18.80	3.78	20.20	2.52	-	-	-	-
16,800	-	-	-	-	33.10	9.10	-	-
16,600	-	-	-	-	-	-	31.60	7.80
13,000	18.00	4.51	20.00	2.71	-	-	-	-
12,350	-	-	-	-	37.50	13.10	35.50	11.30
12,100	18.00	4.51	20.00	2.71	-	-	-	-
10,800	-	-	26.00	(2.71)*	37.50	13.10	35.50	11.30

\*(Aft of Datum)

Straight line variation between weights

<u>Item (Extending)</u>	<u>Moment Change In Lbs.</u>
Wing Flaps 15°	+ 538
25°	+ 879
50° or 45° (See NOTE 23)	+1,593

Main Landing Gear	-1,800
Nose Landing Gear	+1,380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum Ramp Weight	21,200 lbs. (See NOTE 12)
Maximum Brake release weight	21,200 lbs.
Maximum Landing Weight	19,550 lbs.
Maximum Zero Fuel Weight	13,000 lbs. (See NOTE 12)

**I. Model DH.125 Series 1A, Model HS.125 Series 1B** (cont'd)

Minimum Crew For all flights, 2 pilots

Maximum Passengers 8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

<u>Maximum Baggage</u>	Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
	Forward			
	6 seater	205 to 260	60	210
	8 seater	205 to 250	60	160
	Forward cabin			
	(a) Side floor	260 to 303.85	50	
	(b) Center floor	260 to 303.85	60	
	Aft cabin			
	(a) Side floor	303.85 to 395	50	
	(b) Center floor	303.85 to 395	60	
	Aft	395 to 425	60	130

<u>Fuel Capacity</u>	Usable Fuel		
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	615.0	4,100	5.70
Tank 2	615.0	4,100	5.70
Engines and lines	1.5	10	81.00
Total	1,231.5	8210	5.79

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.			
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1	1.87	14	82	1153
No. 2	1.87	14	82	1153
Total	3.74	28	82	2306

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible 25013, 25014, 25016 through 25023, 25025 through 25039, 25042, 25043, 25046, 25047, 25051, 25052, 25053, 25057, 25058, 25060, 25063 through 25068, 25070, 25073 through 25075, 25078 through 25080, 25082 through 25110

**II. Hawker Siddeley Model DH.125 Series 1A-522 (Transport Aircraft), Approved February 3, 1966 (See NOTE 14)**  
**Hawker Siddeley Model HS.125 Series 1B-522 (Transport Aircraft), Approved May 28, 1999 (See NOTES 14 & 52)**  
 (The DH.125 Series 1A-522 and HS.125 Series 1B-522 aircraft differs from the DH.125 Series 1A and the HS.125 Series 1B aircraft, respectfully, in the following major features: (i) Introduction of Bristol Siddeley Viper 522 engines (ii) values of  $M_{MO}$  increased and  $V_{MO}$  decreased.)

Engines 2 Bristol Siddeley Viper 522 turbine engines.

Fuel Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22 Type 2, ASTM D.1655 Jet B. (See NOTE 4).

**II. Model DH.125 Series 1A-522, Model HS.125 Series 1B-522** (cont'd)

<u>Engine Limits</u>	Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lbs.	3,330	
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,100	
	Maximum permissible engine rotor Operating speed (5 minutes maximum)	100% (13,760 r.p.m.)	
	Maximum permissible turbine outlet gas temperature: (See NOTE 7)		
	Take-off (5 minutes maximum)	730°C	
	Maximum continuous	705°C	
	Maximum for acceleration	705°C	
	Starting maximum gas temperature	800°C	
	Maximum permissible oil inlet temperature:		
	Continuous operation (See NOTE 13)	125°C	
	Maximum permissible air bleed extraction of primary engine airflow	7.5%	
	<u>Airspeed Limits</u> (IAS)	V <sub>MO</sub> (Maximum operating) from sea level to 27,800 feet	285 knots
		M <sub>MO</sub> (Maximum operating) 27,800 ft. and above	0.750 M
V <sub>A</sub> (Maneuvering)			
Sea level		181 knots	
10,000 ft.		182 knots	
20,000 ft.		183 knots	
30,000 ft.		195 knots	
40,000 ft.		212 knots	
Straight line variation between points shown.			
V <sub>FE</sub> (Flap speeds)			
<u>Deflection</u>			
15°		210 knots	
25°		160 knots	
50° or 45° (See NOTE 23)		145 knots	
V <sub>LO</sub> (Landing gear operation)			
Retract		210 knots	
Extend		210 knots	
V <sub>LE</sub> (Landing gear extended)	210 knots		
V <sub>MC</sub> (Minimum control speed)			
V <sub>MCA</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	93 knots		
V <sub>MCG</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	84 knots		
<u>Datum</u>	The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage lower skin immediately aft of the equipment bay access hatch.		
<u>Standard Mean Chord</u> (SMC)	90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).		

**II. Model DH.125 Series 1A-522, Model HS.125 Series 1B-522** (cont'd)C.G. Range

(Gear and Flaps Retracted)

Wt. Lbs.	Fwd of Datum				Aft of Datum			
	<u>In-Flight</u>		<u>T.O. &amp; Land</u>		<u>Autopilot disengaged</u>		<u>Autopilot engaged</u>	
	% SMC	In.	% SMC	In.	% SMC	In.	% SMC	In.
21,200	22.40	0.55	23.60	(0.54)*	33.80	9.80	32.60	8.70
20,550	-	-	-	-	34.30	10.20	33.00	9.00
19,000	-	-	-	-	34.10	9.95	32.80	8.82
17,800	18.80	3.78	20.20	2.52	-	-	-	-
16,800	-	-	-	-	33.10	9.10	-	-
16,600	-	-	-	-	-	-	31.60	7.80
13,000	18.00	4.51	20.00	2.71	-	-	-	-
12,350	-	-	-	-	37.50	13.10	35.50	11.30
12,100	18.00	4.51	20.00	2.71	-	-	-	-
10,800	-	-	26.00	(2.71)*	37.50	13.10	35.50	11.30

\*(Aft of Datum)

Straight line variation between weights

Item (Extending)Moment Change In. lbs.

Wing Flaps 15 <sup>o</sup>	+ 538
25 <sup>o</sup>	+ 879
50 <sup>o</sup> or 45 <sup>o</sup> (See NOTE 23)	+1,593
Main Landing Gear	-1,800
Nose Landing Gear	+1,380

The airplane is normally weighed with wing flaps retracted

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum Ramp Weight	21,200 lbs. (See NOTE 12)
Maximum Brake release weight	21,200 lbs.
Maximum Landing Weight	19,550 lbs.
Maximum Zero Fuel Weight	13,000 lbs. (See NOTE 12)

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

8 – For approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance manual.

Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Forward cabin			
(a) Side floor	260 to 303.85	50	
(b) Center floor	260 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395	50	
(b) Center floor	303.85 to 395	60	
Aft	395 to 425	60	130

Fuel CapacityUsable Fuel

Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	615.0	4,100	5.70
Tank 2	615.0	4,100	5.70
Engines and lines	1.5	10	81.00
Total	1,231.5	8,210	5.79

**II. Model DH.125 Series 1A-522, Model HS.125 Series 1B-522** (cont'd)

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.				
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1		1.87	14	82	1153
No. 2		1.87	14	82	1153
Total		3.74	28	82	2306

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Models DH.125 Series 1A and the HS.125 Series 1B

**III. Hawker Siddeley Model DH.125 Series 3A (Transport Aircraft), Approved November 7, 1966.****Hawker Siddeley Model HS.125 Series 3B (Transport Aircraft), Approved May 28, 1999. (See NOTE 52)**

(The DH.125 Series 3A aircraft and the HS.125 Series 3B aircraft differs respectively from the DH.125 Series 1A-522 aircraft and the HS.125 Series 1B-522 aircraft in the following major features: (i) increased maximum ramp, brake release, landing and zero fuel weights. (ii) increased Mmo. (iii) Vmo - 285 knots reducing linearly to 273 knots between 27,200 feet and 30,800 feet).

Engines 2 Bristol Siddeley Viper 522 turbine engines.

Fuel Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22f Type 2, ASTM D.1655 Jet B. (See NOTE 4).

Engine Limits

Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lbs.	3,330
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,100
Maximum permissible engine rotor	100%
Operating speed (5 minutes maximum)	(13,760 r.p.m.)
Maximum permissible turbine outlet gas temperature: (See NOTE 7)	
Take-off (5 minutes maximum)	730°C
Maximum continuous	705°C
Maximum for acceleration	705°C
Starting maximum gas temperature	800°C
Maximum permissible oil inlet temperature:	
Continuous operation (See NOTE 13)	125°C
Maximum permissible air bleed extraction of primary engine airflow	7.5%

Airspeed Limits (IAS)

V <sub>MO</sub> (Maximum operating)	
from sea level to 27,200 feet and	285 knots
decreasing linearly to 273 knots at 30,800 feet	
M <sub>MO</sub> (Maximum operating)	
30,800 ft. and above (See NOTE 15)	0.765 M
V <sub>A</sub> (Maneuvering)	
Sea level	185 knots
10,000 ft.	185 knots
20,000 ft.	185 knots
30,000 ft.	195 knots
40,000 ft.	210 knots
Straight line variation between points shown.	

**III. Model DH.125 Series 3A, Model HS.125 Series 3B** (cont'd)

<u>Airspeed Limits</u> (IAS) (cont.)	V <sub>FE</sub> (Flap speeds)	
	<u>Deflection</u>	
	15°	210 knots
	25°	160 knots
	50° or 45° (See NOTE 23)	145 knots
	V <sub>LO</sub> (Landing gear operation)	
	Retract	210 knots
	Extend	210 knots
	V <sub>LE</sub> (Landing gear extended)	210 knots
	V <sub>MC</sub> (Minimum control speed)	
	V <sub>MCA</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	93 knots
	V <sub>MCG</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	84 knots

Datum The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage lower skin immediately aft of the equipment bay access hatch.

Standard Mean Chord (SMC) 90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

<u>C.G. Range</u> (Gear and Flaps Retracted)	<u>Fwd of Datum</u>				<u>Aft of Datum</u>				
	<u>In-Flight</u>		<u>T.O. &amp; Land</u>		<u>Autopilot disengaged</u>		<u>Autopilot engaged</u>		
	Wt. Lbs.	% SMC	In.	% SMC	In.	% SMC	In.	% SMC	In.
	21,700	23.64	(0.57)*	24.87	(1.68)*	33.67	9.62	32.44	8.51
	21,200	22.40	0.55	23.60	(0.54)*	-	-	-	-
	20,550	-	-	-	-	34.30	10.20	33.00	9.00
	19,000	-	-	-	-	34.10	9.95	32.80	8.82
	17,800	18.80	3.78	20.20	2.52	-	-	-	-
	16,800	-	-	-	-	33.10	9.10	-	-
	16,600	-	-	-	-	-	-	31.60	7.80
	13,000	18.00	4.51	20.00	2.71	-	-	-	-
	12,350	-	-	-	-	37.50	13.10	35.50	11.30
	12,100	18.00	4.51	20.00	2.71	-	-	-	-
	10,800	-	-	26.00	(2.71)*	37.50	13.10	35.50	11.30

\*(Aft of Datum)

Straight line variation between weights

<u>Item (Extending)</u>	<u>Moment Change In.Lbs.</u>
Wing Flaps 15°	+ 538
25°	+ 879
50° or 45° (See NOTE 23)	+1,593
Main Landing Gear	-1,800
Nose Landing Gear	+1,380

The airplane is normally weighed with wing flaps retracted.

Leveling Means Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

<u>Maximum Weights</u>	Maximum Ramp Weight	21,700 lbs. (See NOTE 12)
	Maximum Brake Release Weight	21,700 lbs.
	Maximum Landing Weight	20,000 lbs.
	Maximum Zero Fuel Weight	13,500 lbs. (See NOTE 12)

**III. Model DH.125 Series 3A, Model HS.125 Series 3B** (cont'd)

<u>Minimum Crew</u>	For all flights, 2 pilots
<u>Maximum Passengers</u>	8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

<u>Maximum Baggage</u>	Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
	Forward			
	6 seater	205 to 260	60	210
	8 seater	205 to 250	60	160
	Forward cabin			
	(a) Side floor	260 to 303.85	50	
	(b) Center floor	260 to 303.85	60	
	Aft cabin			
	(a) Side floor	303.85 to 395	50	
	(b) Center floor	303.85 to 395	60	
	Aft	395 to 425	60	130

<u>Fuel Capacity</u>	Usable Fuel		
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	615.0	4,100	5.70
Tank 2	615.0	4,100	5.70
Engines and Lines	1.5	10	81.00
Total	1,231.5	8,210	5.79

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.				
Location	Volume U.S. Gal.	Maximum Weight Lb.	Arm In.	Moment In. Lbs.	
No. 1	1.87	14	82	1153	
No. 2	1.87	14	82	1153	
Total	3.74	28	82	2306	

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible 25015, 25062, 25069, 25111 through 25172

**IV. Hawker Siddeley Model DH.125 Series 1A/R-522 (Transport Aircraft), Approved August 9, 1967**  
**Hawker Siddeley Model HS.125 Series 1B/R-522 (Transport Aircraft), Approved May 28, 1999 (See NOTE 52)**  
 (The DH.125 Series 1A/R-522 aircraft and the HS.125 Series 1B/R-522 aircraft differs respectively from the DH.125 Series 1A-522 aircraft and the HS.125 Series 1B-522 by the incorporation of Modifications No. 251700 and 255640, long-range fuel tank, modified flaps and main landing gear doors.) (See NOTE 10).

Engines 2 Bristol Siddeley Viper 522 turbine engines.

Fuel Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22f Type 2, ASTM D.1655 Jet B. (See NOTE 4).

Engine Limits

Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lbs.	3,330
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,100
Maximum permissible engine rotor	100%
Operating speed (5 minutes maximum)	(13,760 r.p.m.)

**IV. Model DH.125 Series 1A/R-522, Model HS.125 Series 1B/R-522** (cont'd)Engine Limits (cont'd)

Maximum permissible turbine outlet gas temperature: (See NOTE 7)	
Take-off (5 minutes maximum)	730°C
Maximum continuous	705°C
Maximum for acceleration	705°C
Starting maximum gas temperature	800°C

Maximum permissible oil inlet temperature:

Continuous operation (See NOTE 13) 125°C

Maximum permissible air bleed extraction of primary engine airflow 7.5%

Airspeed Limits (IAS)

$V_{MO}$ (Maximum operating)	
from sea level to 27,800 feet with fuel in long range tank	260 knots
from sea level to 27,800 feet with long range tank empty	285 knots

$M_{MO}$ (Maximum operating)	
27,800 ft. and above	0.750 M

$V_A$ (Maneuvering)	
Sea level	189 knots
10,000 ft.	190 knots
20,000 ft.	196 knots
30,000 ft.	202 knots
35,000 ft.	207 knots
40,000 ft.	201 knots

Straight line variation between points shown.

$V_{FE}$  (Flap speeds)

Deflection

15°	210 knots
25°	160 knots
50° or 45° (See NOTE 23)	145 knots

$V_{LO}$  (Landing gear operation)

Retract	210 knots
Extend	210 knots

$V_{LE}$  (Landing gear extended) 210 knots

$V_{MC}$  (Minimum control speed)

$V_{MCA}$  (with flaps at 0° or 15° at sea level for temperatures below 10°C) 93 knots

$V_{MCG}$  (with flaps at 0° or 15° at sea level for temperatures below 10°C) 84 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage lower skin immediately aft of the equipment bay access hatch.

Standard Mean Chord (SMC)

90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

**IV. Model DH.125 Series 1A/R-522, Model HS.125 Series 1B/R-522** (cont'd)

<u>C.G. Range</u> (Gear and Flaps Retracted)	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>		
	<u>Wt. lbs.</u>	<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
22,200	29.53		(5.89)*	37.87	13.41
22,100	-		-	38.00	13.53
21,400	25.53		(2.28)*	-	-
19,200	-		-	37.93	13.47
18,840	-		-	34.00	9.92
17,750	22.60		0.37	-	-
17,400	-		-	33.47	9.44
13,200	23.00		0.00	-	-
13,000	-		-	37.53	13.11
12,000	23.00		0.00	-	-
11,000	28.00		(4.51)*	37.53	13.11

\*(Aft of Datum)

Straight line variation between weights.

<u>Item (Extending)</u>	<u>Moment Change In. Lbs.</u>
Wing Flaps 15°	+ 538
25°	+ 879
50° or 45° (See NOTE 23)	+1,593
Main Landing Gear	-1,800
Nose Landing Gear	+1,380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum Ramp Weight	22,300 lbs.
Maximum Brake Release Weight	22,200 lbs.
Maximum Landing Weight	19,550 lbs.
Maximum Zero Fuel Weight	13,200 lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

Maximum Baggage

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft<sup>2</sup></u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Forward cabin			
(a) Side floor	260 to 303.85	50	
(b) Center floor	260 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395	50	
(b) Center floor	303.85 to 395	60	
Aft	395 to 425	60	130

Fuel Capacity

<u>Usable Fuel</u>			
<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lbs.</u>	<u>Arm In.</u>
Tank 1	615.0	4,100	5.70
Tank 2	615.0	4,100	5.70
Engines and lines	1.5	10	81.00
Long Range Tank	134.5	896	88.70
Total	1,366.0	9,106	13.95

**IV. Model DH.125 Series 1A/R-522, Model HS.125 Series 1B/R-522** (cont'd)

<u>Oil Capacity</u>				
Engine Tank Oil is the oil that is required for circulation in the system.				
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1	1.87	14	82	1153
No. 2	1.87	14	82	1153
Total	3.74	28	82	2306

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Models DH.125 Series 1A and the HS.125 Series 1B

**V. Hawker Siddeley Model DH.125 Series 3A/R (Transport Aircraft), Approved August 9, 1967**  
**Hawker Siddeley Model HS.125 Series 3B/R (Transport Aircraft), Approved May 28, 1999 (See NOTE 52)**  
 (The DH.125 Series 3A/R aircraft and the HS.125 Series 3B/R aircraft differs respectively from the DH.125 Series 3A aircraft and the HS.125 Series 3B by the incorporation of Modifications No. 251700 and 255640, long-range fuel tank, modified flaps and main landing gear doors). (See NOTE 10)

<u>Engines</u>	2 Bristol Siddeley Viper 522 turbine engines.			
<u>Fuel</u>	Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22f Type 2, ASTM D.1655 Jet B. (See NOTE 4).			
<u>Engine Limits</u>	Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lbs.			3,330
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.			3,100
	Maximum permissible engine rotor			100%
	Operating speed (5 minutes maximum)			(13,760 r.p.m.)
	Maximum permissible turbine outlet gas temperature: (See NOTE 7)			
	Take-off (5 minutes maximum)			730°C
	Maximum continuous			705°C
	Maximum for acceleration			705°C
	Starting maximum gas temperature			800°C
	Maximum permissible oil inlet temperature:			
	Continuous operation (See NOTE 13)			125°C
	Maximum permissible air bleed extraction of primary engine airflow			7.5%
<u>Airspeed Limits (IAS)</u>	V <sub>MO</sub> (Maximum operating)			
	from sea level to 30,800 feet with fuel in long range tank			260 knots
	from sea level to 27,200 feet with long range tank empty			285 knots
	decreasing linearly to 273 knots at 30,800 feet.			
	M <sub>MO</sub> (Maximum operating)			
	30,800 ft. and above			0.765 M
	V <sub>A</sub> (Maneuvering)			
	Sea level			190 knots
	10,000 ft.			191 knots
	20,000 ft.			197 knots
	30,000 ft.			203 knots
	35,000 ft.			208 knots
	40,000 ft.			201 knots
	Straight line variation between points shown.			

**V. Model DH.125 Series 3A/R, Model HS.125 Series 3B/R** (cont'd)Airspeed Limits (IAS) (cont.)

$V_{FE}$ (Flap speeds)		
<u>Deflection</u>		
15 <sup>0</sup>		210 knots
25 <sup>0</sup>		160 knots
50 <sup>0</sup> or 45 <sup>0</sup> (See NOTE 23)		145 knots
$V_{LO}$ (Landing gear operation)		
Retract		210 knots
Extend		210 knots
$V_{LE}$ (Landing gear extended)		210 knots
$V_{MC}$ (Minimum control speed)		
$V_{MCA}$ (with flaps at 0 <sup>0</sup> or 15 <sup>0</sup> at sea level for temperatures below 10 <sup>0</sup> C)		93 knots
$V_{MCG}$ (with flaps at 0 <sup>0</sup> or 15 <sup>0</sup> at sea level for temperatures below 10 <sup>0</sup> C)		84 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

C.G. Range

(Gear and Flaps Retracted)

Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
22,700	30.53	(6.79)*	37.20	12.81
22,150	-	-	38.00	13.53
21,700	25.80	(2.52)*	-	-
19,200	-	-	37.93	13.47
18,850	-	-	34.00	9.92
17,750	22.47	0.48	-	-
17,400	-	-	33.47	9.44
13,000	23.00	0.00	37.53	13.11
12,000	23.00	0.00	-	-
11,000	28.00	(4.51)*	37.53	13.11

\*(Aft of Datum)

Straight line variation between weights.

<u>Item (Extending)</u>	<u>Moment Change In. Lbs.</u>	
Wing Flaps	15 <sup>0</sup>	+ 538
	25 <sup>0</sup>	+ 879
	50 <sup>0</sup> or 45 <sup>0</sup> (See NOTE 23)	+1,593
Main Landing Gear		-1,800
Nose Landing Gear		+1,380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum Ramp Weight	22,800 lbs.
Maximum Brake Release Weight	22,700 lbs.
Maximum Landing Weight	20,000 lbs.
Maximum Zero Fuel Weight	13,700 lbs.

**V. Model DH.125 Series 3A/R, Model HS.125 Series 3B/R** (cont'd)

Minimum Crew For all flights, 2 pilots

Maximum Passengers 8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

<u>Maximum Baggage</u>	Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
	Forward			
	6 seater	205 to 260	60	210
	8 seater	205 to 250	60	160
	Forward cabin			
	(a) Side floor	260 to 303.85	50	
	(b) Center floor	260 to 303.85	60	
	Aft cabin			
	(a) Side floor	303.85 to 395	50	
	(b) Center floor	303.85 to 395	60	
	Aft	395 to 425	60	130

<u>Fuel Capacity</u>	Usable Fuel			
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
	Tank 1	615.0	4,100	5.70
	Tank 2	615.0	4,100	5.70
	Engines and lines	1.5	10	81.00
	Long Range Tank	134.5	896	88.70
	Total	1,366.0	9,106	13.95

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.				
	Location	Volume U.S. Gal	Maximum Weight Lb.	Arm In.	Moment In. Lbs.
	No. 1	1.87	14	82	1153
	No. 2	1.87	14	82	1153
	Total	3.74	28	82	2306

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Models DH.125 Series 3A and the HS.125 Series 3B

**VI. Hawker Siddeley Model DH.125 Series 1A/S-522 (Transport Aircraft), Approved February 15, 1968**  
**Hawker Siddeley Model HS.125 Series 1B/S-522 (Transport Aircraft), Approved May 28, 1999 (See NOTE 52)**

(The DH.125 Series 1A/S-522 aircraft and the HS.125 Series 1B/S-522 aircraft differs respectively from the DH.125 Series 1A-522 aircraft and the HS.125 Series 1B-522 aircraft by the incorporation of Modification No. 251867 which introduces structural additions enabling the aircraft to be operated to the same limitations as the DH.125 Series 3A or the HS.125 Series 3B aircraft respectively except for the maximum landing weight which remains at 19,550 lbs., and maximum operating altitude). (See NOTE 11).

Engines 2 Bristol Siddeley Viper 522 turbine engines.

Fuel Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22f Type 2, ASTM D.1655 Jet B. (See NOTE 4).

**VI. Model DH.125 Series 1A/S-522, Model HS.125 Series 1B/S-522** (cont'd)

<u>Engine Limits</u>	Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lbs.	3,330	
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,100	
	Maximum permissible engine rotor Operating speed (5 minutes maximum)	100% (13,760 r.p.m.)	
	Maximum permissible turbine outlet gas temperature: (See NOTE 7)		
	Take-off (5 minutes maximum)	730°C	
	Maximum continuous	705°C	
	Maximum for acceleration	705°C	
	Starting maximum gas temperature	800°C	
	Maximum permissible oil inlet temperature:		
	Continuous operation (See NOTE 13)	125°C	
	Maximum permissible air bleed extraction of primary engine airflow	7.5%	
	<u>Airspeed Limits</u> (IAS)	V <sub>MO</sub> (Maximum operating) from sea level to 27,200 feet and decreasing linearly to 273 knots at 30,800 feet	285 knots
		M <sub>MO</sub> (Maximum operating) 30,800 ft. and above (See NOTE 15)	0.765 M
V <sub>A</sub> (Maneuvering)			
Sea level		185 knots	
10,000 ft.		185 knots	
20,000 ft.		185 knots	
30,000 ft.		195 knots	
40,000 ft.		210 knots	
Straight line variation between points shown.			
V <sub>FE</sub> (Flap speeds)			
<u>Deflection</u>			
15°		210 knots	
25°		160 knots	
50° or 45° (See NOTE 23)		145 knots	
V <sub>LO</sub> (Landing gear operation)			
Retract		210 knots	
Extend		210 knots	
V <sub>LE</sub> (Landing gear extended)	210 knots		
V <sub>MC</sub> (Minimum control speed)			
V <sub>MCA</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	93 knots		
V <sub>MCG</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	84 knots		
<u>Datum</u>	The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage lower skin immediately aft of the equipment bay access hatch.		
<u>Standard Mean Chord</u> (SMC)	90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).		

**VI. Model DH.125 Series 1A/S-522, Model HS.125 Series 1B/S-522** (cont'd)C.G. Range

(Gear and Flaps Retracted)

Wt. Lbs.	Fwd of Datum				Aft of Datum			
	<u>In-Flight</u>		<u>T.O. &amp; Land</u>		<u>Autopilot disengaged</u>		<u>Autopilot engaged</u>	
	% SMC	In.	% SMC	In.	% SMC	In.	% SMC	In.
21,700	23.64	(0.57)*	24.87	(1.68)*	33.67	9.62	32.44	8.51
21,200	22.40	0.55	23.60	(0.54)*	-	-	-	-
20,550	-	-	-	-	34.30	10.20	33.00	9.00
19,000	-	-	-	-	34.10	9.95	32.80	8.82
17,800	18.80	3.78	20.20	2.52	-	-	-	-
16,800	-	-	-	-	33.10	9.10	-	-
16,600	-	-	-	-	-	-	31.60	7.80
13,000	18.00	4.51	20.00	2.71	-	-	-	-
12,350	-	-	-	-	37.50	13.10	35.50	11.30
12,100	18.00	4.51	20.00	2.71	-	-	-	-
10,800	-	-	26.00	(2.71)*	37.50	13.10	35.50	11.30

\*(Aft of Datum)

Straight line variation between weights

Item (Extending)Moment Change In. Lbs.

Wing Flaps	15°	+ 538
	25°	+ 879
	50° or 45° (See NOTE 23)	+1,593
Main Landing Gear		-1,800
Nose Landing Gear		+1,380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum Ramp Weight	21,700 lbs. (See NOTE 12)
Maximum Brake Release Weight	21,700 lbs.
Maximum Landing Weight	19,550 lbs.
Maximum Zero Fuel Weight	13,500 lbs. (See NOTE 12)

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Forward cabin			
(a) Side floor	260 to 303.85	50	
(b) Center floor	260 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395	50	
(b) Center floor	303.85 to 395	60	
Aft	395 to 425	60	130

**VI. Model DH.125 Series 1A/S-522, Model HS.125 Series 1B/S-522** (cont'd)

<u>Fuel Capacity</u>	Usable Fuel			
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm. In.
	Tank 1	615.0	4,100	5.70
	Tank 2	615.0	4,100	5.70
	Engines and lines	1.5	10	81.00
	Total	1,231.5	8,210	5.79

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.				
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
	No. 1	1.87	14	82	1153
	No. 2	1.87	14	82	1153
	Total	3.74	28	82	2306

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Models DH.125 Series 1A and the HS.125 Series 1B

**VII. Hawker Siddeley Model DH.125 Series 3A/RA (Transport Aircraft), Approved February 15, 1968 (See NOTE 46)**  
**Hawker Siddeley Model HS.125 Series 3B/RA (Transport Aircraft), Approved May 28, 1999 (See NOTES 46 & 52)**  
 The DH.125 Series 3A/RA aircraft and the HS.125 Series 3B/RA aircraft differs respectively from the DH.125 Series 3A/R aircraft and the HS.125 Series 3B/R by (i) incorporation of Modification No. 251916 which introduces structural additions to permit a maximum zero fuel weight of 14,200 lbs., (ii) a maximum ramp weight of 23,100 lbs. (See NOTE 11)

**Hawker Siddeley Model HS.125 Series 3B/RB (Transport Aircraft), Approved May 28, 1999. (See NOTE 52)**  
 The DH.125 Series 3B/RB aircraft differs respectively from the DH.125 Series 3B/RA aircraft by incorporation of Modification No. 252024 which increases the maximum ramp weight and the maximum take off weight.

**Hawker Siddeley Model HS.125 Series 3B/RC (Transport Aircraft), Approved May 28, 1999. (See NOTE 52)**  
 The DH.125 Series 3B/RC aircraft differs respectively from the DH.125 Series 3B/RA aircraft by incorporation of modifications to enable it to be used for checking navigational aids by (i) installation of a special four seat cabin configuration and (ii) installation of special Avionics and Flight Inspection equipment.

Engines 2 Bristol Siddeley Viper 522 turbine engines.

Fuel Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22f Type 2, ASTM D.1655 Jet B. (See NOTE 4).

Engine Limits

Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lbs.	3,330
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,100
Maximum permissible engine rotor	100%
Operating speed (5 minutes maximum)	(13,760 r.p.m.)
Maximum permissible turbine outlet gas temperature: (See NOTE 7)	
Take-off (5 minutes maximum)	730°C
Maximum continuous	705°C
Maximum for acceleration	705°C
Starting maximum gas temperature	800°C
Maximum permissible oil inlet temperature:	
Continuous operation (See NOTE 13)	125°C
Maximum permissible air bleed extraction of primary engine airflow	7.5%

**VII. Model DH.125 Series 3A/RA, Model HS.125 Series 3B/RA, Model HS.125 Series 3B/RB, Model HS.125 Series 3B/RC** (cont'd)

<u>Airspeed Limits</u> (IAS)	$V_{MO}$ (Maximum operating)	
	from sea level to 30,800 feet with fuel in long range tank	260 knots
	from sea level to 27,200 feet with long range tank empty	285 knots
	decreasing linearly to 273 knots at 30,800 feet.	
	$V_{MO}$ (Maximum operating) (with Mod. 25A767A)	
	from sea level to 30,800 feet with fuel in long range tank	255 knots
	from sea level to 27,500 feet with long range tank empty	281 knots
	decreasing linearly to 265 knots at 31,980 feet.	
	$M_{MO}$ (Maximum operating)	
	30,800 ft. and above	0.765 M
$M_{MO}$ (Maximum operating) (3B/RB only)	30,800 ft. and above	0.755 M
	$V_A$ (Maneuvering)	
	Sea level	190 knots
	10,000 ft.	191 knots
	20,000 ft.	197 knots
	30,000 ft.	203 knots
	35,000 ft.	208 knots
	40,000 ft.	201 knots
	Straight line variation between points shown.	
$V_{FE}$ (Flap speeds)	<u>Deflection</u>	
	15°	210 knots
	25°	160 knots
	50° or 45° (See NOTE 23)	145 knots
$V_{LO}$ (Landing gear operation)	Retract	210 knots
	Extend	210 knots
	$V_{LE}$ (Landing gear extended)	210 knots
$V_{MC}$ (Minimum control speed)	$V_{MCA}$ (with flaps at 0° or 15° at sea level for temperatures below 10°C)	93 knots
	$V_{MCG}$ (with flaps at 0° or 15° at sea level for temperatures below 10°C)	84 knots
	<u>Datum</u>	The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.
<u>Standard Mean Chord</u> (SMC)	90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).	

**VII. Model DH.125 Series 3A/RA, Model HS.125 Series 3B/RA, Model HS.125 Series 3B/RB,  
Model HS.125 Series 3B/RC (cont'd)**

<u>C.G. Range</u> (Gear and Flaps Retracted)	<u>Fwd. of Datum</u>			<u>Aft of Datum</u>	
	Wt. Lbs.	% SMC	In.	% SMC	In.
22,700	27.20	(3.78)*		38.00	13.53
22,200	25.20	(1.98)*		-	-
19,200	-	-		38.00	13.53
18,950	22.47	0.48		-	-
18,850	-	-		34.00	9.92
18,400	-	-		33.80	9.74
14,200	23.00	0.00		37.53	13.11
12,000	23.00	0.00		-	-
11,000	28.00	(4.51)*		37.53	13.11

\*(Aft of Datum)

Straight line variation between weights.

<u>C.G. Range</u> (for 3B/RB only) (Gear and Flaps Retracted)	<u>Fwd. of Datum</u>			<u>Aft of Datum</u>	
	Wt. Lbs.	% SMC	In.	% SMC	In.
23,300	29.67	(6.01)*		37.07	12.69
22,400	28.73	(5.17)*		-	-
22,400	26.00	(2.70)*		-	-
22,100	-	-		38.00	13.53
19,200	-	-		38.00	13.53
18,850	-	-		34.00	9.92
18,400	22.47	0.48		-	-
17,450	-	-		33.33	9.32
16,800	22.40	0.55		-	-
14,200	-	-		36.13	9.57
13,000	-	-		37.53	13.11
12,000	23.00	0.00		-	-
11,000	28.00	(4.51)*		37.53	13.11

\*(Aft of Datum)

Straight line variation between weights.

<u>Item (Extending)</u>	<u>Moment Change In.Lbs.</u>
Wing Flaps 15 <sup>0</sup>	+538
25 <sup>0</sup>	+879
50 <sup>0</sup> or 45 <sup>0</sup> (See NOTE 23)	+1,593
Main Landing Gear	-1,800
Nose Landing Gear	+1,380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum Ramp Weight	23,100 lbs.	(3B/RB only) 23,300 Lbs.
Maximum Brake-Release Weight	22,700 lbs.	23,300 Lbs.
Maximum Landing Weight	20,000 lbs.	20,000 Lbs.
Maximum Zero Fuel Weight	14,200 lbs.*	14,200 Lbs.
* (See NOTE 46)		

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

**VII. Model DH.125 Series 3A/RA, Model HS.125 Series 3B/RA, Model HS.125 Series 3B/RB, Model HS.125 Series 3B/RC (cont'd)**

<u>Maximum Baggage</u>	Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
	Forward			
	6 seater	205 to 260	60	210
	8 seater	205 to 250	60	160
	Forward cabin			
	(a) Side floor	260 to 303.85	50	
	(b) Center floor	260 to 303.85	60	
	Aft cabin			
	(a) Side floor	303.85 to 395	50	
	(b) Center floor	303.85 to 395	60	
	Aft	395 to 425	60	130

<u>Fuel Capacity</u>	Usable Fuel		
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	615.0	4,100	5.70
Tank 2	615.0	4,100	5.70
Engines and lines	1.5	10	81.00
Ventral tank	134.5	896	88.70
Total	1,366.0	9,106	13.95

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.			
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1	1.87	14	82	1153
No. 2	1.87	14	82	1153
Total	3.74	28	82	2306

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Models DH.125 Series 3A/R and HS.125 Series 3B/R. (See NOTE 61)

**VIII. Hawker Siddeley Model DH.125 Series 400A (Transport Aircraft), Approved November 15, 1968 (See NOTE 16) Hawker Siddeley Model HS.125 Series 400B (Transport Aircraft), Approved May 28, 1999 (See NOTES 16 & 53)**  
 (The DH.125 Series 400A aircraft and the HS.125 Series 400B aircraft differs respectively from the DH.125 Series 3A/RA aircraft and the HS.125 Series 3B/RA aircraft in the following major features: (i) increased maximum ramp and brake-release weights; (ii) introduction of an outward-opening main entry door)

**Beechcraft Hawker Model BH.125 Series 400A (Transport Aircraft), Approved 14 July 1970 (See NOTE 16)**  
 (The Hawker Siddeley Model DH.125 Series 400A is, from aircraft Serial Number 25230 and subsequent, identified as the Beechcraft Hawker Model BH.125 Series 400A. The BH.125 Series 400A is, in all respects, identical to the DH.125 Series 400A except that the aircraft data plate, the control column central motif and the external nameplate on the fuselage nose have been altered to incorporate the revised identification.)

**Hawker Siddeley Model HS.125 Series 400B/1 (Transport Aircraft), Approved May 28, 1999 (See NOTES 16 & 53)**  
 (The HS.125 Series 400B/1 aircraft were originally manufactured as a HS.125 Series 400A aircraft converted to a HS.125 Series 400B aircraft and then reconverted to the equivalent of a HS.125 Series 400A aircraft.)

VIII. **Model DH.125 Series 400A, Model HS.125 Series 400B, Model BH.125 Series 400A, Model HS.125 Series 400B/1, Model HS.125 Series 401B, Model HS.125 Series 403B, Model HS.125 Series 403A(C)** (cont'd)

**Hawker Siddeley Model HS.125 Series 401B (Transport Aircraft), Approved May 28, 1999 (See NOTE 53)**

(The HS.125 Series 401B aircraft differs respectively from the HS.125 Series 400B aircraft in the following major features: (i) increased maximum take off weight and zero fuel weight and (ii) cabin loading altered (See NOTE 8).

**Hawker Siddeley Model HS.125 Series 403B (Transport Aircraft), Approved May 28, 1999 (See NOTE 53)**

**Hawker Siddeley Model HS.125 Series 403A(C) (Transport Aircraft), Approved May 28, 1999 (See NOTE 53)**

(The HS.125 Series 403B and the HS.125 Series 403A(C) aircraft differs respectively from the HS.125 Series 400A aircraft in the following major features: (i) increased maximum take off weight, zero fuel weight, and ramp weight and (ii) cabin loading was altered (See NOTE 8). The HS.125 Series 403A(C) aircraft was for Canadian registry.

The following details are applicable to both the Hawker Siddeley Models DH.125 Series 400A, HS.125 Series 400B, Beechcraft Hawker Model BH.125 Series 400A. All other models are the same except as noted. (See NOTE 35)

<u>Engines</u>	2 Bristol Siddeley Viper 522 turbine engines.	
<u>Fuel</u>	Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22 Type 2, ASTM D.1655 Jet B, Mil-t-5624 JP4 Grade. (See NOTE 4).	
<u>Engine Limits</u>	Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lbs.	3,330
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,100
	Maximum permissible engine rotor operating speed (5 minutes maximum)	100% (13,760 r.p.m.)
	Maximum permissible turbine outlet gas temperature: (See NOTE 7)	
	Take-off (5 minutes maximum)	730°C
	Maximum continuous	705°C
	Maximum for acceleration	705°C
	Starting maximum gas temperature	800°C
	Maximum permissible oil inlet temperature:	
	Continuous operation (See NOTE 13)	125°C
	Maximum permissible air bleed extraction of primary engine airflow	7.5%
<u>Airspeed Limits (IAS)</u>	$V_{MO}$ (Maximum operating)	
	from sea level to 30,800 feet with fuel in long range tank	260 knots
	from sea level to 27,200 feet with long range tank empty	285 knots
	decreasing linearly to 273 knots at 30,800 feet.	
	$V_{MO}$ (Maximum operating) (with Mod. 252243C or 256403D, Series 401B, Series 403A(C) or Series 403B)	
	from sea level to 30,800 feet with fuel in long range tank	257 knots
	from sea level to 27,500 feet with long range tank empty	282 knots
	decreasing linearly to 270 knots at 31,350 feet.	
	(See NOTE 16)	
	$M_{MO}$ (maximum operating) (See NOTE 15)	
	30,800 ft. and above	0.765 M
	$M_{MO}$ (maximum operating) (Series 401B and Series 403B)	
	30,800 ft. and above	0.755 M

**VIII. Model DH.125 Series 400A, Model HS.125 Series 400B, Model BH.125 Series 400A, Model HS.125 Series 400B/1, Model HS.125 Series 401B, Model HS.125 Series 403B, Model HS.125 Series 403A(C) (cont'd)**

Airspeed Limits (IAS) (cont'd)

V <sub>A</sub> (Maneuvering)		
Sea level		193 knots
10,000 feet		195 knots
20,000 feet		201 knots
30,000 feet		208 knots
35,000 feet		213 knots
40,000 feet		209 knots
Straight line variation between points shown.		
V <sub>FE</sub> (Flap speeds)		
<u>Deflection</u>		
15°		210 knots
25°		160 knots
50° or 45° (See NOTE 23)		145 knots
V <sub>LO</sub> (Landing gear operation)		
Retract		210 knots
Extend		210 knots
V <sub>LE</sub> (Landing gear extended)		210 knots
V <sub>MC</sub> (Minimum control speed)		
V <sub>MCA</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)		93 knots
V <sub>MCG</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)		84 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

C.G. Range

(Gear and Flaps Retracted)

Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
23,300	29.67	(6.01)*	37.13	12.75
22,400	28.73	(5.17)*	-	-
22,400	26.00	(2.70)*	-	-
22,100	-	-	38.00	13.53
19,200	-	-	38.00	13.53
18,850	-	-	34.00	9.92
18,400	22.45	.50	-	-
17,400	-	-	33.33	9.32
16,800	22.40	.55	-	-
14,200	-	-	36.00	11.73
13,000	-	-	37.53	13.11
12,000	23.00	0.00	-	-
11,000	28.00	(4.51)*	37.53	13.11

\*(Aft of Datum)

Straight line variation between weights.

**VIII. Model DH.125 Series 400A, Model HS.125 Series 400B, Model BH.125 Series 400A, Model HS.125 Series 400B/1, Model HS.125 Series 401B, Model HS.125 Series 403B, Model HS.125 Series 403A(C)** (cont'd)

<u>C.G. Range</u> (with Mod. 252243C) (Gear and Flaps Retracted) (See NOTE 16)	<u>Wt. Lbs.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	23,300	29.40	(5.77)*	37.13	12.75
	22,900	-	-	38.00	13.53
	22,700	29.13	(5.53)*	-	-
	22,700	25.93	(2.64)*	-	-
	19,200	-	-	38.00	13.53
	18,850	-	-	34.00	9.92
	18,400	22.45	0.50	-	-
	17,400	-	-	33.33	9.32
	16,800	22.40	0.55	-	-
	14,200	-	-	36.00	11.73
	13,000	-	-	37.53	13.11
	12,000	23.00	0.00	-	-
	11,000	28.00	(4.51)*	37.53	13.11

\*(Aft of Datum)

Straight line variation between weights.

<u>C.G. Range</u> (with Mod. 256403D) (Gear and Flaps Retracted) (See NOTE 16)	<u>Wt. Lbs.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	23,300	29.40	(5.77)*	37.00	12.63
	22,900	29.20	(5.59)*	-	-
	22,900	26.07	(2.77)*	-	-
	21,900	-	-	38.00	13.53
	19,200	-	-	38.00	13.53
	18,900	-	-	34.00	9.92
	18,500	22.45	0.50	-	-
	17,400	-	-	33.33	9.32
	16,200	22.40	0.55	-	-
	14,200	-	-	36.00	11.73
	13,000	-	-	37.53	13.11
	12,000	23.00	0.00	-	-
	11,000	28.00	(4.51)*	37.53	13.11

\*(Aft of Datum)

Straight line variation between weights.

<u>C.G. Range</u> (Series 401B) (Gear and Flaps Retracted)	<u>Wt. Lbs.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	23,600	29.73	(6.07)*	34.20	10.10
	23,300	-	-	37.00	12.63
	22,900	29.20	(5.59)*	-	-
	22,900	26.07	(2.77)*	-	-
	21,900	-	-	38.00	13.53
	19,200	-	-	38.00	13.53
	18,900	-	-	33.93	9.86
	18,500	22.45	0.50	-	-
	17,400	-	-	33.33	9.32
	16,200	22.40	0.55	-	-
	14,200	-	-	36.00	11.73
	13,000	-	-	37.53	13.11
	12,000	23.00	0.00	-	-
	11,000	28.00	(4.51)*	37.53	13.11

\*(Aft of Datum)

Straight line variation between weights.

**VIII. Model DH.125 Series 400A, Model HS.125 Series 400B, Model BH.125 Series 400A, Model HS.125 Series 400B/1, Model HS.125 Series 401B, Model HS.125 Series 403B, Model HS.125 Series 403A(C) (cont'd)**

<u>C.G. Range</u> (Series 403A(C) and Series 403B) (Gear and Flaps Retracted)	<u>Wt. Lbs.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
23,600	29.53	(5.89)*	34.20	10.10	
23,300	-	-	35.13	10.94	
23,300	-	-	37.00	12.63	
22,900	29.20	(5.59)*	-	-	
22,900	26.07	(2.77)*	-	-	
21,900	-	-	38.00	13.53	
19,200	-	-	38.00	13.53	
18,900	-	-	33.93	9.86	
18,500	22.45	0.50	-	-	
17,400	-	-	33.33	9.32	
16,200	22.40	0.55	-	-	
14,200	-	-	36.00	11.73	
13,000	-	-	37.53	13.11	
12,000	23.00	0.00	-	-	
11,000	28.00	(4.51)*	37.53	13.11	

\*(Aft of Datum)

Straight line variation between weights.

<u>Item (extending)</u>	<u>Moment Change In.Lbs</u>	
Wing flaps	15 <sup>o</sup>	+538
	25 <sup>o</sup>	+879
	50 <sup>o</sup> or 45 <sup>o</sup> (See NOTE 23)	+1,593
Main Landing Gear		-1,800
Nose Landing Gear		+1,380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

		(with Mod. 252243C)	(with Mod. 256403D)
Maximum Ramp Weight	23,300 lbs.	23,600 Lbs.	23,800 Lbs.
Maximum Brake-Release Weight	23,300 lbs.	23,300 Lbs.	23,300 Lbs.
Maximum Landing Weight	20,000 lbs.	20,000 Lbs.	20,000 Lbs.
Maximum Zero Fuel Weight	14,200 lbs.	14,500 Lbs.	14,700 Lbs.

	(Series 401B)	(Series 403A(C) & Series 403B)
Maximum Ramp Weight	23,600 lbs.	23,800 lbs.
Maximum Brake-Release Weight	23,600 lbs.	23,600 lbs.
Maximum Landing Weight	20,000 lbs.	20,000 lbs.
Maximum Zero Fuel Weight	14,500 lbs.	14,700 lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weigh and balance section, or Weight and Balance section, or Weight and Balance Manual.

**VIII. Model DH.125 Series 400A, Model HS.125 Series 400B, Model BH.125 Series 400A, Model HS.125 Series 400B/1, Model HS.125 Series 401B, Model HS.125 Series 403B, Model HS.125 Series 403A(C) (cont'd)**

Maximum Passengers (cont'd)

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Forward cabin			
(a) Side floor	260 to 303.85	50	
(b) Center floor	260 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395	50	
(b) Center floor	303.85 to 395	60	
Aft	395 to 425	60	130

Fuel Capacity

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	615.0	4,100	5.70
Tank 2	615.0	4,100	5.70
Engines and lines	1.5	10	81.00
Long Range Tank	134.5	896	88.70
Total	1,366.0	9,106	13.95

Oil Capacity

Engine Tank Oil is the oil that is required for circulation in the system.				
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1	1.87	14	82	1153
No. 2	1.87	14	82	1153
Total	3.74	28	82	2306

Maximum Operating Altitude

40,000 feet (See NOTE 9)

Serial Numbers Eligible

DH.125 Series 400A and HS.125 Series 400B: 25173 through 25229 (See NOTE 61)  
BH.125 Series 400A: 25230 through 25290 (See NOTE 61)

**IX. Beechcraft Hawker Model BH.125 Series 600A (Transport Aircraft), Approved August 17, 1972 (See NOTE 17)**

**Hawker Siddeley Model HS.125 Series 600B (Transport Aircraft), Approved May 28, 1999 (See NOTES 17 & 54)**

The BH.125 Series 600A aircraft and the HS.125 Series 600B differs respectively from the BH.125 Series 400A and the HS.125 Series 400B in the following major features: (i) Introduction of Rolls Royce (1971) Ltd., Bristol Engine Division Viper 601-22 engines, (ii) increased maximum ramp, brake release, landing and zero fuel weights, (iii) increased maximum operating speed ( $V_{MO}$ ), rough air speed ( $V_{RA}$ ), flap operating speeds ( $V_{FE}$ ), and landing gear operating speed ( $V_{LE}$ ), (iv) increased fuselage length, (v) increased fuel capacity by the addition of an extra fuel tank in the dorsal fairing, (vi) revised aileron tab arrangement and aileron control gearing, (vii) aerodynamic improvements providing better aircraft aerodynamic lines.

**Hawker Siddeley Model HS.125 Series 600A (Transport Aircraft), Approved January 6, 1976 (See NOTE 17)**

The Beechcraft Hawker Model BH.125 Series 600A, is, from aircraft Serial No. 256055, identified as the Hawker Siddeley Model HS.125 Series 600A. The Hawker Siddeley Model HS.125 Series 600A is in all respects identical to the Beechcraft Hawker Model BH.125 Series 600A except that the aircraft data plate, the control column central motif and the external nameplate on the fuselage nose have all been altered to reflect the revised identification.

**Hawker Siddeley Model HS.125 Series 600B/1 (Transport Aircraft), Approved May 28, 1999 (See Notes 17, 54 & 55)**

**Hawker Siddeley Model HS.125 Series 600B/2 (Transport Aircraft), Approved May 28, 1999 (See Notes 17, 54 & 55)**

**Hawker Siddeley Model HS.125 Series 600B/3 (Transport Aircraft), Approved May 28, 1999 (See Notes 17, 54 & 55)**

The following details are applicable to both the Beechcraft Hawker Model BH.125 Series 600A and the Hawker Siddeley Models HS.125 Series 600A and Series 600B, 600B/1, 600B/2 and 600B/3 aircraft. (See NOTE 18).

**IX. Model BH.125 Series 600A, Model HS.125 Series 600B, Model HS.125 Series 600A, Model HS.125 Series 600B/1, Model HS.125 Series 600B/2, Model HS.125 Series 600B/3** (cont'd)

<u>Engines</u>	2 Rolls Royce (1971) Ltd., Bristol Engine Division Viper 601-22 turbine engines	
<u>Fuel</u>	Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22 Type 2, ASTM D.1655 Jet B, Mil-T-5624 JP4. (See NOTE 4).	
<u>Engine Limits</u>	Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lbs.	3,675
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,675
	Maximum permissible engine rotor operating speed	100% (13,760 r.p.m.)
	Maximum permissible turbine outlet gas temperature:	
	Take-off (5 minutes maximum)	725°C
	Maximum continuous	715°C
	Maximum for acceleration	715°C
	Starting maximum gas temperature	700°C
	Maximum permissible oil inlet temperature:	
	Continuous operation	145°C
	Maximum permissible air bleed extraction of primary engine airflow	5.5%
<u>Airspeed Limits (IAS)</u>	V <sub>MO</sub> (Maximum operating)	
	when the dorsal and/or ventral fuel tank contains fuel	280 knots
	when the dorsal and the ventral fuel tanks are empty	300 knots
	V <sub>MO</sub> (Maximum operating) (with Mod. 252320)(See NOTE 17)	
	when the dorsal and/or ventral fuel tank contains fuel	280 knots
	from sea level to 12,400 feet with dorsal and ventral tanks empty decreasing linearly to 292 knots at 29,200 feet.	320 knots
	M <sub>MO</sub> (maximum operating)	
	30,800 ft. and above	0.755 M
	M <sub>MO</sub> (maximum operating) (with Mod. 252320)(See NOTE 17)	
	29,200 ft. and above	0.78 M
	V <sub>A</sub> (Maneuvering)	
	Sea level	190 knots
	10,000 feet	193 knots
	20,000 feet	196 knots
	30,000 feet	201 knots
	35,000 feet	205 knots
	40,000 feet	212 knots
	Straight line variation between points shown.	
	V <sub>FE</sub> (Flap speeds)	
	<u>Deflection</u>	
	15°	220 knots
	25°	175 knots
	45°	160 knots

**IX. Model BH.125 Series 600A, Model HS.125 Series 600B, Model HS.125 Series 600A, Model HS.125 Series 600B/1, Model HS.125 Series 600B/2, Model HS.125 Series 600B/3 (cont'd)**

<u>Airspeed Limits</u> (IAS) (cont'd)	V <sub>LO</sub> (Landing gear operation)	
	Retract	220 knots
	Extend	220 knots
	V <sub>LE</sub> (Landing gear extended)	220 knots
	V <sub>MC</sub> (Minimum control speed)	
	V <sub>MCA</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	96 knots
	V <sub>MCG</sub> (with flaps at 0° or 15° at sea level for temperatures below 10°C)	90 knots

Datum The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC) 90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

<u>C.G. Range</u> (Gear and Flaps Retracted)	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	Wt. Lbs.	% SMC In.	% SMC	In.
	25,000	26.40 (3.06)*	34.73	10.58
	24,850	-	35.00	10.82
	24,590	26.13 (2.82)*	-	-
	24,590	24.27 (1.14)*	-	-
	23,700	23.67 (0.60)*	-	-
	23,700	20.53 2.23	-	-
	20,800	-	35.00	10.82
	20,510	-	30.40	6.67
	20,300	17.07 5.36	-	-
	19,000	-	29.53	5.89
	15,550	16.00 6.32	-	-
	14,700	-	32.00	8.12
	12,800	16.00 6.32	31.53	7.69

\*(Aft of Datum)

Straight line variation between weights.

<u>C.G. Range</u> (with Mod. 252320) (Gear and Flaps Retracted)	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	Wt. Lbs.	% SMC In.	% SMC	In.
	25,500	26.87 (3.49)*	33.80	9.74
	25,100	26.47 (3.13)*	-	-
	25,100	24.53 (1.38)*	-	-
	24,850	-	35.00	10.82
	24,200	23.93 (0.83)*	-	-
	24,200	21.00 1.81	-	-
	20,800	-	35.00	10.82
	20,510	-	30.40	6.67
	20,300	17.07 5.36	-	-
	19,000	-	29.53	5.89
	15,550	16.00 6.32	-	-
	14,700	-	32.00	8.12
	12,800	16.00 6.32	31.53	7.69

\*(Aft of Datum)

Straight line variation between weights.

**IX. Model BH.125 Series 600A, Model HS.125 Series 600B, Model HS.125 Series 600A, Model HS.125 Series 600B/1, Model HS.125 Series 600B/2, Model HS.125 Series 600B/3** (cont'd)

C.G. Range (with Mod. 256663)  
(Gear and Flaps Retracted)

Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
25,500	26.60	(3.49)*	32.00	9.74
25,100	26.40	(3.13)*	-	-
25,100	24.53	(1.38)*	-	-
24,200	23.93	(0.83)*	-	-
24,200	21.00	1.81	-	-
20,650	-	-	32.00	10.82
20,500	-	-	30.33	10.82
20,300	17.07	5.36	-	-
19,150	-	-	29.47	10.82
15,550	16.00	6.32	-	-
14,700	-	-	32.00	8.12
12,800	16.00	6.32	31.40	7.58

\*(Aft of Datum)

Straight line variation between weights.

<u>Item (Extending)</u>	<u>Moment Change In.Lbs.</u>
Wing Flaps 15 <sup>o</sup>	+538
25 <sup>o</sup>	+879
45 <sup>o</sup>	+1,593
Main landing gear	-1,980
Nose landing gear	+1,380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

		(With Mod. 252320)
Maximum Ramp Weight	25,000 lbs.	25,500 lbs.
Maximum Brake-Release Weight	25,000 lbs.	25,500 lbs.
Maximum Landing Weight	22,000 lbs.	22,000 lbs.
Maximum Zero Fuel Weight	15,550 lbs.	16,050 lbs.

	(With Mod. 256663)
Maximum Ramp Weight	25,500 lbs.
Maximum Brake-Release Weight	25,500 lbs.
Maximum Landing Weight	22,000 lbs.
Maximum Zero Fuel Weight	16,050 lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

15 Maximum - For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward	180.25 to 223.11	100	310
Forward cabin			
(a) Side floor	245.85 to 303.85	50	
(b) Center floor	245.85 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395.3	50	
(b) Center floor	303.85 to 395.3	60	
Aft	397.8 to 422.3	60	130

**IX. Model BH.125 Series 600A, Model HS.125 Series 600B, Model HS.125 Series 600A, Model HS.125 Series 600B/1, Model HS.125 Series 600B/2, Model HS.125 Series 600B/3 (cont'd)**

<u>Fuel Capacity</u>	<u>Usable Fuel</u>			
	<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lbs.</u>	<u>Arm In.</u>
	Tank 1	611.0	4,070	5.60
	Tank 2	611.0	4,070	5.60
	Engines and lines	1.5	10	81.00
	Long Range (ventral tank)	134.5	896	88.60
	Dorsal tank	61.0	406	119.30
	Total	1,419.0	9,452	18.43

<u>Oil Capacity</u>	<u>Engine Tank Oil is the oil that is required for circulation in the system.</u>				
	<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lbs.</u>	<u>Arm In.</u>	<u>Moment In. Lbs.</u>
	No. 1	2.03	15.3	83	1224
	No. 2	2.03	15.3	83	1224
	Total	4.06	30.6	83	2448

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible BH.125 Series 600A and HS.125 Series 600B: 25256, 25258, 256001 through 256035, and 256037 through 256054  
HS.125 Series 600A: 256055 through 256071

**X. Hawker Siddeley Model HS.125 Series 700A (Transport Aircraft), Approved May 20, 1977  
Hawker Siddeley Model HS.125 Series 700B (Transport Aircraft), Approved May 28, 1999 (See NOTE 56)**

The HS.125 Series 700A and HS.125 Series 700B aircraft differs respectively from the BH/HS.125 Series 600A and the HS.125 Series 600B aircraft in the following major respects: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 601-22 engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance, (iv) Provisions for a New Automatic Flight Control System - Collins FCS.80, (v) Addition of a single point pressure refuel/defuel system, (vi) Reduction in certificated taxiing and take-off (brake release) weights, (vii) Reduction of  $M_{MO}$  from 0.78 (Post Modification 252320 Part A) to 0.77.

The following details are applicable to both the Hawker Siddeley Model HS.125 Series 700A and Series 700B aircraft. (See NOTES 20, 24 & 27)

Engines 2 Garrett AiResearch TFE 731-3 turbofan engines, or  
2 Garrett AiResearch TFE 731-3R turbofan engines (See NOTE 20)

Fuel Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23h Type 1, ASTM D.1655 Jet A or Jet A1.  
Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22 Type 2, ASTM D.1655 Jet B, Mil-T-5624 JP4. (See NOTE 28).

<u>Engine Limits</u>	<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,700	3,700
Maximum permissible engine rotor operating speed L.P. Shaft (N1)	101.5 (21,000 rpm)	101.5 (21,000 rpm)

**X. Model HS.125 Series 700A, Model HS.125 Series 700B** (cont'd)

<u>Engine Limits</u> (cont'd)	H.P. Shaft (N2)	100 (29,692 rpm)	100 (29,989 rpm)
Maximum permissible interstage turbine temperature (ITT):			
Take-off (5 minutes maximum)		907°C	929°C
Take-off (10 minutes maximum)		917°C	939°C
Take-off (instantaneous)		927°C	949°C
Maximum continuous		885°C	885°C
Engine starting and relighting (unrestricted)		907°C	907°C
Engine starting and relighting (10 seconds)		927°C	927°C
Engine starting and relighting (5 seconds)		above 927°C	above 927°C
Maximum permissible oil temperature:			
Sea level to 30,000 ft.		127°C	127°C
Above 30,000 ft.		140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes		149°C	149°C
Minimum permissible oil temperature:			
Engine starting		-40°C	-40°C
Before take-off		+30°C	+30°C
Maximum permissible air bleed extraction:			
L.P. air source		5 %	5 %
H.P. air source (climb and cruise condition)		3 %	3 %
H.P. air source (descent condition only)		5 %	5 %
<u>Airspeed Limits</u> (IAS)			
V <sub>MO</sub> (maximum operating)			
With fuel in the dorsal and/or ventral tank			280 knots
With dorsal and ventral tanks empty			320 knots
S.L. to 12,400 ft. decreasing linearly 1 kt. per 600 ft. to 292 kts. at 29,200 ft.			
V <sub>MO</sub> (maximum operating) (Cont.)			
With dorsal and ventral tanks empty and with Mod 258825: S.L. to 10,600 ft. decreasing linearly 1 kt. per 600 ft. to 288 kts. at 29,800 ft.			320 Knots
M <sub>MO</sub> (maximum operating)			
28,500 ft. and above			0.77 M
M <sub>MO</sub> (maximum operating)(with Mod 252648)			
29,200 ft. and above			0.78 M
V <sub>A</sub> (maneuvering)			
Sea level			192 knots
10,000 ft.			195 knots
20,000 ft.			198 knots
30,000 ft.			203 knots
35,000 ft.			207 knots
38,000 ft.			211 knots
40,000 ft.			214 knots
41,000 ft.			217 knots

**X. Model HS.125 Series 700A, Model HS.125 Series 700B** (cont'd)

<u>Airspeed Limits</u> (IAS) (cont'd)	$V_{FE}$ (Flap speeds)		
	<u>Deflection</u>		
	15°		220 knots
	25°		175 knots
	45°		160 knots
	$V_{LO}$ (landing gear operation)		
	Retract		220 knots
	Extend		220 knots
	$V_{LE}$ (landing gear extended)		220 knots
	$V_{MC}$ (minimum control speed)	<u>APR not operating</u>	<u>APR operating</u>
	$V_{MCA}$ (with flaps 0° or 15° at sea level for temperatures below 22°C)	101 knots	104 knots
	$V_{MCA}$ (with either rudder bias strut inoperative)	110 knots	113 knots
	$V_{MCG}$ (with flaps 0° or 15° at sea level for temperatures below 22°C)	92 knots	95 knots

Datum The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC) 90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

<u>C.G. Range</u> (Gear and Flaps Retracted)		<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	<u>Wt. Lbs.</u>	<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	24,800	25.00	(1.80)*	35.00	10.82
	24,200	24.60	(1.44)*	-	-
	24,200	21.80	1.09	36.80	12.45
	22,000	-	-	36.80	12.45
	20,950	-	-	36.27	11.97
	20,850	18.60	3.98	33.80	9.74
	20,650	-	-	33.67	9.62
	20,400	-	-	30.27	6.56
	19,000	-	-	29.40	5.77
	16,300	18.00	4.52	-	-
	14,700	-	-	31.93	8.05
	13,100	18.00	4.52	31.50	7.67

\*(Aft of Datum)

Straight line variations between weights

<u>C.G. Range</u> (with Mod. 258332) (Gear and flaps Retracted)		<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	<u>Wt. Lbs.</u>	<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	25,500	27.40	(3.97)*	33.53	9.50
	25,000	25.13	(1.92)*	-	-
	24,200	24.60	(1.44)*	-	-
	24,200	21.80	1.09	36.80	12.45
	22,400	-	-	36.80	12.45
	20,950	-	-	36.27	11.97
	20,850	18.60	3.98	33.80	9.74
	20,600	-	-	33.73	9.68
	20,400	-	-	30.27	6.56
	19,000	-	-	29.40	5.77
	16,300	18.00	4.52	-	-

**X. Model HS.125 Series 700A, Model HS.125 Series 700B** (cont'd)C.G. Range (cont'd)

(with Mod. 258332)	14,700	-	-	31.93	8.05
	13,100	18.00	4.52	31.50	7.67

\*(Aft of Datum)

Straight line variations between weights

Item (Extending)                      Moment Change In. Lb.

Wing flaps 15°	+538
25°	+879
45°	+1593
Main landing gear	-1980
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

		with Modification 258332	
Maximum ramp weight	25,000 Lbs.	25,500 Lbs.	(See NOTE 27)
Maximum brake release weight	24,800 Lbs.	25,500 Lbs.	(See NOTE 27)
Maximum landing weight	22,000 Lbs.	22,000 Lbs.	
Maximum zero fuel weight	16,050 Lbs.	16,300 Lbs.	(See NOTES 29 & 34)
Minimum zero fuel weight	13,100 Lbs.	13,100 Lbs.	

Minimum Crew

For all flights, 2 pilots

Maximum Passengers15 Maximum – For FAA approved seating configuration, refer to serial specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward	180.25 to 223.11	109	310
Forward cabin			
(a) Side floor	245.85 to 303.85	50	
(b) Center floor	245.85 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395.3	50	
(b) Center floor	303.85 to 395.3	60	
Aft	397.8 to 422.3	60	130

Fuel CapacityUsable Fuel

Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	612.5	4,080	5.60
Tank 2	612.5	4,080	5.60
Engines and lines	1.5	10	107.60
Ventral tank	131.0	873	88.60
Dorsal tank	61.0	406	119.30
Total	1,418.5	9,449	18.26

Oil Capacity

Engine Tank Oil is the oil that is required for circulation in the system.

Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1	1.5	11.3	93.69	1,059
No. 2	<u>1.5</u>	<u>11.3</u>	93.69	<u>1,059</u>
Total	3.0	22.6	93.90	2,118

**X. Model HS.125 Series 700A, Model HS.125 Series 700B** (cont'd)

<u>Maximum Operating Altitude</u>	41,000 feet
<u>Serial Numbers Eligible</u>	257001 through 257215 (See NOTE 61)

**XI. Hawker Siddeley Model DH.125 Series 1A with Modifications 251867 and 252605 (Transport Aircraft), Approved January 20, 1982 (See NOTE 22)**

The DH.125 Series 1A with modification 252605 aircraft differs respectively from the DH.125 Series 1A aircraft fitted with modification 251867 in the following major respects: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 521 turbine engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance.

**Hawker Siddeley Model DH.125, Series 1A with Modification 252606 (Transport Aircraft), Approved January 20, 1982 (See NOTE 22)**

The DH.125 Series 1A with modification 252606 aircraft differs respectively from the DH.125 Series 1A aircraft not fitted with modification 251867 in the following major respects: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 521 turbine engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance.

<u>Engines</u>	2 Garrett AiResearch TFE 731-3 turbofan engines, or 2 Garrett AiResearch TFE 731-3R turbofan engines (See NOTE 20)	
<u>Fuel</u>	Aviation Kerosene to specification Defence Standard 91-87, NATO Code F-34, Defence Standard 91-91, NATO Code F-35, 3-GP-23h, ASTM D.1655-74 Jet A or Jet A1 Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, ASTM D.1655 Jet B, MIL-T-5624 JP4 Grade, 3 GP-22 (See NOTE 28)	
<u>Engine Limits</u>	<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,700	3,700
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1) (21,000 rpm)	101.5 % (21,000 rpm)	101.5 %
H.P. Shaft (N2)	100 % (29,692 rpm)	101 % (29,989 rpm)
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	907°C	929°C
Take-off (10 minutes maximum)	917°C	939°C
Take-off (instantaneous)	927°C	949°C
Maximum continuous	885°C	885°C
Engine starting and relighting (unrestricted)	907°C	907°C
Engine starting and relighting (10 seconds)	927°C	927°C
Engine starting and relighting (5 seconds)	above 927°C	above 927°C

**XI. Model DH.125 Series 1A** (cont'd)

<u>Engine Limits</u> (cont'd)	Maximum permissible oil temperature:		
	Sea level to 30,000 ft.	127°C	127°C
	Above 30,000 ft.	140°C	140°C
	Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
	Minimum permissible oil temperature:		
	Engine starting	-40°C	-40°C
	Before take-off	+30°C	+30°C
	Maximum permissible air bleed extraction:		
	L.P. air source	5 %	5 %
	H.P. air source (climb and cruise condition)	3 %	3 %
H.P. air source (descent condition only)	5 %	5 %	
<u>Airspeed Limits</u> (IAS)	V <sub>MO</sub> (maximum operating)		285 knots
	S.L. to 27,200 ft. decreasing linearly 1 kt. per 300 ft. to 273 kts. at 30,800 ft.		
	M <sub>MO</sub> (maximum operating)		0.755 M
	V <sub>A</sub> (Maneuvering)		
	Sea level		185 knots
	10,000 ft.		185 knots
	20,000 ft.		185 knots
	30,000 ft.		195 knots
	V <sub>A</sub> (Maneuvering)		
	40,000 ft.		210 knots
	Straight line variation between points shown.		
	V <sub>FE</sub> (Flap speeds)		
	<u>Deflection</u>		
	15°		210 knots
	25°		160 knots
45°		145 knots	
V <sub>LO</sub> (landing gear operation)			
Retract		210 knots	
Extend		210 knots	
V <sub>LE</sub> (landing gear extended)		210 knots	
V <sub>MC</sub> (minimum control speed)	<u>APR not operating</u>	<u>APR operating</u>	
V <sub>MCA</sub> (with flaps 0° or 15° at sea level for temperatures below 22°C)	100 knots	104 knots	
V <sub>MCA</sub> (with either rudder bias strut inoperative)	110 knots	113 knots	
V <sub>MCG</sub> (with flaps 0° or 15° at sea level for temperatures below 22°C)	91 knots	95 knots	

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

**XI. Model DH.125 Series 1A** (cont'd)

Standard Mean Chord (SMC) 90.24 in. The leading edge of the SMC is 20.76. in. forward of the datum (for SMC definition, see Approved Flight Manual).

C.G. Range  
(Gear and Flaps Retracted)

Series 1A with Modifications 251867 and 252605

Wt. Lbs.	Fwd. of Datum		Aft of Datum	
	% SMC	In.	% SMC	In.
21,700	24.60	(1.44)*	33.60	9.56
20,500	-	-	34.33	10.22
19,000	-	-	34.07	9.98
18,500	21.67	1.20	-	-
16,800	-	-	33.07	9.08
13,700	22.00	0.91	-	-
12,350	-	-	37.53	13.11
11,600	22.27	0.66	-	-
11,400	23.27	(0.24)*	37.53	13.11

\*(Aft of Datum)

Straight line variations between weights

Series 1A with Modification 252606

Wt. Lbs.	Fwd. of Datum		Aft of Datum	
	% SMC	In.	% SMC	In.
21,200	24.67	(1.50)*	33.80	9.74
20,500	-	-	34.33	10.22
19,000	-	-	34.07	9.98
18,000	21.67	1.20	-	-
16,800	-	-	33.07	9.08
13,700	22.00	0.91	-	-
12,350	-	-	37.53	13.11
11,600	22.20	0.73	-	-
11,400	23.27	(0.24)*	37.53	13.11

\*(Aft of Datum)

Straight line variations between weights

<u>Item (Extending)</u>	<u>Moment Change In. Lb.</u>
Wing flaps 15 <sup>0</sup>	+538
25 <sup>0</sup>	+879
45 <sup>0</sup>	+1593
Main landing gear	-1800
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

	<u>with Modifications</u> <u>251867 &amp; 252605</u>	<u>with Modification</u> <u>252606</u>
Maximum ramp weight	21,900 Lbs.	21,400 Lbs.
Maximum brake release weight	21,700 Lbs.	21,200 Lbs.
Maximum landing weight	19,550 Lbs.	19,550 Lbs.
Maximum zero fuel weight	13,700 Lbs.	13,200 Lbs.
Minimum zero fuel weight	11,400 Lbs.	11,400 Lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

**XI. Model DH.125 Series 1A** (cont'd)

<u>Maximum Baggage</u>	Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
	Forward			
	6 seater	205.00 to 260.00	60	210
	8 seater	205.00 to 260.00	60	160
	Forward cabin			
	(a) Side floor	260.00 to 303.85	50	
	(b) Center floor	260.00 to 303.85	60	
	Aft cabin			
	(a) Side floor	303.85 to 395.30	50	
	(b) Center floor	303.85 to 395.30	60	
	Aft	396.00 to 425.00	60	130

  

<u>Fuel Capacity</u>	Usable Fuel			
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
	Tank 1	615.0	4,100	5.70
	Tank 2	615.0	4,100	5.70
	Engines and lines	1.5	10	81.00
	Total	1,231.5	8,210	5.79

  

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.				
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
	No. 1	1.5	11.3	93.69	1,059
	No. 2	<u>1.5</u>	<u>11.3</u>	93.69	<u>1,059</u>
	Total	3.0	22.6		2,118

  

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Model DH.125 Series 1A and HS.125 Series 1B

**XII. Hawker Siddeley Model DH.125 Series 3A with Modification 252603 (Transport Aircraft), Approved January 20, 1982 (See NOTE 26)****Hawker Siddeley Model HS.125 Series F3B (Transport Aircraft), Approved May 28, 1999 (See NOTES 26 & 52)**

(The DH.125 Series 3A aircraft with modification 252603 and the HS.125 Series F3B differs respectively from the DH.125 Series 3A and the HS.125 Series 3B aircraft in the following major features: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 522 turbine engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance.

<u>Engines</u>	2 Garrett AiResearch TFE 731-3 turbofan engines, or 2 Garrett AiResearch TFE 731-3R turbofan engines (See NOTE 20)	
<u>Fuel</u>	Aviation Kerosene to specification Defence Standard 91-87, NATO Code F-34, Defence Standard 91-91, NATO Code F-35, 3-GP-23h, ASTM D.1655-74 Jet A or Jet A1 Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, ASTM D.1655 Jet B, MIL-T-5624 JP4 Grade, 3 GP-22 (See NOTE 28)	
<u>Engine Limits</u>	<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,700	3,700

**XII. Model DH.125 Series 3A, Model HS.125 Series F3B** (cont'd)

<u>Engine Limits</u> (cont'd)	Maximum permissible engine rotor operating speed:		
	L.P. Shaft (N1)	101.5 % (21,000 rpm)	101.5 % (21,000 rpm)
	H.P. Shaft (N2)	100 % (29,692 rpm)	101 % (29,989 rpm)
	Maximum permissible interstage turbine temperature (ITT):		
	Take-off (5 minutes maximum)	907°C	929°C
	Take-off (10 minutes maximum)	917°C	939°C
	Take-off (instantaneous)	927°C	949°C
	Maximum continuous	885°C	885°C
		<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
	Engine starting and relighting (unrestricted)	907°C	907°C
	Engine starting and relighting (10 seconds)	927°C	927°C
	Engine starting and relighting (5 seconds)	above 927°C	above 927°C
	Maximum permissible oil temperature:		
	Sea level to 30,000 ft.	127°C	127°C
	Above 30,000 ft.	140°C	140°C
	Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
	Minimum permissible oil temperature:		
	Engine starting	-40°C	-40°C
	Before take-off	+30°C	+30°C
	Maximum permissible air bleed extraction:		
	L.P. air source	5 %	5 %
	H.P. air source (climb and cruise condition)	3 %	3 %
	H.P. air source (descent condition only)	5 %	5 %
<u>Airspeed Limits</u> (IAS)	V <sub>MO</sub> (maximum operating) SL to 27,200 ft. decreasing linearly 1 kt. per 300 ft. to 273 kts. at 30,800 ft.		285 knots
	M <sub>MO</sub> (maximum operating)		0.755 M
	V <sub>A</sub> (Maneuvering)		
	Sea level		185 knots
	10,000 ft.		185 knots
	20,000 ft.		185 knots
	30,000 ft.		195 knots
	40,000 ft.		210 knots
	Straight line variation between points shown.		

**XII. Model DH.125 Series 3A, Model HS.125 Series F3B** (cont'd)

<u>Airspeed Limits</u> (IAS) (cont'd)	<u>V<sub>FE</sub></u> (Flap speeds)		
	<u>Deflection</u>		
	15°	210 knots	
	25°	160 knots	
	45°	145 knots	
	<u>V<sub>LO</sub></u> (landing gear operation)		
	Retract	210 knots	
	Extend	210 knots	
	<u>V<sub>LE</sub></u> (landing gear extended) 210 knots		
	<u>V<sub>MC</sub></u> (minimum control speed)	<u>APR not operating</u>	<u>APR operating</u>
	<u>V<sub>MCA</sub></u> (with flaps 0° or 15° at sea level for temperatures below 22°C)	100 knots	104 knots
	<u>V<sub>MCA</sub></u> (with either rudder bias strut inoperative)	110 knots	113 knots
	<u>V<sub>MCG</sub></u> (with flaps 0° or 15° at sea level for temperatures below 22°C)	91 knots	95 knots

Datum The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC) 90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

<u>C.G. Range</u> (Gear and Flaps Retracted)	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>		
	<u>Wt. Lbs.</u>	<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	21,700	24.60	(1.44)*	33.60	9.56
	20,500	-	-	34.33	10.22
	19,000	-	-	34.07	9.98
	18,500	21.67	1.20	-	-
	16,800	-	-	33.07	9.08
	13,700	22.00	0.91	-	-
	12,300	-	-	37.53	13.11
	11,600	22.27	0.66	-	-
	11,400	23.27	(0.24)*	37.53	13.11

\*(Aft of Datum)

Straight line variations between weights

<u>Item (Extending)</u>	<u>Moment Change In. Lb.</u>
Wing flaps 15°	+538
25°	+879
45°	+1593
Main landing gear	-1800
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

<u>Maximum Weights</u>	Maximum ramp weight	21,900 Lbs.
	Maximum brake release weight	21,700 Lbs.
	Maximum landing weight	20,000 Lbs.
	Maximum zero fuel weight	13,700 Lbs.
	Minimum zero fuel weight	11,400 Lbs.

**XII. Model DH.125 Series 3A, Model HS.125 Series F3B** (cont'd)

<u>Minimum Crew</u>	For all flights, 2 pilots
<u>Maximum Passengers</u>	8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

<u>Maximum Baggage</u>	Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
	Forward			
	6 seater	205.00 to 260.00	60	210
	8 seater	205.00 to 260.00	60	160
	Forward cabin			
	(a) Side floor	260.00 to 303.85	50	
	(b) Center floor	260.00 to 303.85	60	
	Aft cabin			
	(a) Side floor	303.85 to 395.3	50	
	(b) Center floor	303.85 to 395.3	60	
	Aft	395.00 to 425.00	60	130

<u>Fuel Capacity</u>	Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	
Tank 1	615.0	4,100	5.70	
Tank 2	615.0	4,100	5.70	
Engines and lines	1.5	10	81.00	
Total	1,231.5	8,210	5.79	

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.				
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.	
No. 1	1.5	11.3	93.69	1,059	
No. 2	1.5	11.3	93.69	1,059	
Total	3.0	22.6		2,118	

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Model DH.125 Series 3A and HS.125 Series 3B (See NOTE 61)

**XIII. Hawker Siddeley Model DH.125 Series 3A/RA with Modification 252600 (Transport Aircraft), Approved February 15, 1968 (See NOTE 25)**  
**Hawker Siddeley Model HS.125 Series F3B/RA (Transport Aircraft), Approved May 28, 1999 (See NOTES 25 & 52)**

(The DH.125 Series 3A/RA aircraft with modification 252600 and the HS.125 Series F3B/RA differs respectively from the DH.125 Series 3A/RA and the HS.125 Series 3B/RA aircraft in the following major features: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 522 turbine engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance.

Engines 2 Garrett AiResearch TFE 731-3 turbofan engines, or  
2 Garrett AiResearch TFE 731-3R turbofan engines (See NOTE 20)

Fuel Aviation Kerosene to specification Defence Standard 91-87, NATO Code F-34, Defence Standard 91-91, NATO Code F-35, 3-GP-23h, ASTM.D.1655-74 Jet A or Jet A-1  
Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade, 3 GP-22 (See NOTE 28)

**XIII. Model DH.125 Series 3A/RA, Model HS.125 Series F3B/RA** (cont'd)Engine Limits

	<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,700	3,700
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1)	101.5 % (21,000 rpm)	101.5 % (21,000 rpm)
H.P. Shaft (N2)	100 % (29,692 rpm)	100 % (29,989 rpm)
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	907°C	929°C
Take-off (10 minutes maximum)	917°C	939°C
Take-off (instantaneous)	927°C	949°C
Maximum continuous	885°C	885°C
Engine starting and relighting (unrestricted)	907°C	907°C
Engine starting and relighting (10 seconds)	927°C	927°C
Engine starting and relighting (5 seconds)	above 927°C	above 927°C
Maximum permissible oil temperature:		
Sea level to 30,000 ft.	127°C	127°C
Above 30,000 ft.	140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
Minimum permissible oil temperature:		
Engine starting	-40°C	-40°C
Before take-off	+30°C	+30°C
Maximum permissible air bleed extraction:		
L.P. air source	5 %	5 %
H.P. air source (climb and cruise condition)	3 %	3 %
H.P. air source (descent condition only)	5 %	5 %

Airspeed Limits (IAS)

V <sub>MO</sub> (Maximum operating)	
with fuel in long range tanks	257 knots
from sea level to 27,500 feet with long range tank empty	282 knots
decreasing linearly 1 knot per 320 feet to 270 knots at 31,350 feet.	
M <sub>MO</sub> (maximum operating)	0.755 M
V <sub>A</sub> (Maneuvering)	193 knots
V <sub>FE</sub> (Flap speeds)	
<u>Deflection</u>	
15°	210 knots
25°	160 knots
45°	145 knots

**XIII. Model DH.125 Series 3A/RA, Model HS.125 Series F3B/RA** (cont'd)Airspeed Limits (IAS) (cont'd)

V <sub>LO</sub> (landing gear operation)		
Retract		210 knots
Extend		210 knots
V <sub>LE</sub> (landing gear extended)		210 knots
V <sub>MC</sub> (minimum control speed)	<u>APR not operating</u>	<u>APR operating</u>
V <sub>MCA</sub> (with flaps 0° or 15° at sea level for temperatures below 22°C)	100 knots	104 knots
V <sub>MCA</sub> (with either rudder bias strut inoperative)	110 knots	113 knots
V <sub>MCG</sub> (with flaps 0° or 15° at sea level for temperatures below 22°C)	91 knots	95 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

C.G. Range

(Gear and Flaps Retracted)

Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
23,600	30.73	(6.97)*	36.00	11.73
23,300	-	-	37.00	12.63
22,900	30.40	(6.67)*	-	-
22,900	27.40	(3.97)*	-	-
21,900	-	-	38.00	13.53
19,600	-	-	38.00	13.53
19,300	-	-	34.07	9.98
18,500	23.87	(0.78)*	-	-
17,400	-	-	33.27	9.26
16,100	23.23	(0.20)*	-	-
14,700	26.20	(2.88)*	-	-
14,200	-	-	36.13	11.84
13,750	25.00	(1.80)*	-	-
13,000	-	-	37.53	13.11
11,600	25.00	(1.80)*	-	-
11,400	26.00	(2.70)*	37.53	13.11

\*(Aft of Datum)

Straight line variations between weights

<u>Item (Extending)</u>	<u>Moment Change In. Lb.</u>
Wing flaps 15°	+538
25°	+879
45°	+1593
Main landing gear	-1800
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum ramp weight	23,800 Lbs.
Maximum brake release weight	23,600 Lbs.
Maximum landing weight	20,000 Lbs.
Maximum zero fuel weight	14,700 Lbs.
Minimum zero fuel weight	11,400 Lbs.

**XIII. Model DH.125 Series 3A/RA, Model HS.125 Series F3B/RA** (cont'd)

Minimum Crew For all flights, 2 pilots

Maximum Passengers 8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

<u>Maximum Baggage</u>	Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
	Forward			
	6 seater	205.00 to 260.00	60	210
	8 seater	205.00 to 260.00	60	160
	Forward cabin			
	(a) Side floor	260.00 to 303.85	50	
	(b) Center floor	260.00 to 303.85	60	
	Aft cabin			
	(a) Side floor	303.85 to 395.3	50	
	(b) Center floor	303.85 to 395.3	60	
	Aft	395.00 to 425.00	60	130

<u>Fuel Capacity</u>	Usable Fuel			
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
	Tank 1	615.0	4,100	5.70
	Tank 2	615.0	4,100	5.70
	Engines and lines	1.5	10	81.00
	Long Range Tank	134.5	896	88.70
	Total	1,366.0	9,106	13.95

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.			
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In. Moment In. Lbs.
	No. 1	1.5	11.3	93.69 1,059
	No. 2	1.5	11.3	93.69 1,059
	Total	3.0	22.6	2,118

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Model DH.125 Series 3A and HS.125 Series 3B (See NOTE 61)

**XIV. Hawker Siddeley Model DH.125, Series 400A with Modification 252550 (Transport Aircraft), Approved November 15, 1968 (See NOTE 21)**  
**Beechcraft Hawker Model BH.125, Series 400A with Modification 252550 (Transport Aircraft), Approved July 14, 1970 (See NOTE 21)**

(The DH.125 Series 400A aircraft with modification 252550 and the BH.125 Series 400A aircraft with modification 252550 differs respectively from the DH.125 Series 400A and the BH.125 Series 400A aircraft in the following major features: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 522 turbine engines,

(ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance, and (iv) Increase in certificated taxi and take-off weights.

**Hawker Siddeley Model HS.125 Series F400B (Transport Aircraft), Approved May 28, 1999 (See NOTES 21 & 53)**

(The HS.125 Series F400B aircraft with modification 252551 differs from the HS.125 Series 400B aircraft in the following major features: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 522 turbine engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance, and (iv) Increase in certificated taxi and take-off weights.

**XIV. Model DH.125 Series 400A, Model BH.125 Series 400A, Model HS.125 Series F400B, Model HS.125 Series F403B**  
(cont'd)

**Hawker Siddeley Model HS.125 Series F403B (Transport Aircraft), Approved May 28, 1999 (See NOTES 21 & 53)**

(The HS.125 Series F403B aircraft with modification 252551 differs from the HS.125 Series 403B aircraft in the following major features: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 522 turbine engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance, and (iv) Increase in certificated taxi and take-off weights.

Engines

2 Garrett AiResearch TFE 731-3 turbofan engines, or  
2 Garrett AiResearch TFE 731-3R turbofan engines (See NOTE 20)

Fuel

Aviation Kerosene to specification Defence Standard 91-87, NATO Code F-34, Defence Standard 91-91, NATO Code F-35, 3-GP-23h, ASTM.D.1655-74 Jet A or Jet A-1  
Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade, 3 GP-22 (See NOTE 28)

Engine Limits

	<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,700	3,700
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1)	101.5 % (21,000 rpm)	101.5 % (21,000 rpm)
H.P. Shaft (N2)	100 % (29,692 rpm)	100 % (29,989 rpm)
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	907°C	929°C
Take-off (10 minutes maximum)	917°C	939°C
Take-off (instantaneous)	927°C	949°C
Maximum continuous	885°C	885°C
Engine starting and relighting (unrestricted)	907°C	907°C
Engine starting and relighting (10 seconds)	927°C	927°C
Engine starting and relighting (5 seconds)	above 927°C	above 927°C
Maximum permissible oil temperature:		
Sea level to 30,000 ft.	127°C	127°C
Above 30,000 ft.	140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C

**XIV. Model DH.125 Series 400A, Model BH.125 Series 400A, Model HS.125 Series F400B, Model HS.125 Series F403B**  
(cont'd)

Engine Limits (cont'd)

Minimum permissible oil temperature:

Engine starting	-40°C	-40°C
Before take-off	+30°C	+30°C

	<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
Maximum permissible air bleed extraction:		
L.P. air source	5 %	5 %
H.P. air source (climb and cruise condition)	3 %	3 %
H.P. air source (descent condition only)	5 %	5 %

Airspeed Limits (IAS)

V <sub>MO</sub> (Maximum operating) with fuel in long range tanks from sea level to 27,500 feet with long range tank empty decreasing linearly 1 knot per 320 feet to		257 knots 282 knots 270 knots at 31,350 feet.
V <sub>MO</sub> (Maximum operating) (with modification 259273) with fuel in long range tanks from sea level to 27,500 feet with long range tank empty decreasing linearly 1 knot per 340 feet to		253 knots 276 knots 260 knots at 32,940 feet.
M <sub>MO</sub> (maximum operating)		0.755 M
V <sub>A</sub> (Maneuvering)		193 knots
V <sub>FE</sub> (Flap speeds) <u>Deflection</u> 15° 25° 45°		210 knots 160 knots 145 knots
V <sub>LO</sub> (landing gear operation) Retract Extend		210 knots 210 knots
V <sub>LE</sub> (landing gear extended)		210 knots
V <sub>MC</sub> (minimum control speed)	<u>APR not operating</u>	<u>APR operating</u>
V <sub>MCA</sub> (with flaps 0° or 15° at sea level for temperatures below 22°C)	100 knots	104 knots
V <sub>MCA</sub> (with either rudder bias strut inoperative)	110 knots	113 knots
V <sub>MCG</sub> (with flaps 0° or 15° at sea level for temperatures below 22°C)	91 knots	95 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

**XIV. Model DH.125 Series 400A, Model BH.125 Series 400A, Model HS.125 Series F400B, Model HS.125 Series F403B**  
(cont'd)

<u>C.G. Range</u> (Gear and Flaps Retracted)	Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		% SMC	In.	% SMC	In.
23,600		30.73	(6.97)*	36.00	11.73
23,300		-	-	37.00	12.63
22,900		30.40	(6.67)*	-	-
22,900		27.40	(3.97)*	-	-
21,900		-	-	38.00	13.53
19,600		-	-	38.00	13.53
19,300		-	-	34.07	9.98
18,500		23.87	(0.78)*	-	-
17,400		-	-	33.27	9.26
16,100		23.23	(0.20)*	-	-
14,700		26.20	(2.88)*	-	-
14,200		-	-	36.13	11.84
13,750		25.00	(1.80)*	-	-
13,000		-	-	37.53	13.11
11,600		25.00	(1.80)*	-	-
11,400		26.00	(2.70)*	37.53	13.11

\*(Aft of Datum)

Straight line variations between weights

Item (Extending)                      Moment Change In. Lb.

Wing flaps 15°	+538
25°	+879
45°	+1593
Main landing gear	-1800
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

		<u>with Modification</u> 259273
Maximum ramp weight	23,800 Lbs.	23,800 Lbs.
Maximum brake release weight	23,600 Lbs.	23,600 Lbs.
Maximum landing weight	20,000 Lbs.	20,000 Lbs.
Maximum zero fuel weight	14,700 Lbs.	15,200 Lbs.
Minimum zero fuel weight	11,400 Lbs.	11,400 Lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

8 – For FAA approved seating configuration, refer to special specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

Maximum Baggage

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft<sup>2</sup></u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward			
6 seater	205.00 to 260.00	60	210
8 seater	205.00 to 260.00	60	160
Forward cabin			
(a) Side floor	260.00 to 303.85	50	
(b) Center floor	260.00 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395.3	50	
(b) Center floor	303.85 to 395.3	60	
Aft	395.00 to 425.00	60	130

**XIV. Model DH.125 Series 400A, Model BH.125 Series 400A, Model HS.125 Series F400B, Model HS.125 Series F403B**  
(cont'd)

<u>Fuel Capacity</u>	Usable Fuel			
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
	Tank 1	615.0	4,100	5.70
	Tank 2	615.0	4,100	5.70
	Engines and lines	1.5	10	81.00
	Long Range Tank	134.5	896	88.70
	Total	1,366.0	9,106	13.95

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.				
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
	No. 1	1.5	11.3	93.69	1,059
	No. 2	1.5	11.3	93.69	1,059
	Total	3.0	22.6		2,118

Maximum Operating Altitude 40,000 feet (See NOTE 9)

Serial Numbers Eligible Same as listed previously for Hawker Siddeley Models DH.125 Series 400A and HS.125 Series 400B and Beechcraft Hawker Model BH.125 Series 400A. (See NOTE 61)

**XV. Beechcraft Hawker Model BH.125 Series 600A with Modification 252468 (Transport Aircraft), Approved October 15, 1981 (See NOTE 19)**  
**Hawker Siddeley Model HS.125 Series 600A with Modification 252468 (Transport Aircraft), Approved October 15, 1981 (See NOTE 19)**

The BH.125 Series 600A aircraft with modification 252468 and the HS.125 Series 600A aircraft with modification 252468 differs respectively from the BH.125 Series 600A and the HS.125 Series 600A aircraft in the following major features: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 522 turbine engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance, and (iv) Reduction in take-off weights and increase in maximum zero fuel weight.

The BH.125 Series 600A with modification 252468, is, from aircraft Serial No. 256055, identified as the model HS.125 Series 600A with modification 252468.

**Hawker Siddeley Model HS.125 Series F600B (Transport Aircraft), Approved May 28, 1999 (See NOTES 19 & 54)**

The HS.125 Series F600B aircraft differs from the HS.125 Series 600B aircraft in the following major features: (i) Garrett AiResearch TFE 731-3 engines replace the Rolls Royce Viper 522 turbine engines, (ii) Modifications to associated aircraft systems consequential to the engine change, (iii) Minor changes to improve aerodynamic efficiency and aircraft appearance, and (iv) Reduction in take-off weights and increase in maximum zero fuel weight.

Engines 2 Garrett AiResearch TFE 731-3 turbofan engines, or  
2 Garrett AiResearch TFE 731-3R turbofan engines (See NOTE 20)

Fuel Aviation Kerosene to specification Defence Standard 91-91, NATO Code F-35, Defence Standard 91-87, NATO Code F-34, 3-GP-23h Type 1, ASTM D.1655 Jet A or Jet A1.  
Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, 3-GP-22 Type 2, ASTM D.1655 Jet B, Mil-T-5624 JP4. (See NOTE 28).

<u>Engine Limits</u>	<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	3,700	3,700

**XV. Model BH.125 Series 600A, Model HS.125 Series 600A, Model HS.125 Series F600B** (cont'd)

<u>Engine Limits</u> (cont'd)	<u>TFE 731-3 and TFE 731-3R with APR not operating</u>	<u>TFE 731-3R with APR operating</u>
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1)	101.5 % (21,000 rpm)	101.5 % (21,000 rpm)
H.P. Shaft (N2)	100 % (29,692 rpm)	100 % (29,989 rpm)
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	907°C	929°C
Take-off (10 minutes maximum)	917°C	939°C
Take-off (instantaneous)	927°C	949°C
Maximum continuous	885°C	885°C
Engine starting and relighting (unrestricted)	907°C	907°C
Engine starting and relighting (10 seconds)	927°C	927°C
Engine starting and relighting (5 seconds)	above 927°C	above 927°C
Maximum permissible oil temperature:		
Sea level to 30,000 ft.	127°C	127°C
Maximum permissible oil temperature:		
Above 30,000 ft.	140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
Minimum permissible oil temperature:		
Engine starting	-40°C	-40°C
Before take-off	+30°C	+30°C
Maximum permissible air bleed extraction:		
L.P. air source	5 %	5 %
H.P. air source (climb and cruise condition)	3 %	3 %
H.P. air source (descent condition only)	5 %	5 %
<u>Airspeed Limits</u> (IAS)		
V <sub>MO</sub> (maximum operating)		
With fuel in the dorsal and/or ventral tank		280 knots
With dorsal and ventral tanks empty		320 knots
S.L. to 12,400 ft. decreasing linearly 1 kt. per 600 ft. to 292 kts. at 29,200 ft.		
M <sub>MO</sub> (maximum operating)		
28,500 ft. and above		0.78 M
V <sub>A</sub> (maneuvering)		
Sea level		192 knots
10,000 ft.		195 knots
20,000 ft.		198 knots
30,000 ft.		203 knots
35,000 ft.		207 knots
38,000 ft.		211 knots
40,000 ft.		214 knots
41,000 ft.		217 knots

**XV. Model BH.125 Series 600A, Model HS.125 Series 600A, Model HS.125 Series F600B** (cont'd)Airspeed Limits (IAS) (cont.)

V <sub>FE</sub> (Flap speeds)		
<u>Deflection</u>		
15°		220 knots
25°		175 knots
45°		160 knots
V <sub>LO</sub> (landing gear operation)		
Retract		220 knots
Extend		220 knots
V <sub>LE</sub> (landing gear extended)		220 knots
V <sub>MC</sub> (minimum control speed)	<u>APR not operating</u>	<u>APR operating</u>
V <sub>MCA</sub> (with flaps 0° or 15° at sea level for temperatures below 22°C)	101 knots	104 knots
V <sub>MCA</sub> (with either rudder bias strut inoperative)	110 knots	113 knots
V <sub>MCG</sub> (with flaps 0° or 15° at sea level for temperatures below 22°C)	92 knots	95 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

90.24 in. The leading edge of the SMC is 20.76 in. forward of the datum (for SMC definition, see Approved Flight Manual).

C.G. Range

(Gear and Flaps Retracted)

Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
24,800	25.00	(1.80)*	35.00	10.82
24,200	24.60	(1.44)*	-	-
24,200	21.80	1.09	36.47	12.15
22,500	-	-	36.47	12.15
20,950	-	-	36.27	11.97
20,850	18.60	3.98	33.80	9.74
20,650	-	-	33.67	9.62
20,400	-	-	30.27	6.56
19,000	-	-	29.40	5.77
16,050	18.00	4.52	-	-
14,700	-	-	31.93	8.05
13,100	18.00	4.52	31.50	7.66

\*(Aft of Datum)

Straight line variations between weights

C.G. Range

(with Mod. 252818)

(Gear and flaps Retracted)

Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
25,500	27.13	(3.72)*	33.53	9.50
25,100	25.00	(1.80)*	-	-
24,450	24.60	(1.44)*	-	-
24,450	21.80	1.07	-	-
24,200	-	-	36.47	12.15
22,400	-	-	36.47	12.15
21,100	18.60	3.98	-	-
20,950	-	-	36.27	11.97
20,875	-	-	33.80	9.74
20,600	-	-	33.73	9.68
20,400	-	-	30.33	6.61
19,000	-	-	29.40	5.77

**XV. Model BH.125 Series 600A, Model HS.125 Series 600A, Model HS.125 Series F600B** (cont'd)**C.G. Range** (with Modification 252818) (cont)

Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
16,300	18.00	4.52	-	-
14,700	-	-	31.87	8.00
13,100	18.00	4.52	31.50	7.66

\*(Aft of Datum)

Straight line variations between weights

<u>Item (Extending)</u>	<u>Moment Change In. Lb.</u>
Wing flaps 15 <sup>o</sup>	+538
25 <sup>o</sup>	+879
45 <sup>o</sup>	+1593
Main landing gear	-1980
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

**Leveling Means**

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

**Maximum Weights**

		with Modification 252818
Maximum ramp weight	25,000 Lbs.	25,500 Lbs. (See NOTE 27)
Maximum brake release weight	24,800 Lbs.	25,500 Lbs. (See NOTE 27)
Maximum landing weight	22,000 Lbs.	22,000 Lbs.
Maximum zero fuel weight	16,050 Lbs.	16,050 Lbs.
Minimum zero fuel weight	13,100 Lbs.	13,100 Lbs.

**Minimum Crew**

For all flights, 2 pilots

**Maximum Passengers****15 Maximum** – For FAA approved seating configuration, refer to serial specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.**Maximum Baggage**

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft<sup>2</sup></u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward	180.25 to 223.11	100	310
Forward cabin			
(a) Side floor	245.85 to 303.85	50	
(b) Center floor	245.86 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395.3	50	
(b) Center floor	303.85 to 395.3	60	
Aft	397.80 to 422.30	60	130

**Fuel Capacity**

<u>Usable Fuel</u>			
<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lbs.</u>	<u>Arm In.</u>
Tank 1	612.5	4,080	5.60
Tank 2	612.5	4,080	5.60
Engines and lines	1.5	10	107.60
Ventral tank	131.0	873	88.60
Dorsal tank	61.0	406	119.30
Total	1,418.5	9,449	18.26

**XV. Model BH.125 Series 600A, Model HS.125 Series 600A, Model HS.125 Series F600B** (cont'd)

<u>Oil Capacity</u>	Engine Tank Oil is the oil that is required for circulation in the system.				
	Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1		1.5	11.3	93.69	1,059
No. 2		<u>1.5</u>	<u>11.3</u>	93.69	<u>1,059</u>
Total		3.0	22.6	93.90	2,118

Maximum Operating Altitude. 41,000 feet

Serial Numbers Eligible. Same as listed previously for models BH/HS.125 Series 600A and HS.125 Series 600B, 600B/1, 600B/2 and 600B/3

**XVI. British Aerospace Model BAe.125 Series 800A (Transport Aircraft), Approved July 12, 1984 (See NOTES 30, 40 and 64)**

**British Aerospace Model BAe.125 Series 800A (C-29A) (Transport Aircraft), Approved December 12, 1989 (See NOTES 30 and 64)** The C-29A variant was intended for Airborne Flight Inspection operations.

**British Aerospace Model BAe.125 Series 800A (U-125)(Transport Aircraft), Approved April 24, 1992 (See NOTE 40 and 64)** The U-125 variant was intended for Airborne Flight Inspection operations.

**British Aerospace Model BAe.125 Series 800B (Transport Aircraft), Approved May 28, 1999 (See NOTE 57) Hawker 800 (name change) (Transport Aircraft), Approved January 28, 1994 (See NOTES 42, 57 and 64)**

The BAe.125 Series 800A/Hawker 800 and the BAe.125 Series 800B differs respectively from the HS.125 Series 700A and the HS.125 Series 700B aircraft in the following major respects: (i) Garrett Turbine Engine Company TFE 731-5R engines replace the Garrett AiResearch TFE 731-3 engines, (ii) The wing span is increased by 4 ft. 6 ins, (iii) Curved windscreens replace the existing flat panels, (iv) The rear fuselage underfairing is reshaped and the ventral tank is increased in capacity. The ventral fin is deleted, (v) The fin leading edge is extended forward and the dorsal fuel tank deleted, (vi) The nose wheel doors are sequenced to close after the gear is down, (vii) A stall identification (stick pusher) system is fitted, (viii) An Electronic Flight Instrument System (E.F.I.S.) is fitted, (ix) Increase in certificated taxiing, take-off, landing and zero fuel weights, and (x) Increase of  $M_{MO}$  from 0.77 to 0.80. (See NOTE 36 and 42).

**Hawker 800 (U-125A) (Transport Aircraft), Approved December 9, 1994 (See NOTES 49 and 64)**

The U-125A variant was intended for use by the Japan Air Self Defense Force as a search and rescue aircraft.

Engines 2 Garrett Turbine Engine Company TFE 731-5R turbofan engines

Fuel Aviation Kerosene to specification Defence Standard 91-87, NATO Code F-34, Defence Standard 91-91, NATO Code F-35, ASTM .D.1655 Jet A or Jet A-1, CAN/CGSB 3.23/, MIL-T-83133 JP8 Grade.  
Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, ASTM D.1655 Jet B, MIL-T-5624 JP4 and JP5 Grades, CAN/CGSB 3.22/ Jet B, GOST 10227-86 T-2 (See NOTE 28)

<u>Engine Limits</u>	<u>TFE 731-5R</u>	<u>TFE 731-5R</u>
	<u>with APR</u>	<u>with APR</u>
	<u>not operating</u>	<u>operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	4,304	4,500
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	4,304	4,304
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1)	100 % (21,000 rpm)	100 % (21,000 rpm)
H.P. Shaft (N2)	100 % (29,692 rpm)	100 % (29,989 rpm)

**XVI. Model BAe.125 Series 800A, Model BAe.125 Series 800A (C-29A), Model BAe.125 Series 800A (U-125), Model BAe.125 Series 800B, Hawker 800 (name change), Hawker 800 (U-125A) (cont'd)**

Engine Limits (cont'd)

	<u>TFE 731-5R</u> <u>with APR</u> <u>not operating</u>	<u>TFE 731-5R</u> <u>with APR</u> <u>operating</u>
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	952°C	974°C
Take-off (10 minutes maximum)	984°C	984°C
Take-off (instantaneous)	994°C	994°C
Maximum continuous	924°C	924°C
Engine starting and relighting (unrestricted)	952°C	952°C
Engine starting and relighting (10 seconds)	974°C	974°C
Engine starting and relighting (5 seconds)	above 974°C	above 974°C
Maximum permissible oil temperature:		
Sea level to 30,000 ft.	127°C	127°C
Above 30,000 ft.	140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
Minimum permissible oil temperature:		
Engine starting	-40°C	-40°C
Before take-off	+30°C	+30°C
Maximum permissible air bleed extraction:		
L.P. air source	5 %	5 %
H.P. air source (climb and cruise condition)	3 %	3 %
H.P. air source (descent condition only)	5 %	5 %

Airspeed Limits (IAS)

V <sub>MO</sub> (maximum operating)	
With fuel in the ventral tank	280 knots
With ventral tank empty or with the pannier fitted to BAe. Mod 259292 (See NOTE 33)	335 knots
S.L. to 12,000 ft. decreasing linearly 1 kt. per 680 ft. to 310 kts. at 29,000 ft.	
V <sub>MO</sub> (maximum operating) (with Mod. 25B047A)	335 knots
S.L. to 12,000 ft. decreasing linearly 1 kt. per 680 ft. to 313 kts. at 27,300 ft.	
M <sub>MO</sub> (maximum operating)	0.80 M
M <sub>MO</sub> (maximum operating) (with Mod. 25B047A)	0.78 M
V <sub>A</sub> (maneuvering)	
Sea level	196 knots
10,000 ft.	202 knots
20,000 ft.	207 knots
30,000 ft.	217 knots
35,000 ft.	225 knots
38,000 ft.	231 knots
40,000 ft.	236 knots
41,000 ft.	238 knots

**XVI. Model BAe.125 Series 800A, Model BAe.125 Series 800A (C-29A), Model BAe.125 Series 800A (U-125), Model BAe.125 Series 800B, Hawker 800 (name change), Hawker 800 (U-125A) (cont'd)**

Airspeed Limits (IAS) (cont'd)

V <sub>FE</sub> (Flap speeds)	
<u>Deflection</u>	
15°	220 knots
25°	175 knots
45°	165 knots
V <sub>LO</sub> (landing gear operation)	
Retract	220 knots
Extend	220 knots
V <sub>LE</sub> (landing gear extended)	220 knots
V <sub>MC</sub> (minimum control speed)	
V <sub>MCA</sub> (with flaps 0° or 15° at sea level for temperatures below 23°C)	115 knots
V <sub>MCA</sub> (with either rudder bias strut inoperative)	125 knots
V <sub>MCG</sub> (with flaps 0° or 15° at sea level for temperatures below 23°C)	112 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

87.16 in. The leading edge of the SMC is 15.70 in. forward of the datum (for SMC definition, see Approved Flight Manual).

C.G. Range

(Gear and Flaps Retracted)

Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
27,400	25.60	(6.61)*	31.80	12.02
26,600	-	-	35.00	14.81
26,000	23.70	(4.96)*	-	-
25,800	19.20	(1.03)*	-	-
25,000	17.60	0.36	-	-
24,000	16.40	1.40	35.00	14.81
23,000	15.60	2.10	-	-
22,600	-	-	33.20	13.24
22,400	-	-	28.00	8.70
22,000	15.20	2.45	-	-
21,400	-	-	26.20	7.14
21,000	15.00	2.63	-	-
20,000	-	-	26.60	7.48
19,000	-	-	27.30	8.09
18,000	-	-	28.20	8.88
17,520	15.70	2.02	24.60	5.74
17,200	-	-	29.20	9.75
16,600	-	-	29.60	10.10
15,750	15.00	2.63	-	-
15,400	15.70	2.02	-	-
14,120	19.00	(0.86)*	28.60	9.23

\*(Aft of Datum)

**XVI. Model BAe.125 Series 800A, Model BAe.125 Series 800A (C-29A), Model BAe.125 Series 800A (U-125), Model BAe.125 Series 800B, Hawker 800 (name change), Hawker 800 (U-125A) (cont'd)**

<u>C.G. Range</u> (with Mod. 259550 & 253169A) (Gear and Flaps Retracted)	<u>Wt. Lbs.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	28,000	25.60	(6.61)*	32.00	12.19
	27,150	-	-	35.00	14.81
	26,600	23.50	(4.78)*	-	-
	26,500	19.50	(1.30)*	-	-
	26,000	18.00	0.00	-	-
	25,000	16.80	1.06	-	-
	24,000	16.10	1.67	35.00	14.81
	23,000	15.55	2.15	-	-
	22,600	-	-	33.10	13.15
	22,400	-	-	28.40	9.05
	22,000	15.20	2.45	-	-
	21,400	15.00	2.63	26.30	7.22
	20,300	-	-	26.60	7.48
	18,000	15.70	2.02	24.60	5.74
	17,600	-	-	29.20	9.75
	17,000	-	-	29.60	10.10
	15,600	15.00	2.63	-	-
	15,400	15.70	2.02	-	-
	14,120	19.00	(0.86)*	28.60	9.23

\*(Aft of Datum)

Straight line variations between weights.

<u>C.G. Range</u> (with Mod. 25B047A) (Gear and Flaps Retracted)	<u>Wt. Lbs.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	26,866	19.00	(0.86)*	23.30	.61
	25,000	16.20	1.58	24.50	5.65
	22,000	15.00	2.63	21.30	2.86
	19,500	15.00	2.63	-	-
	19,200	-	-	21.30	2.86
	18,450	15.80	1.93	21.50	3.04
	17,350	15.80	1.93	-	-
	17,000	-	-	23.00	4.35
	16,550	-	-	23.00	4.35

\*(Aft of Datum)

Straight line variations between weights.

<u>Item (Extending)</u>	<u>Moment Change In. Lb.</u>
Wing flaps 15 <sup>o</sup>	+538
25 <sup>o</sup>	+879
45 <sup>o</sup>	+1593
Main landing gear	-1980
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

		with Modifications 259550 & 253169A	
Maximum ramp weight	27,520 Lbs.	28,100 Lbs.	(See NOTE 31)
Maximum brake release weight	27,400 Lbs.	28,000 Lbs.	(See NOTE 31)
Maximum landing weight	23,350 Lbs.	23,350 Lbs.	
Maximum zero fuel weight	17,520 Lbs.	18,000 Lbs.	(See NOTES 32 & 37)
Minimum zero fuel weight	14,120 Lbs.	14,120 Lbs.	

**XVI. Model BAe.125 Series 800A, Model BAe.125 Series 800A (C-29A), Model BAe.125 Series 800A (U-125), Model BAe.125 Series 800B, Hawker 800 (name change), Hawker 800 (U-125A) (cont'd)**

Maximum Weights (cont.)

	with Modification 25B047A
Maximum ramp weight	26,866 Lbs.
Maximum brake release weight	26,866 Lbs.
Maximum landing weight	23,350 Lbs.
Maximum zero fuel weight	18,450 Lbs.
Minimum zero fuel weight	16,550 Lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

15 Maximum – For FAA approved seating configuration, refer to serial specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward	180.25 to 223.11	100	310
Forward cabin			
(a) Side floor	245.85 to 303.85	50	
(b) Center floor	245.86 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395.3	50	
(b) Center floor	303.85 to 395.3	60	
Aft	397.80 to 422.30	50	60

Fuel Capacity

Usable Fuel

Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	631.75	4208	8.20
Tank 2	631.75	4208	8.20
Ventral tank	231.80	1,544	100.40
Total	1,495.30	9,960	22.49

Oil Capacity

Engine Tank Oil is the oil that is required for circulation in the system.

Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1	1.5	11.3	90.84	1,026
No. 2	1.5	11.3	90.84	1,026
Total	3.0	22.6	90.84	2,052

Maximum Operating Altitude.

41,000 feet

Serial Numbers Eligible.

BAe.125 Series 800A and 800B - 258001 through 258128, 258130, 258132, 258133, 258135 through 258150, 258152, 258153, 258155, 258157, 258160 through 258214, 258216 through 258226, 258228 through 258241, 258243, 258244, 258246, 258248, 258249, 258251 through 258254, (See NOTE 61);  
 C-29A - 258129, 258131, 258134, 258154, 258156 and 258158  
 U-125 - 258215, 258227 and 258242  
 Hawker 800 - 258255 through 258265, 258267, 258269 through 258276  
 U-125A - 258245, 258247, 258250, 258268, 258288, 258305, 258306, 258325, 258333, 258341, 258348, 258360, 258370, 258381, 258407, 258427, 258445, 258469, 258493, 258513, 258533, 258610, 258629, 258685, 258735 and 258797, 258824 and 258843

**XVII. British Aerospace Model BAe.125 Series 1000A (Transport Aircraft), Approved October 31, 1991**  
**(See NOTES 39, 45, 64 and 66)**

**British Aerospace Model BAe.125 Series 1000B (Transport Aircraft), Approved May 28, 1999 (See NOTES 45 and 58)**

**Hawker 1000 (name change), Approved January 28, 1994 (See NOTES 41, 45, 64 and 66)**

The BAe.125 Series 1000A, 1000B and Hawker 1000 differs respectively from the BAe.125 Series 800A, 800B and Hawker 800 aircraft in the following major respects, (i) Pratt and Whitney Canada (P&WC) PW305 engines with Full Authority Digital Engine Control replace the Garrett Turbine Engine Company TFE 731-5R Engines, (ii) Fuselage is lengthened by 33 inches and the addition of a window on each side, (iii) A forward ventral tank is introduced and the aft ventral tank increased in capacity, (iv) An external rear baggage compartment loading door is introduced (See NOTE 45), (v) Split pitch and roll control systems are introduced, (vi) A secondary pressure bulkhead is introduced between the toilet and the rear baggage, (vii) An increase in the Maximum Operating Altitude to 43,000 feet is introduced, and (viii) An increase in certificated taxiing, take-off, landing and zero fuel weights are introduced.

Engines

2 Pratt & Whitney Canada (P&WC) PW305 turbofan engines, or  
 2 Pratt & Whitney Canada (P&WC) PW305B turbofan engines (Post Mod. 253650A)  
 (See NOTE 43)

Fuel

Aviation Kerosene to specification Defence Standard 91-87, NATO Code F-34, Defence Standard 91-91, NATO Code F-35, ASTM .D.1655 (Jet A or Jet A-1), MIL-T-5624 - JP4 and JP5 Grades, MIL-T-83133 JP8 Grade, CAN/CGSB 3.23 (Jet A or A-1), GOST 10227-86 (TS-1 premium and RT.)

Engine Limits

	<u>PW305 engine</u>	<u>PW305B engine</u>
Normal take-off static thrust (to 15°C OAT) lbs.	5,225	5,204
Maximum take-off static thrust (to 22°C OAT) lbs.	5,225	-
Maximum take-off static thrust (to 23.5°C OAT) lbs.	-	5,266
Maximum continuous thrust (to 19.4°C OAT) lbs.	4,750	-
Maximum continuous thrust (to 27.5°C OAT) lbs.	-	4,483
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1)	102 % (10,820rpm)	102 % (10,820 rpm)
H.P. Shaft (N2)	102 % (27,469rpm)	102 % (47,469 rpm)
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	785°C	785°C
Take-off (20 seconds maximum)	795°C	795°C
Maximum continuous	785°C	785°C
Engine starting and relighting (unrestricted)	680°C	680°C
Maximum permissible oil temperature:		
Maximum oil temperature.	135°C	135°C
Transient limit ( 20°C)	143°C	143°C

**XVII. Model BAe.125 Series 1000A, Model BAe.125 Series 1000B, Hawker 1000 (name change) (cont'd)**

<u>Engine Limits</u> (cont.)		<u>PW305 engine</u>	<u>PW305B engine</u>
	Minimum permissible oil temperature:		
	Engine starting	-40°C	-40°C
	Before take-off	+10°C	+10°C
	Maximum permissible air bleed extraction:		
	L.P. air source	5 %	5 %
	H.P. air source (climb and cruise condition)	7 %	7 %
	Combined total air source	10 %	10 %
<u>Airspeed Limits</u> (IAS)	V <sub>MO</sub> (Maximum operating) with ventral tanks empty, up to 12,900 feet reducing by 1 kt. per 750 ft to 308 knots at 29,400 ft. with ventral tanks not empty up to an altitude of 33,730 feet.	330 knots  280 knots	
	M <sub>MO</sub> (maximum operating) 0.80 M		
	V <sub>A</sub> (Maneuvering)	200 knots	
	V <sub>FE</sub> (Flap speeds)		
	<u>Deflection</u>		
	15°	220 knots	
	25°	180 knots	
	45°	170 knots	
	V <sub>LO</sub> (Landing gear operation)		
	Retract	220 knots	
	Extend	220 knots	
	V <sub>LE</sub> (Landing gear extended)	220 knots	
			with Modification
	V <sub>MC</sub> (Minimum control speed)		<u>253650A</u>
	V <sub>MCG</sub> (with flaps 0° or 15° at sea level for temperatures below 20°C)	119 knots	119.5 knots
	V <sub>MCA</sub> (with flaps at 0° at sea level for temperatures below 20°C)	124 knots	116.5 knots
	V <sub>MCA</sub> (with flaps at 15° at sea level for temperatures below 20°C)	119 knots	111.5 knots
<u>Datum</u>	The center of gravity datum (station 353.04 inches) is 12.25 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.		
<u>Standard Mean Chord</u> (SMC)	87.16 in. The leading edge of the SMC is 15.70 in., forward of the datum (for SMC definition, see Approved Flight Manual).		
<u>C.G. Range</u> (Gear and Flaps Retracted)		<u>Fwd. of Datum</u>	<u>Aft of Datum</u>
	<u>Wt. Lbs.</u>	<u>% SMC</u> <u>In.</u>	<u>% SMC</u> <u>In.</u>
	31,000	22.00    (3.48)*	31.00    11.32
	30,300	-        -	33.40    13.41
	29,000**	12.50    4.81	19.30    1.12
	27,000	-        -	34.00    13.93
	26,500**	16.00    1.75	-        -
	24,000**	12.50    4.81	15.40    (2.24)**x
	22,500	-        -	31.40    11.67
	22,000	15.00    2.63	-        -
	19,800***	16.18    1.60	28.42    7.66
	19,000	15.00    2.63	-        -
	19,000***	-        -	31.00    11.32
	16,300	16.00    1.75	-        -

**XVII. Model BAe.125 Series 1000A, Model BAe.125 Series 1000B, Hawker 1000 (name change) (cont'd)**

<u>C.G. Range</u> (Gear and Flaps Retracted) (cont.)	<u>Wt. Lbs.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	16,300***	16.00	1.75	-	-
	15,800***	20.80	(2.43)*	31.00	11.32
	15,800	20.80	(2.43)*	33.30	13.32

\*(Dimension Aft of Datum)

\*\*(Boundary Area for Fuel Transfer In-Flight only)

\*\*\* (Boundary Area for Zero Fuel Weight)

\*X (Dimension Fwd of Datum)

Straight line variations between weights.

<u>C.G. Range</u> (with Mod 253379A) (Gear and Flaps Retracted)	<u>Wt. Lbs.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
	31,000	22.00	(3.48)*	31.00	11.32
	30,300	-	-	33.40	13.41
	29,000**	12.50	4.81	19.30	1.12
	27,000	-	-	34.00	13.93
	26,500	16.00	1.75	-	-
	26,500**	16.00	1.75	-	-
	24,000**	12.50	4.81	15.40	(2.24)*X
	22,500	-	-	31.40	11.67
	22,000	15.00	2.63	-	-
	20,300***	16.20	1.58	26.80	7.66
	19,000	15.00	2.63	-	-
	19,000***	-	-	31.00	11.32
	16,300	16.00	1.75	-	-
	16,300***	16.00	1.75	-	-
	15,800***	20.80	(2.43)*	31.00	11.32
	15,800	20.80	(2.43)*	33.30	13.32

\*(Dimension Aft of Datum)

\*\*(Boundary Area for Fuel Transfer In-Flight only)

\*\*\* (Boundary Area for Zero Fuel Weight)

\*X (Dimension Fwd of Datum)

Straight line variations between weights.

<u>Item (Extending)</u>	<u>Moment Change In. Lb.</u>
Wing flaps 15 <sup>o</sup>	+538
25 <sup>o</sup>	+879
45 <sup>o</sup>	+1593
Main landing gear	-1980
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

		<u>with Modification 253379A</u>
Maximum ramp weight	31,100 Lbs.	31,100 Lbs.
Maximum brake release weight	31,000 Lbs.	31,000 Lbs.
Maximum landing weight	25,000 Lbs.	25,000 Lbs.
Maximum zero fuel weight	19,800 Lbs.	20,300 Lbs. (See NOTES 38 & 44)
Minimum zero fuel weight	15,800 Lbs.	15,800 Lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers15 Maximum – For FAA approved seating configuration, refer to serial specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

**XVII. Model BAe.125 Series 1000A, Model BAe.125 Series 1000B, Hawker 1000 (name change) (cont'd)**Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward Stowage Wardrobe	107.35 to 192.25	100	80
Forward Cabin			
(a) Side Floor	214.75 to 303.85	50	-
(b) Center floor	214.75 to 303.85	60	-
Aft Cabin			
(a) Side floor	303.85 to 381.75	50	-
(b) Center floor	303.85 to 381.75	60	-
Wardrobe	370.81 to 381.56	100	200
Aft Luggage Compartment	410.30 to 445.40	100	500

Fuel Capacity

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	637.0	4243	8.24
Tank 2	637.0	4243	8.24
Fwd Ventral tank	164.0	1092	-87.78
Aft Ventral tank*	270.0	1798	109.07
Total	1,708.0	11,376	15.00
Usable Fuel (pressure refueled)			
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	634.6	4227	8.24
Tank 2	634.6	4227	8.24
Fwd Ventral tank	160.4	1068	-87.78
Aft Ventral tank*	266.4	1774	109.07
Total	1,696.0	11,296	15.00

\* If external toilet servicing facility is fitted See NOTE 62.

Oil Capacity

The oil tank has a capacity of 2.0 U.S. gallons of oil, of which 1.25 U.S. gallons may be consumed without adversely affecting the operation of the engine. The engine oil tank in the BAe.125 Series 1000A, 1000B and Hawker 1000 is an integral part of the engine.

Maximum Operating Altitude.

43,000 feet

Serial Numbers Eligible.

BAe.125 Series 1000A and 1000B: 258151, 258159, 259004 through 259042. (See NOTE 61)  
Hawker 1000 - 259003, 259043 through 259052

**XVIII. Hawker 800XP (Transport Aircraft), Approved July 28, 1995 (See NOTES 47, 59, 64 and 65)**

The Hawker 800XP differs respectively from the BAe.125 Series 800A aircraft in the following major respects:

- (i) Allied Signal Engines TFE 731-5BR turbofan engines replace the Garrett Turbine Engine Company TFE 731-5R turbofan engines,
- (ii) Dee Howard TR5000BR thrust reversers fitted as standard,
- (iii) Increase in certificated ramp, take-off and maximum zero fuel weights,
- (iv) Vortilons replace wing fences and Hawker 1000 aileron servo tab gearing is introduced,
- (v) Rudder Bias moment arm is reduced to 2.72",
- (vi) Mach Trim System is fitted,
- (vii) 3 Wheel ECS is fitted as standard,
- (viii) 38 liter TKS tank is fitted, and
- (ix) Introduction of Hawker 800XP designation.

Engines

2 Allied Signal Engines TFE 731-5BR turbofan engines.

**XVIII. Hawker 800XP** (cont'd)Fuel

Aviation Kerosene to specification Defence Standard 91-87, NATO Code F-34, Defence Standard 91-91, NATO Code F-35, ASTM .D.1655 (Jet A or Jet A-1), CAN/COGS 3.23/ (Jet A or Jet A-1), Mil-T-83133 JP8 Grade, GOST 10227-86 (TS-1, T-1 or RT.), GB 6537-94/No.3. Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, ASTM D.1655 Jet B, MIL-T-5624 JP4 and JP5 Grades, CAN/COGS 3.22/ Jet B, GOST 10227-86 T-2

Engine Limits

	<u>TFE 731-5BR</u> <u>with APR</u> <u>not operating</u>	<u>TFE 731-5BR</u> <u>with APR</u> <u>operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	4,750	4,750
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	4,634	4,634
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1)	100 % (21,000 rpm)	100 % (21,000 rpm)
H.P. Shaft (N2)	100.8 % (30,540 rpm)	100.8 % (30,540 rpm)
	<u>TFE 731-5BR</u> <u>with APR</u> <u>not operating</u>	<u>TFE 731-5BR</u> <u>with APR</u> <u>operating</u>
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	978°C	996°C
Take-off (5 second maximum)	1006°C	1006°C
Take-off (2 second maximum)	1016°C	1016°C
Maximum continuous	968°C	968°C
Engine starting and relighting (unrestricted)	978°C	978°C
Engine starting and relighting (10 seconds)	996°C	996°C
Engine starting and relighting (5 seconds)	above 996°C	above 996°C
Maximum permissible oil temperature:		
Sea level to 30,000 ft.	127°C	127°C
Above 30,000 ft.	140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
Minimum permissible oil temperature:		
Engine starting	-40°C	-40°C
Before take-off	+30°C	+30°C
Maximum permissible air bleed extraction:		
L.P. air source	5 %	5 %
H.P. air source (climb and cruise condition)	3 %	3 %
H.P. air source (descent condition only)	5 %	5 %

**XVIII. Hawker 800XP** (cont'd)Airspeed Limits (IAS)

$V_{MO}$ (maximum operating)		
With fuel in the ventral tank		280 knots
With ventral tanks empty, Sea level to 12,000 ft. decreasing linearly 1 knot per 680 ft. to 310 kts. at 29,000 ft.		335 knots
$M_{MO}$ (maximum operating)		0.80 M
$M_{MO}$ (Mach Trimmer unserviceable/inoperative)		0.73 M
$V_A$ (maneuvering)		
	Sea level	196 knots
	10,000 ft.	202 knots
	20,000 ft.	207 knots
	30,000 ft.	217 knots
	35,000 ft.	225 knots
	38,000 ft.	231 knots
	40,000 ft.	236 knots
	41,000 ft.	238 knots
$V_{FE}$ (Flap speeds)		
<u>Deflection</u>		
15°		20 knots
25°		175 knots
45°		165 knots
$V_{LO}$ (landing gear operation)		
Retract		220 knots
Extend		220 knots
$V_{LE}$ (landing gear extended)		220 knots
$V_{MC}$ (minimum control speed)		
$V_{MCA}$ (with flaps 0° at sea level for temperatures below 23° C)		114.0 knots
$V_{MCA}$ (with flaps 15° at sea level for temperatures below 23° C)		108.0 knots
$V_{MCG}$ (with flaps 0° or 15° at sea level for temperatures below 23°C)		115.5 knots
$V_{MCL}$ (with flaps 25° at sea level for temperatures below 23°C)		106.0 knots
$V_{MCL}$ (with flaps 45° at sea level for temperatures below 23°C)		105.0 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

87.16 in. The leading edge of the SMC is 15.70 in. forward of the datum (for SMC definition, see Approved Flight Manual).

**XVIII. Hawker 800XP** (cont'd)

<u>C.G. Range</u> (Gear and Flaps Retracted)	Wt. Lbs.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		% SMC	Ft.	% SMC	Ft.
	28,000	***	24.80	0.49*	32.10 1.02
	27,100	***	23.40	0.39 *	35.00 1.23
	27,000	***	25.60	0.55 *	- -
	26,950		19.40	0.10 *	- -
	26,000		17.60	0.03	- -
	25,500	***	-	-	29.00 0.80
	25,000		16.60	-0.10	- -
	24,000	***	-	-	35.00 1.23
	24,000		15.70	-0.17	- -
	23,000		15.25	-0.20	- -
	22,600	***	-	-	33.00 1.09
	22,400	***	-	-	28.40 0.75
	22,000		15.00	-0.22	- -
	21,400		-	-	26.30 0.60
	20,400		-	-	26.60 0.62
	18,450	**	15.70	-0.17	24.70 0.49
	17,700		-	-	29.20 0.81
	17,000	**	-	-	29.60 0.84
	15,750		15.00	-0.22	- -
	15,465	**	15.70	-0.17	- -
	14,120	**	19.00	0.07 *	28.70 0.78

\*(Dimension Aft of Datum)

\*\*(Boundary Area for Zero Fuel Weight)

\*\*\* (Boundary Area obtainable with Full Ventral Tank fuel)

<u>Item (Extending)</u>	<u>Moment Change In. Lb.</u>
Wing flaps 15 <sup>0</sup>	+538
25 <sup>0</sup>	+879
45 <sup>0</sup>	+1593
Main landing gear	-1980
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum ramp weight	28,120 Lbs.
Maximum brake release weight	28,000 Lbs.
Maximum landing weight	23,350 Lbs.
Maximum zero fuel weight	18,450 Lbs.
Minimum zero fuel weight	14,120 Lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers15 Maximum – For FAA approved seating configuration, refer to serial specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.

**XVIII. Hawker 800XP** (cont'd)Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward	180.25 to 234.24	100	225
Forward cabin			
(a) Side floor	245.85 to 303.85	50	
(b) Center floor	245.86 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395.3	50	
(b) Center floor	303.85 to 395.3	60	
Aft	397.80 to 422.30	100	210

Fuel Capacity

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	634.00	4,223	8.20
Tank 2	634.00	4,223	8.20
Ventral tank (See NOTE 62)	<u>233.00</u>	<u>1,552</u>	100.40
Total	1,501.00	9,998	22.51
Usable Fuel (Pressure refueled)			
Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.
Tank 1	631.60	4,207	8.20
Tank 2	631.60	4,207	8.20
Ventral tank (See NOTE 62)	<u>229.40</u>	<u>1,528</u>	100.40
Total	1,492.60	9,942	22.61

Oil Capacity

Engine Tank Oil is the oil that is required for circulation in the system.

Location	Volume U.S. Gal	Maximum Weight Lbs.	Arm In.	Moment In. Lbs.
No. 1	1.65	12.4	90.84	1,126
No. 2	<u>1.65</u>	<u>12.4</u>	90.84	1,126
Total	3.30	24.8	90.84	2,252

Maximum Operating Altitude

41,000 feet.

Serial Numbers Eligible

Hawker 800XP equipped with Honeywell SPZ 8000, or optional Collins EFIS 86 258266, 258277, 258279 through 258287, 258289 through 258304, 258307 through 258324, 258326 through 258332, 258334 through 258340, 258342 through 258347, 258349 through 258359, 258361 through 258369, 258371 through 258380, 258382 through 258406, 258408 through 258426, 258428 through 258444, 258446 through 258468, 258470 through 258492, 258494 through 258512, 258514 through 258532, 258534 through 258540, 258542 through 258555, 258557 through 258566.

Hawker 800XP equipped with Collins Pro Line 21  
Serial Number 258278, 258541, 258556, 258567 through 258609, 258611 through 258628, 258630 through 258684, 258686 through 258734, 258736 through 258788, 258795, 258802, 258821, 258825, 258829, 258834, 258840, and 258847.

**XIX. Hawker 850XP (Transport Aircraft), Approved February 28, 2006 (See NOTES 1, 2, 3, 8, 64, and 68).**

The Hawker 850XP differs respectively from the Hawker 800XP aircraft in the following major respects:  
Addition of winglets on the outboard wings.

Engines

2 Allied Signal Engines TFE 731-5BR turbofan engines.

Fuel

Aviation Kerosene to specification Defence Standard 91-87, NATO Code F-34, Defence Standard 91-91, NATO Code F-35, ASTM .D.1655 (Jet A or Jet A-1), CAN/COGS 3.23/ (Jet A or Jet A-1), Mil-T-83133 JP8 Grade, GOST 10227-86 (TS-1, T-1 or RT.), GB 6537-94/No.3.

Aviation Wide-cut to specification Defence Standard 91-88, NATO Code F-40, ASTM D.1655 Jet B, MIL-T-5624 JP4 and JP5 Grades, CAN/COGS 3.22/ Jet B, GOST 10227-86 T-2

Engine Limits

	<u>TFE 731-5BR with APR not operating</u>	<u>TFE 731-5BR with APR operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lbs.	4,750	4,750
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lbs.	4,634	4,634
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1)	100 % (21,000 rpm)	100 % (21,000 rpm)
H.P. Shaft (N2)	100.8 % (30,540 rpm)	100.8 % (30,540 rpm)
	<u>TFE 731-5BR with APR not operating</u>	<u>TFE 731-5BR with APR operating</u>
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	978°C	996°C
Take-off (5 second maximum)	1006°C	1006°C
Take-off (2 second maximum)	1016°C	1016°C
Maximum continuous	968°C	968°C
Engine starting and relighting (unrestricted)	978°C	978°C
Engine starting and relighting (10 seconds)	996°C	996°C
Engine starting and relighting (5 seconds)	above 996°C	above 996°C
Maximum permissible oil temperature:		
Sea level to 30,000 ft.	127°C	127°C
Above 30,000 ft.	140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
Minimum permissible oil temperature:		
Engine starting	-40°C	-40°C
Before take-off	+30°C	+30°C
Maximum permissible air bleed extraction:		
L.P. air source	5 %	5 %
H.P. air source (climb and cruise condition)	3 %	3 %
H.P. air source (descent condition only)	5 %	5 %

**XIX. Hawker 850XP** (cont'd)Airspeed Limits (IAS)

$V_{MO}$ (maximum operating)	
With fuel in the ventral tank	280 knots
With ventral tanks empty, Sea level to 12,000 ft. decreasing linearly 1 knot per 680 ft. to 310 kts. at 29,000 ft.	335 knots

$M_{MO}$  (maximum operating) 0.80 M

$M_{MO}$  (Mach Trimmer unserviceable/inoperative) 0.73 M

$V_A$ (maneuvering)	
Sea level	196 knots
10,000 ft.	202 knots
20,000 ft.	207 knots
30,000 ft.	217 knots
35,000 ft.	225 knots
38,000 ft.	231 knots
40,000 ft.	236 knots
41,000 ft.	238 knots

 $V_{FE}$  (Flap speeds)Deflection

15°	220 knots
25°	175 knots
45°	165 knots

 $V_{LO}$  (landing gear operation)

Retract	220 knots
Extend	220 knots

$V_{LE}$  (landing gear extended) 220 knots

 $V_{MC}$  (minimum control speed)

$V_{MCA}$ (with flaps 0° at sea level for temperatures below 23° C)	114.0 knots
$V_{MCA}$ (with flaps 15° at sea level for temperatures below 23° C)	108.0 knots
$V_{MCG}$ (with flaps 0° or 15° at sea level for temperatures below 23°C)	115.5 knots
$V_{MCL}$ (with flaps 25° at sea level for temperatures below 23°C)	106.0 knots
$V_{MCL}$ (with flaps 45° at sea level for temperatures below 23°C)	105.0 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

87.16 in. The leading edge of the SMC is 15.70 in. forward of the datum (for SMC definition, see Approved Flight Manual).

**XIX. Hawker 850XP** (cont'd)C.G. Range (Gear and Flaps Retracted)

<u>Wt.</u> <u>Lbs.</u>		Forward Limits		Aft Limits with Empty Ventral Tank		Aft Limits with Full Ventral Tank	
		<u>% SMC</u>	<u>*Ft.</u>	<u>% SMC</u>	<u>*Ft.</u>	<u>% SMC</u>	<u>*Ft.</u>
28,000	**	24.78	+0.49	N/A		32.08	+1.02
27,100		23.40	+0.39	N/A		34.98	+1.23
27,000		20.72	+0.20	25.57	+0.55	34.98	+1.23
26,950		19.37	+0.10	25.68	+0.56	34.98	+1.23
26,000		17.57	-0.03	27.84	+0.72	34.98	+1.23
25,500		17.07	-0.07	28.98	+0.80	34.98	+1.23
25,000		16.57	-0.10	28.88	+0.79	34.98	+1.23
24,000		15.67	-0.17	28.68	+0.78	34.98	+1.23
23,350		15.37	-0.19	28.59	+0.77	N/A	
23,000		15.18	-0.20	28.49	+0.76	33.54	+1.13
22,600		15.05	-0.21	28.41	+0.76	32.97	+1.09
22,400		15.09	-0.21	28.37	+0.75	N/A	
22,000		14.97	-0.22	27.53	+0.69	N/A	
21,400		14.97	-0.22	26.27	+0.60	N/A	
20,400		14.97	-0.22	26.57	+0.62	N/A	
18,450	***	15.67	-0.17	24.68	+0.49	N/A	
17,700		14.97	-0.22	29.17	+0.81	N/A	
17,000	***	15.67	-0.17	29.57	+0.84	N/A	
16,100		14.97	-0.22	29.29	+0.82	N/A	
15,750		14.97	-0.22	29.18	+0.81	N/A	
15,465	***	15.67	-0.17	29.09	+0.81	N/A	
14,120	***	18.97	+0.07	28.67	+0.78	N/A	

\* Feet from CG Datum (negative is forward and positive is aft)

\*\* Applicable with Full Ventral Tank Only

\*\*\* Zero Fuel Weight Limits

<u>Item (Extending)</u>	<u>Moment Change In. Lb.</u>
Wing flaps 15 <sup>0</sup>	+538
25 <sup>0</sup>	+879
45 <sup>0</sup>	+1593
Main landing gear	-1980
Nose landing gear	+1380

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum ramp weight	28,120 Lbs.
Maximum brake release weight	28,000 Lbs.
Maximum landing weight	23,350 Lbs.
Maximum zero fuel weight	18,450 Lbs.
Minimum operating weight	16,100 Lbs.
Minimum zero fuel weight	14,120 Lbs.

**XIX. Hawker 850XP** (cont'd)Minimum Crew

For all flights, 2 pilots

Maximum Passengers15 Maximum – For FAA approved seating configuration, refer to serial specific FAA Airplane Flight Manual weight and balance section, or Weight and Balance Manual.Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft <sup>2</sup>	Capacity Pounds (See NOTE 8)
Forward	180.25 to 234.24	100	225
Forward cabin			
(a) Side floor	245.85 to 303.85	50	
(b) Center floor	245.86 to 303.85	60	
Aft cabin			
(a) Side floor	303.85 to 395.3	50	
(b) Center floor	303.85 to 395.3	60	
Aft	397.80 to 422.30	100	210

Fuel Capacity

## Usable Fuel

Location	Volume	Maximum	Arm
	U.S. Gal	Weight Lbs.	In.
Tank 1	634.00	4,223	8.20
Tank 2	634.00	4,223	8.20
Ventral tank (See NOTE 62)	233.00	1,552	100.40
Total	1,501.00	9,998	22.51

## Usable Fuel (Pressure refueled)

Location	Volume	Maximum	Arm
	U.S. Gal	Weight Lbs.	In.
Tank 1	631.60	4,207	8.20
Tank 2	631.60	4,207	8.20
Ventral tank (See NOTE 62)	229.40	1,528	100.40
Total	1,492.60	9,942	22.61

Oil Capacity

Engine Tank Oil is the oil that is required for circulation in the system.

Location	Volume	Maximum	Arm	Moment
	U.S. Gal	Weight Lbs.	In.	In. Lbs.
No. 1	1.65	12.4	90.84	1,126
No. 2	1.65	12.4	90.84	1,126
Total	3.30	24.8	90.84	2,252

Maximum Operating Altitude

41,000 feet.

Serial Numbers Eligible

Serial Number 258789 through 258794, 258796, 258798 through 258801, and 258803 through 258819, 258822, 258823, 258826 through 258828, 258830 through 258833, 258835 through 258838, 258841, 258844, 258845, 258848, 258852, 258855, 258856, 258858, 258859, 258861, 258872, 258874, 258876, 258891, 258893, 258895, 258900, 258901, 258904, 258907, 258909, 258912, 258915, 258921, 258959, 258961, 258963, 258977, 258980, 258982 and after.

**XX. Hawker 900XP (Transport Aircraft), Approved August 24, 2007 (See NOTES 1, 2, 3, 8, 63, 64, and 69)**

The Hawker 900XP differs respectively from the Hawker 850XP aircraft in the following major respects:  
Honeywell Aerospace TFE731-50R turbofan engines replacing the TFE731-5BR engines, and updated Rockwell Collins Pro Line 21 Avionics to integrate with the new engine limitations in the cockpit.

Engines

2 Honeywell Aerospace TFE731-50R turbofan engines.

Fuel

Aviation Kerosene to specification Defense Standard 91-87, NATO Code F-34, Defense Standard 91-91, NATO Code F-35, ASTM .D.1655 (Jet A or Jet A-1), CAN/CGSB 3.23/ (Jet A or Jet A-1), Mil-T-83133 JP8 Grade, GOST 10227-86 (TS-1 or RT.), GB 6537-94/No.3.

Aviation Wide-cut to specification Defense Standard 91-88, NATO Code F-40, ASTM D.1655 Jet B, MIL-T-5624 JP4 and JP5 Grades, CAN/CGSB 3.22/ Jet B, GOST 10227-86 T-2

Engine Limits

	<u>TFE 731-50R</u> <u>with APR</u> <u>not operating</u>	<u>TFE 731-50R</u> <u>with APR</u> <u>operating</u>
Take-off static thrust: standard day, sea level conditions (5 minute limit) lbs.	4,750	4,750
Maximum continuous static thrust: standard day, sea level conditions (unrestricted) lbs.	4,634	4,634
Maximum permissible engine rotor operating speed		
L.P. Shaft (N1)	100% (21,000 rpm)	100% (21,000 rpm)
H.P. Shaft (N2)	100 % (31,485 rpm)	101 % (31,800 rpm)
Maximum permissible Interstage Turbine Temperature (ITT):		
Take-off (5 minutes maximum)	999°C	1022°C
Maximum continuous	991°C	991°C
Engine starting and relighting (Unrestricted)	994°C	994°C
Maximum permissible oil temperature:		
Sea level to 30,500 ft.	127°C	127°C
Above 30,500 ft.	140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
Minimum permissible oil temperature:		
Engine starting	-40°C	-40°C
Before take-off	+30°C	+30°C
Maximum permissible air bleed extraction:		
L.P. air source	5%	5%
H.P. air source (climb and cruise condition)	3%	3%
H.P. air source (descent condition)	5%	5%

**XX. Hawker 900XP** (cont'd)Airspeed Limits (IAS)

$V_{MO}$ (maximum operating)		
With fuel in the ventral tank		280 knots
With ventral tanks empty, Sea level to 12,000 ft. decreasing linearly 1 knot per 680 ft. to 310 kts. at 29,000 ft.		335 knots
$M_{MO}$ (maximum operating)		0.80 M
$M_{MO}$ (Mach Trimmer unserviceable/inoperative)		0.73M
$V_A$ (maneuvering)		
	Sea level	196 knots
	10,000 ft.	202 knots
	20,000 ft.	207 knots
	30,000 ft.	217 knots
	35,000 ft.	225 knots
	38,000 ft.	231 knots
	40,000 ft.	236 knots
	41,000 ft.	238 knots
$V_{FE}$ (Flap speeds)		
	<u>Deflection</u>	
	15°	220 knots
	25°	175 knots
	45°	165 knots
$V_{LO}$ (landing gear operation)		
Retract		220 knots
Extend		220 knots
$V_{LE}$ (landing gear extended)		220 knots
$V_{MC}$ (minimum control speed)		114.0 knots
$V_{MCA}$		
(with flaps 0° at sea level for temperatures below 23° C)		114.0 knots
(with flaps 15° at sea level for temperatures below 23° C)		108.0 knots
$V_{MCG}$ (0 Kt Crosswind)		
(with flaps 0° or 15° at sea level for temperatures below 23°C)		115.5 knots
$V_{MCL}$		
(with flaps 25° at sea level for temperatures below 23° C)		106.0 knots
(with flaps 45° at sea level for temperatures below 23° C)		105.0 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is a placard-identified screw on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

7.263 ft.. The leading edge of the SMC is 1.308 ft. forward of the c.g. datum.

**XX. Hawker 900XP** (cont'd)C.G. Range (Gear and Flaps Retracted)

<u>Wt.</u> <u>Lbs.</u>		Forward Limits		Aft Limits with Empty Ventral Tank		Aft Limits with Full Ventral Tank	
		<u>% SMC</u>	<u>*Ft.</u>	<u>% SMC</u>	<u>*Ft.</u>	<u>% SMC</u>	<u>*Ft.</u>
28,000	**	24.78	+0.49	N/A		32.08	+1.02
27,100		23.40	+0.39	N/A		34.98	+1.23
27,000		20.72	+0.20	25.57	+0.55	34.98	+1.23
26,950		19.37	+0.10	25.68	+0.56	34.98	+1.23
26,000		17.57	-0.03	27.84	+0.72	34.98	+1.23
25,500		17.07	-0.07	28.98	+0.80	34.98	+1.23
25,000		16.57	-0.10	28.88	+0.79	34.98	+1.23
24,000		15.67	-0.17	28.68	+0.78	34.98	+1.23
23,350		15.37	-0.19	28.59	+0.77	N/A	
23,000		15.18	-0.20	28.49	+0.76	33.54	+1.13
22,600		15.05	-0.21	28.41	+0.76	32.97	+1.09
22,400		15.09	-0.21	28.37	+0.75	N/A	
22,000		14.97	-0.22	27.53	+0.69	N/A	
21,400		14.97	-0.22	26.27	+0.60	N/A	
20,400		14.97	-0.22	26.57	+0.62	N/A	
18,450	***	15.67	-0.17	24.68	+0.49	N/A	
17,700		14.97	-0.22	29.17	+0.81	N/A	
17,000	***	15.67	-0.17	29.57	+0.84	N/A	
16,100		14.97	-0.22	29.29	+0.82	N/A	
15,750		14.97	-0.22	29.18	+0.81	N/A	
15,465	***	15.67	-0.17	29.09	+0.81	N/A	
14,120	***	18.97	+0.07	28.67	+0.78	N/A	

\* Feet from CG Datum (negative is forward and positive is aft)

\*\* Applicable with Full Ventral Tank Only

\*\*\* Zero Fuel Weight Limits

<u>Item (Extending)</u>	<u>Moment Change Lb.-ft.</u>
Wing flaps 15 <sup>0</sup>	+45
25 <sup>0</sup>	+73
45 <sup>0</sup>	+133
Main landing gear	-165
Nose landing gear	+115

The airplane is weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55

Maximum Weights

Maximum ramp weight	28,120 Lbs.
Maximum brake release weight	28,000 Lbs.
Maximum landing weight	23,350 Lbs.
Maximum zero fuel weight	18,450 Lbs.
Minimum operating weight	16,100 Lbs.
Minimum zero fuel weight	14,120 Lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers15 Maximum – For FAA approved seating configuration, refer to serial specific FAA Airplane Flight Manual.

**XX. Hawker 900XP** (cont'd)Maximum Baggage

Variable – Refer to the serial specific FAA Airplane Flight Manual.

Fuel Capacity

Usable Fuel (Gravity Refuel)

Location	Volume	Maximum	Arm
	U.S. Gal	Weight Lbs.	Ft.
Tank 1	634.00	4,223	0.68
Tank 2	634.00	4,223	0.68
Ventral tank (See NOTE 62)	<u>233.00</u>	<u>1,552</u>	8.37
Total	1,501.00	9,998	1.87

Usable Fuel (Pressure refueled)

Location	Volume	Maximum	Arm
	U.S. Gal	Weight Lbs.	Ft.
Tank 1	631.60	4,207	0.68
Tank 2	631.60	4,207	0.68
Ventral tank (See NOTE 62)	<u>229.40</u>	<u>1,528</u>	8.37
Total	1,492.60	9,942	1.86

Oil Capacity

Engine Tank Oil is the oil that is required for circulation in the system.

Location	Volume	Maximum	Arm	Moment
	U.S. Gal	Weight Lbs.	Ft.	Lb.-Ft.
No. 1	3.01	24.09	8.49	204.52
No. 2	<u>3.01</u>	<u>24.09</u>	8.49	204.52
Total	6.02	48.18	8.49	409.05

Maximum Operating Altitude

41,000 feet.

Serial Numbers Eligible

Serial Number HA-0001 through HA-0108, HA-0110, HA-0112 through HA-0114, HA-0117, HA-0120, HA-0121, HA-0140, HA-0143, HA-0146 and after.

**XXI. Hawker 750 (Transport Aircraft), Approved February 08, 2008 (See NOTES 1, 2, 3, 8, 63, 64, and 70).**

The Hawker 750 differs respectively from the Hawker 800XP, which retains the certification basis and is similar in configuration with the following exceptions:

- External Baggage Unit: The Hawker 750 incorporates as standard equipment, an external baggage unit in place of the aft ventral fuel tank installed on the Hawker 800XP. The standard configuration of the Hawker 750 uses the previously certified external baggage unit with improvements. This baggage unit meets the requirements of 14 CFR 25.857(d),(1),(2),(3),(5) as Amended through 25-32 for Class D baggage compartments.
- MTOW: The range and MTOW of the Hawker 750 is less than that of the Hawker 800XP as a result of the decrease in available fuel. Changes to the weight and center of gravity envelope reflect the alternative loading capabilities provided with the external baggage unit.
- Avionics: Hawker 750 Pro Line 21 avionics installation is revised to include a single FMS-6000/Single GPS in lieu of a dual installation.
- Introduction of Hawker 750 designation.

Engines

2 Honeywell Aerospace TFE 731-5BR turbofan engines.

Fuel

Aviation Kerosene to specification Defense Standard 91-87, NATO Code F-34, Defense Standard 91-91, NATO Code F-35, ASTM .D.1655 (Jet A or Jet A-1), CAN/COGS 3.23/ (Jet A or Jet A-1), Mil-T-83133 JP8 Grade, GOST 10227-86 (TS-1, T-1 or RT.), GB 6537-94/No.3.

Aviation Wide-cut to specification Defense Standard 91-88, NATO Code F-40, ASTM D.1655 Jet B, MIL-T-5624 JP4 and JP5 Grades, CAN/COGS 3.22/ Jet B, GOST 10227-86 T-2

**XXI. Hawker 750** (cont'd)

<u>Engine Limits</u>	<u>TFE 731-5BR with APR not operating</u>	<u>TFE 731-5BR with APR operating</u>
Take-off static thrust: standard day, sea level conditions (5 minute limit) lbs.	4,750	4,750
Maximum continuous static thrust: standard day, sea level conditions (unrestricted) lbs.	4,634	4,634
Maximum permissible engine rotor operating speed:		
L.P. Shaft (N1)	100 % (21,000 rpm)	100 % (21,000 rpm)
H.P. Shaft (N2)	100.8 % (30,540 rpm)	100.8 % (30,540 rpm)
Maximum permissible Interstage Turbine Temperature (ITT):		
Take-off (5 minutes maximum)	978°C	996°C
Take-off (5 second maximum)	1006°C	1006°C
Take-off (2 second maximum)	1016°C	1016°C
Maximum continuous	968°C	968°C
Engine starting and relighting (unrestricted)	978°C	978°C
Engine starting and relighting (10 seconds)	996°C	996°C
Engine starting and relighting (5 seconds)	above 996°C	above 996°C
Maximum permissible oil temperature:		
Sea level to 30,000 ft.	127°C	127°C
Above 30,000 ft.	140°C	140°C
Transient temperature above maximum at any altitude for a duration of not more than two minutes	149°C	149°C
Minimum permissible oil temperature:		
Engine starting	-40°C	-40°C
Before take-off	+30°C	+30°C
Maximum permissible air bleed extraction:		
L.P. air source	5 %	5 %
H.P. air source (climb and cruise condition)	3 %	3 %
H.P. air source (descent only)	5 %	5 %

**XXI. Hawker 750 (cont)**Airspeed Limits (IAS)

$V_{MO}$ (maximum operating)		
Sea level to 12,000 ft. decreasing linearly 1 knot per 680 ft. to 310 Kts. at 29,000 ft.		335 knots
$M_{MO}$ (maximum operating)		0.80 M
$M_{MO}$ (Mach Trimmer unserviceable/inoperative)		0.73 M
$V_A$ (maneuvering)		
	Sea level	196 knots
	10,000 ft.	202 knots
	20,000 ft.	207 knots
	30,000 ft.	217 knots
	35,000 ft.	225 knots
	38,000 ft.	231 knots
	40,000 ft.	236 knots
	41,000 ft.	238 knots
$V_{FE}$ (Flap speeds)		
	<u>Deflection</u>	
	15°	220 knots
	25°	175 knots
	45°	165 knots
$V_{LO}$ (landing gear operation)		
Retract		220 knots
Extend		220 knots
$V_{LE}$ (landing gear extended)		220 knots
$V_{MC}$ (minimum control speed)		114.0 knots
$V_{MCA}$ (with flaps 0° at sea level for temperatures below 23° C)		114.0 knots
$V_{MCA}$ (with flaps 15° at sea level for temperatures below 23° C)		108.0 knots
$V_{MCG}$ (with flaps 0° or 15° at sea level for temperatures below 23°C)		115.5 knots
$V_{MCL}$ (with flaps 25° at sea level for temperatures below 23°C)		106.0 knots
$V_{MCL}$ (with flaps 45° at sea level for temperatures below 23°C)		105.0 knots

Datum

The center of gravity datum (station 353.04 inches) is 11 feet forward of the fuselage reference point. The reference point is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Chord (SMC)

7.263 ft. The leading edge of the SMC is 1.308 ft. forward of the datum (for SMC definition, see Approved Flight Manual).

**XXI. Hawker 750** (cont'd)

<u>C.G. Range</u> (Gear and Flaps Retracted)	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	<u>Wt. Lbs.</u>	<u>% SMC</u>	<u>*Ft.</u>	<u>% SMC</u>
27,000	20.7	+0.20	25.6	+0.55
26,950	19.4	+0.10	25.7	+0.56
26,000	17.6	-0.03	27.9	+0.72
25,500	17.1	-0.06	29.0	+0.80
24,000	15.7	-0.17	28.7	+0.78
23,350	15.4	-0.19	28.6	+0.77
23,000	15.3	-0.20	28.5	+0.76
22,400	15.1	-0.21	28.4	+0.76
22,000	15.0	-0.22	27.6	+0.69
21,400	15.0	-0.22	26.3	+0.60
20,400	15.0	-0.22	26.6	+0.62
18,450**	15.7	-0.17	24.7	+0.49
17,700	15.0	-0.22	29.2	+0.81
17,000**	15.7	-0.17	29.6	+0.84
15,750	15.0	-0.22	29.2	+0.81
15,465**	15.7	-0.17	29.1	+0.81
14,120**	19.0	+0.07	28.7	+0.78

\*Feet from CG Datum (negative is forward and positive is aft) with straight line variation between points shown.

\*\*Zero Fuel Weight Limits

<u>Item (Extending)</u>	<u>Moment Change Lb-Ft.</u>
Wing flaps 15°	+45
25°	+73
45°	+133
Main landing gear	-165
Nose landing gear	+115

The airplane is normally weighed with wing flaps retracted.

Leveling Means

Fore and aft alignment bolts are situated in the fuselage seat rails at stations 309.35 and 371.55 inches.

Maximum Weights

Maximum Ramp Weight (Straight line variation from 27,070 Lbs. to 27,120 Lbs. @ 0.20 ft. and 27,120 Lbs. thereafter)	27,120 Lbs.
Maximum Brake Release Weight (Straight line variation from 26,950 Lbs. to 27,000 Lbs. @ 0.20 ft. and 27,000 Lbs. thereafter)	27,000 Lbs.
Maximum Landing Weight	23,350 Lbs.
Maximum Zero Fuel Weight	18,450 Lbs.
Minimum Zero Fuel Weight	14,120 Lbs.

Minimum Crew

For all flights, 2 pilots

Maximum Passengers

15 Maximum – For FAA approved seating configuration, refer to serial specific FAA Approved Airplane Flight Manual.

**XXI. Hawker 750** (cont'd)

<u>Maximum Baggage</u>	Compartment	Centroid Ft.	Maximum Load Lb/Ft <sup>2</sup>	Capacity Lbs. (See NOTE 8)
	External Baggage Unit	7.66	100	500
	Forward Bay	6.03	100	280
	Middle Bay	9.35	100	315
	Aft Bay	12.26	100	80
	Cabin Variable	Refer to the serial specific FAA Approved Airplane Flight Manual, Weight & Balance Section 6, Part 2 – (See Note 8)		

Fuel Capacity

<u>Usable Fuel (Gravity Refuel)</u>				
Location	Volume U.S. Gal.	Maximum Weight Lbs.	Arm Ft.	
Tank 1	634.0	4,223	0.68	
Tank 2	<u>634.0</u>	<u>4,223</u>	<u>0.68</u>	
Total	1,268.0	8,446	0.68	
<u>Usable Fuel (Pressure Refuel)</u>				
Location	Volume U.S. Gal.	Maximum Weight Lbs.	Arm Ft.	
Tank 1	631.6	4,207	0.68	
Tank 2	<u>631.6</u>	<u>4,207</u>	<u>0.68</u>	
Total	1,263.2	8,414	0.68	

Oil Capacity

Engine Tank Oil is the oil that is required for circulation in the system.

Location	Volume U.S. Gal.	Maximum Weight Lbs.	Arm Ft.	Moment Lbs. Ft.
No. 1	1.65	12.4	7.57	94
No. 2	<u>1.65</u>	<u>12.4</u>	<u>7.57</u>	<u>94</u>
Total	3.30	24.8	7.57	188

Maximum Operating Altitude

41,000 feet.

Serial Numbers Eligible

Serial Number HB-1 through HB-35, HB-41, HB-43, HB-62, HB-63, HB-65, HB-67 and after.

**Data Pertinent to all Models**Required Equipment.

The basic required equipment as prescribed in the applicable Airworthiness (See Certification Basis) and Operating Regulations must be installed in the aircraft for certification.

The BH/DH/HS/BAe.125 and Hawker Aircraft Maintenance Schedule (MS) publications reference MS.125-1/400 (Series 1A, 1B, 1A-522, 1B-522, 1A/R-522, 1B/R-522, 1A/S-522, 1B/S-522, 3A, 3B, 3A/R, 3B/R, 3A/RA, 3B/RA, 3B/RB, 3B/RC, F3B, F3B/RA, 400A, 400B, 401B, 403A(C), 403B, F400B and F403B), MS.125-600 (Series 600A, 600B, F600B, 600B/1, 600B/2 and 600B/3), MS.125-700 (Series 700A and 700B), MS.125-800 (Series 800A, 800B and Hawker 800), MS. Hawker 800 C29A

Required Equipment. (cont.)

(Hawker 800 C29A), MS U125 (Hawker 800 U-125), MS U125A (Hawker 800 U-125A), MS.800XP (Hawker 800XP/Hawker 850XP) and MS.125-1000 (Series 1000A, 1000B and Hawker 1000) contain lists of all required inspection schedules pertinent to the model variants specified herein and optional equipment installations approved by the FAA, and identifies all life-limited items (See NOTE 3). Document 25.6PF.61 Fin Tank Refuel instructions is required for HS.125 Series 600A and 600B Certification. Document 25.7PF.83 Single Point Pressure Refuel Instructions is required for HS.125 Series 700A and 700B Certification. Document 25-8PF59-1 Pressure Refueling Instructions is required for BAe.125 Series 800A, BAe.125 Series 800B, Hawker 800, and Hawker 800XP Certification. Document 140-590037-PRF, Pressure Refueling Instructions, is required for Hawker 900XP certification. Document DO1W02102-0005(25-8PF-317), Pressure Refueling Instructions, is required for Hawker 750 certification. Document 25-9PF 212, Pressure Refueling Instructions, is required for BAe.125 Series 1000A, 1000B and Hawker 1000 Certification.

Control Surface Movements

To ensure proper operation of the airplane the movement of the various control surfaces must be carefully controlled by proper rigging of the flight control systems. The airplane must, therefore, be rigged according to the approved data contained in the Maintenance Manuals (MM or AMM). Publication reference MM.125 (Series 1A, 1B, 1A-522, 1B-522, 1A/R-522, 1B/R-522, 1A/S-522, 1B/S-522, 3A, 3B, 3A/R, 3B/R, 3A/RA, 3B/RA, 3B/RB, 3B/RC, F3B, F3B/RA, 400A, 400B, 400B/1, 401B, 403A(C), 403B, F400B, F403B, 600A, 600B, 600B/1, 600B/2, 600B/3 and F600B) or MM.125-700 (HS.125 Series 700A and 700B), AMM 125-800 Vol. 1-3 (BAe.125 Series 800A, 800B and Hawker 800), AMM C29A Vol. 1-3 (Hawker 800 C29A), AMM U125 Vol. 1-3 (Hawker 800 U-125), AMM U125A Vol. 1-3 (Hawker 800 U-125A), AMM 125-1000A Vol. 1-3 (BAe.125 Series 1000A, 1000B and Hawker 1000), AMM Hawker 800XP Vol. 1-3 (Hawker 800XP) and AMM Supplement (Hawker 850XP), AMM Hawker 900XP Vol. 1-3 (Hawker 900XP), AMM Hawker 750 Vol. 1-3 (Hawker 750).

Certification Basis

Application for Type Certificate to the UK CAA was dated September 28, 1960. CAR.10, British Civil Airworthiness Requirements (1st November 1963), and Special Conditions notified by the United States Government to the Government of the United Kingdom including Validation Arrangements (V.A.) Note 1, Issue 1 dated April 19, 1961. This certification is equivalent to CAR.4b dated December 1953, Amendment 4b-1 through 4b-11, exclusive of CAR 4b.350 (e) and includes Special Regulation SR.422B.

CAR.10, Type Certificate No. A3EU issued September 25, 1964. The Type Certificate was amended February 3, 1966, to include Model DH.125 Series 1A-522, amended November 7, 1966 to include Model DH.125 Series 3A, amended August 9, 1967 to include Model DH.125 Series 1A/R-522 and Model DH.125 Series 3A/R, amended February 15, 1968, to include Model DH.125 Series 1A/S-522 and Model DH.125 Series 3A/RA, amended November 15, 1968, to include Model DH.125 Series 400A, amended July 14, 1970, to include BH.125 Series 400A, amended August 17, 1972, to include BH.125 Series 600A, amended January 6, 1976, to include HS.125 Series 600A, amended May 20, 1977, to include HS.125 Series 700A, amended July 12, 1984 to include BAe.125 Series 800A, amended October 31, 1991, to include BAe.125 Series 1000A, amended January 28, 1994, to include Hawker 800 and Hawker 1000, amended July 28, 1995, to include Hawker 800XP, amended May 28, 1999 to include HS.125 Series 1B, 1B-522, 1B/R-522, 1B/S-522, 3B, 3B/R, 3B/RA, 3B/RB, 3B/RC, F3B, F3B/RA, 400B, 400B/1, 401B, 403A(C), 403B, F400B, F403B, 600B, 600B/1, 600B/2, 600B/3, F600B, 700B, and BAe.125 Series 800B and 1000B.

Compliance, over and above, certification basis requirements, has been met with CAR Amendments 4B-12 and 4B-14. Compliance has been established with the following optional requirements: Ice Protection Provision 4b.640. FAA Exemption No. 573 grants exemption from CAR 4b.437, however for DH.125 Series 400A and subsequent models added to this Type Certificate, compliance has been established for Fuel Jettisoning Systems certification weights with FAR 25.1001 of Amendment 25-18. For BH.125 and HS.125 Series 600A models compliance has been established with the special retroactive requirements of FAR 25.2 through FAR Amendment 25-20 and FAR 21 Amendment 21-27 and (FAR 36(1)(c)(2)). (See NOTE 18).

Certification Basis (cont'd)

HS.125 Series 1A, 3A, 3A/RA and BH/HS.125 Series 400A and 600A airplanes fitted with Garrett AiResearch TFE 731-3 engines comply with the later requirements of FAR 21.183(e) amendment 21-42 and FAR 36.1(d) amendment 36-1 through 36-5.

For HS.125 Series 700A models, compliance has been established with the special retroactive requirements of FAR 25.2 through amendment 25-20; FAR 25.979 of amendment 25-11, FAR 21.183(e) of amendment 21-42, and FAR 36.1(d) for amendment 36-1 through 36-5.

For BAe.125 Series 800A models, compliance has been established with the specific additional requirements of FAR Part 25, Amendment 25-1 through 25-54, above and beyond the CAR. 10, British Civil Airworthiness Requirements specified in the second paragraph above under "Certification Basis." The additional FAR requirements are as follows:

- FAR 25.2
- FAR 25.305 (For wing only)
- FAR 25.571 (For wing and engine mounts only) (See NOTE 3)
- FAR 25.903 (d) (1)
- FAR 25.979 (a) through (c)
- FAR 25.1419
- FAR 25.1529

Plus FAR Part 36 as amended by Amendment 36-1 through 36-12.

Plus Special Federal Aviation Regulation (SFAR) 27 as amended by Amendments 27-1 through 27-4.

Equivalent Safety is established with:

- FAR 25.773(b)(2) - Pilots Window
- FAR 25.613(a) - Design Values
- FAR 25.615(a) - Design Properties

Equivalent Level of Safety (FAA Memo No. TD4610WI-T-SE-2) has been established for CAR 4b.635(c) Aft Position Light on Models HS.125 Series 700A/B, BAe.125 Series 800A/B, BAe.125 Series 800A (U-125), Hawker 800, Hawker 800 (U-125A), BAe.125 Series 1000A/B and Hawker 1000.

For Hawker 800XP and 850XP airplanes fitted with Allied Signal TFE 731-5BR engines, for Hawker 750 airplanes fitted with Honeywell Aerospace TFE731-5BR engines, and for Hawker 900XP airplanes fitted with Honeywell Aerospace TFE731-50R engines:

The U.S. Certification Basis for BAe.125 Series 800A models (including equivalent safety findings) and, in agreement with the manufacturer, compliance has been established with the following additional FAR requirements:

For the Engine Electronic Controls and Mach Trim System:

- FAR 25.1316 as amended through amendment 25-80 and
- Special Condition No. 25-ANM-98 High-Intensity Radiated Fields

For the thrust reverser installation:

- FAR 25.933 as amended through amendment 25-40
- FAR 25.934 as amended through amendment 25-23
- FAR 25.1309 as amended through amendment 25-23

Plus FAR Part 34 basic issue.

Plus FAR Part 36 as amended by Amendments 36-1 through 36-20

Plus Equivalent Safety Finding to CAR 4B.635(c), FAA Memo No. TD4610WI-T-SE-1, for Aft Position Light Chromaticity.

Certification Basis (cont'd)

For the Collins ProLine 21 Avionics installations the additional 14 CFR Part 25, Amendment 25-1 through 25-97 (with exception noted), requirements are as follows:

25.301(a),(b)	25.843(a)
25.303	25.853(a)
25.305(a),(b)	25.869
25.307(a)	25.1301
25.321	25.1303
25.331	25.1305(a),(c),(d)
25.333	25.1307 (c), (d),(e)
25.337	25.1309(a),(b),(c),(d),(e)
25.341	25.1316
25.345	25.1321(a),(b),(c),(d),(e)
25.349	25.1323(a),(b),(c),(d)
25.351	25.1325(a),(c)(d),(e)
25.365(a),(b),(d)	25.1327(a)
25.367	25.1329(a),(c),(e),(f),(h)
25.373	25.1331
25.391(b)	25.1333
25.395(b)	25.1335
25.397(b)	25.1337(b),(c)
25.561	25.1351(a),(b),(d)
25.581(a)(c)	25.1353(a),(b)
25.601	25.1355
25.603	25.1357(a),(c),(d),(e),(g)
25.605(a)	25.1381
25.609(a)	25.1431(a),(c)
25.613(a)	25.1529
25.629(a)	25.1543(b)
25.672	25.1547(a),(d)
25.677(a)(b)	25.1549(a),(b),(c),(d)
25.683	25.1553
25.773(a)(2)	25.1581
25.777(d)	25.1583 amdt (25-105)
25.779	25.1585 amdt (25-105)
	25.1587

Special Condition No. 25-181-SC High Intensity Radiated Fields (HIRF)

Equivalent Level of Safety is established with: 14CFR25.1549 – digital presentation of N2, oil temperature, oil pressure and fuel flow

For the Universal Avionics CVR-120R installation:

14 CFR 25.1457 as amended through amendment 25-124

For the Hawker 850XP, the Hawker 800XP with Honeywell SPZ-8000 Avionics, or the Hawker 800XP with Rockwell Collins ProLine 21 Avionics airplanes, the addition of the following for the regulations winglets:

14 CFR 25.445(a), as amended through 25-86

14 CFR 25.581(b) as amended through 25-23

14 CFR 25.615(a) as amended through 25-23

14 CFR 25.954(a)(b) as amended through 25-14

For the Hawker 900XP airplanes compliance has also been established with the following additional FAR requirements:

14 CFR 25.901 (b) (1) (i) as amended through 25-46

14 CFR 25.903 (a) (b) (e) (1) (2) as amended through 25-40

14 CFR 25.939 (a) (c) as amended through 25-40

14 CFR 25.943 as amended through 25-40

14 CFR 25.1322 (a) (b) (c) (d) as amended through 25-38

Certification Basis (cont'd)

Plus FAR Part 36 as amended by Amendments 36-1 through 36-28

The certification basis for the Hawker 750 is the same as that for the Hawker 800XP with Pro-Line 21 Avionics, including all Special Conditions, and equivalent safety findings, plus the following additional requirements.

For the Hawker 750 airplanes, compliance has been established with the special retroactive requirements of 14 CFR 25.2 through Amendment 25-20.

14 CFR 25.855(a)(b)(c)(d)(e)(2)(3) as amended through Amendment 25-32 which apply to the external baggage unit.

Equivalent Level of Safety is established with 14 CFR 25.855 (a-1) as amended through Amendment 25-32 for Cargo Compartment Liners; Reference: AT4637WI-T-A-1.

14 CFR 25.857(d)(1)(2)(3)(5) as amended through Amendment 25-32 – Baggage Compartments

14 CFR 25.571 as amended through Amendment 25-54 for Baggage Compartment

The Hawker 750 has met the criteria defined in 14 CFR 21.93(b) for “No Acoustical Change”, and therefore maintains compliance with 14 CFR Part 36 as amended by Amendments 36-1 through 36-20.

For BAe.125 Series 1000A models: The U.S. Certification Basis for BAe.125-800A models (including equivalent safety findings) and, in agreement with the manufacturer, compliance has been established with specific additional requirements of Part 25 of the FAR, as amended by amendments 25-1 through 25-70, for areas of significant design change from the Series 800A. The additional FAR requirements are as follows:

25.25	25.1021
25.33	25.1045(d)
25.361(b)	25.109(e)
25.365(a) and (d)	25.1093(b)(1)(i)(ii)
25.511(b)(6)	and (b)(2) (Engine only)
25.571(b)(6)	25.1141(f)(2)
25.697(a)	25.1143(d)
25.735(f)(1)	25.1163(a)
25.843(a)	25.1183(b)(1)
25.853(b) and (c)	25.1189(a)(1) and (2)
25.855(a)	25.1303(c)(1)
25.857(d)(6)	25.1305(c)(6) and (7)
25.901(c)	25.1309(a), (b), (c), (d) and (e)
25.903(a)	25.1323(b)(2)
25.904	25.1331(a)(3)
25.905	25.1359
25.939(a)	25.1411(a)
25.961	25.1423
25.963(e)	25.1438(a)(b) and (c)
25.993(c)	25.1457(c)
25.994	25.1459(a)(4) and (e)
25.997	25.1521(b) and (c)
25.1001	25.1549 (Engine only)
25.1013	
25.1015	Appendix F
25.1019	Appendix H

NOTE: Compliance with the subject paragraphs of FAR 25.1309 has been established for systems which have been significantly redesigned.

Plus FAR Part 36 as amended by Amendments 36-1 through 36-18.

Plus Special Federal Aviation Regulation (SFAR) 27 as amended by Amendments 27-1 through 27-6.

Certification Basis (cont'd)

Plus Special Conditions: Special Conditions No. 25-ANM-34 dated June 29, 1990, High Altitude Operation and Protection from Effects of Lightning and High Intensity Radiated Fields.

Plus Equivalent Safety Finding to CAR 4B.635(c), FAA Memo No. TD4610WI-T-SE-2, for Aft Position Light Chromaticity.

The BH/DH/HS/BAe.125 Series (1B, 1B-522, 1B/R-522, 1B/S-522, 3B, 3B/R, 3B/RA, 3B/RB, 3B/RC, F3B, F3B/RA, 400B, 400B/1, 401B, 403A(C), 403B, F400B, F403B, 600B, 600B/1, 600B/2, 600B/3, F600B, 700B, 800B and 1000B) and some Hawker 800 and 1000 models were certified to CAA, United Kingdom, regulations. As of May 28, 1999, these 'B' aircraft are eligible to receive FAA Airworthiness Certificates and Registration as a 'B' aircraft if shown to meet the requirements to be equivalent to an 'A' aircraft.

Production Basis

TC only: Serial numbers 258297, 258301, 258304, 258306 and 259003. Prior to Standard Airworthiness, Aircraft must be inspected and flight tested by FAA.

Production Certificate, PC-8: Serial numbers 258309, 258311, 258313, 258315, 258317, 258319, 258320, 258322, 258325, 258326, 258331, 258333, 258334, 258336 and 258338 and on.

Hawker 900XP:

TC only: Serial numbers HA-0001, HA-0002, HA-0003, HA-0004, HA-0005, HA-0006, HA-0007, HA-0008, HA-0009, HA-0010, HA-0011, HA-0012, HA-0013 and HA-0014. Prior to Standard Airworthiness, Aircraft must be inspected and flight tested by FAA.

Production Certificate, PC-8: Serial numbers HA-0015 and on.

Hawker 750:

TC only: Serial numbers HB-1 and HB-2. Prior to Standard Airworthiness, Aircraft must be inspected and flight tested by FAA.

Production Certificate, PC-8: Serial numbers HB-3 and on.

Service Information

Service bulletins, structural repair manuals, repair drawings, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is C.A.A. approved, or C.A.A. approved through the Manufacturer's C.A.A. Approval Reference, DAI/1103/38, DAI/1011/55 or DAI/2652/55, prior to August 1, 1995, are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only. Effective August 1, 1995 and after, service information pertaining to the type design is to be FAA approved under FAR Part 21 requirements.

## NOTE 1.

- (a) A current weight and balance report, including list of equipment 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 with the effect of fuel use and movement of crew and passengers from their assigned positions being considered.
- (c) The "drainable unusable fuel" is the amount of fuel in the tanks which is unavailable to the engines under critical flight conditions as defined in CAR 4b.416. This drainable unusable fuel does not include the "tank trapped fuel". The total unusable fuel must be included in the airplane empty weight or be suitably accounted for in the airplane weight and balance report. The total volume of unusable fuel in gallons is as follows:

NOTE 1. (cont'd)

Airplane Total (BH/DH/HS/.125 Series 1A, 1B, 1A-522, 1B-522, 1A/R-522, 1B/R-522, 1A/S-522, 1B/S-522, 3A, 3B, 3A/R, 3B/R, 3A/RA, 3B/RA, F3B/RA, 400A, 400B, 400B/1, F400B, 401B, 403A(C), 403B, and F403B)

	Volume U.S. Gal	Weight Lbs.	Arm In.
Tank trapped	2.4	16	12
Drainable unusable fuel	9.0	60	16.5
Total unusable fuel	11.4	76	15.6

Airplane Total (BH/HS.125 Series 600A, 600B, 600B/1, 600B/2, 600B/3, F600B and HS.125 Series 700A and 700B).

	Volume U.S. Gal	Weight Lbs.	Arm In.
Tank trapped	3.4	11.6	-16.6
Drainable (Wing)	11.5	76.6	-14.0
Unusable (Ventral)	0.9	6.0	59.0
Fuel (Dorsal)	Nil	Nil	-
Total unusable fuel	15.8	105.2	-9.7

Airplane Total (BAe.125 Series 800A, 800B, Hawker 800, Hawker 800XP and Hawker 850XP)

	Volume U.S. Gal	Weight Lbs.	Arm In.
Tank trapped	3.3	22.0	-15.6
Drainable (Wing)	8.1	54.0	-14.0
Unusable (Ventral)	0.7	5.0	74.4
Total unusable fuel	12.1	81.0	-9.0

Airplane Total (Hawker 750)

	Volume U.S. Gal	Weight Lbs.	Arm Ft.
Trapped	3.3	22.0	-1.30
Drainable	8.1	54.0	-1.17
Total unusable	11.4	76.0	-1.21

Airplane Total (Hawker 900XP)

	Volume U.S. Gal	Weight Lbs.	Arm Ft.
Trapped	3.3	22.0	-1.30
Drainable	8.8	59.0	-0.54
Total unusable	12.1	81.0	-0.75

Airplane Total (BAe.125 Series 1000A and 1000B and Hawker 1000)

	Volume U.S. Gal	Weight Lbs.	Arm In.
Tank trapped	3.3	22.0	-15.6
Drainable (Wing)	8.1	54.0	-14.0
Unusable forward ventral	4.2	28.0	-57.6
Unusable aft ventral	2.6	17.6	60.0
Total unusable fuel	18.2	121.6	-13.1

## NOTE 1. (cont'd)

- (d) Engine System oil is the total engine oil less than the quantity drainable from the tank. The undrainable oil for the following aircraft fitted with Viper engines is:  
(BH/DH/HS/.125 Series 1A, 1B, 1A-522, 1B-522, 1A/R-522, 1B/R-522, 1A/S-522, 1B/S-522, 3A, 3B, 3A/R, 3B/R, 3A/RA, 3B/RA, 400A, 400B, 400B/1, 401B, 403A(C), 403B, 600A, 600B, 600B/1, 600B/2 and 600B/3 fitted with Viper Engines).

<u>Location</u>	<u>Volume U.S. Gal.</u>	<u>Weight Lb.</u>	<u>Arm In.</u>	<u>Moment In. Lb.</u>
No. 1	0.3	2.3	82.5	190.4
No. 2	<u>0.3</u>	<u>2.3</u>	82.5	<u>190.4</u>
Total	0.6	4.6	82.5	380.8

The undrainable oil for the following aircraft fitted with Garrett TFE 731 engines is:  
(BH/DH/HS/BAe.125 Series 1A, 1B, 3A, 3B, F3B/RA , 400A, 400B, F400B, F400B, 401B, 403A(C), 403B, F403B, 600A, 600B, 600B/1, 600B/2, 600B/3, F600B, 700A, 700B, 800A, 800B, Hawker 800, Hawker 800XP, Hawker 850XP, and Hawker 750 fitted with Garrett TFE 731 engines).

<u>Location</u>	<u>Volume U.S. Gal.</u>	<u>Weight Lb.</u>	<u>Arm In.</u>	<u>Moment In. Lb.</u>
No. 1	1.5	11.3	106.2	1200
No. 2	<u>1.5</u>	<u>11.3</u>	106.2	<u>1200</u>
Total	3.0	22.6	106.2	2400

(BAe.125 Series 1000A and 1000B and Hawker 1000A and 1000B fitted with Pratt & Whitney PW305B engines.)

The total quantity of oil for both engines is 6.02 U.S. gallons. The weight of this is included in the Basic Aircraft Weight.

For the Hawker 900XP airplanes fitted with Honeywell Aerospace TFE731-50R engines:  
The total quantity of oil for both engines is 6.02 gallons. The weight of this is included in the Basic Aircraft Weight.

## NOTE 2.

Any 'A' and 'B' (operating as 'A' equivalent) aircraft must be operated according to the appropriate FAA Approved Flight Manual:

<u>Document No.</u>	<u>Model Applicability</u>
HS.1.2	DH.125 Series 1A and HS.125 Series 1B
HS.1.3	DH.125 Series 1A-522, 1A/R-522, 1A/S-522, 3A, 3A/R and 3A/RA
HS.1.3	HS.125 Series 1B-522, 1B/R-522. 1B/S-522, 3B, 3B/R, 3B/RA, 3B/RB and 3B/RC
HS.1.5	DH/BH.125 Series 400A and HS.125 Series 400B, 401B, 403A(C) and 403B
HS.1.7	BH.125 Series 600A and HS.125 Series 600A, 600B, 600B/1, 600B/2 and 600B/3
HS.1.9	BH/HS.125 Series 600A with Modification 252468, HS.125 Series F600B, 700A and 700B
HS.1.10	DH.125 Series 3A/RA with Modification 252600, DH/BH.125 Series 400A with Modification 252550, HS.125 Series F3B/RA, F400B and F403B
HS.1.11	DH.125 Series 1A with Modifications 251867 and 252605, DH.125 Series 1A with Modification 252606, and DH.125 Series 3A with Modification 252603 and HS.125 Series F3B
H.S.1.16	BAe.125 Series 800A and 800B and Hawker 800
HS.1.19	BAe.125 Series 1000A and 1000B and Hawker 1000
HS.1.22	Hawker 800XP

## NOTE 2. (cont'd)

As of August 1, 1995, the FAA accepted responsibility for the maintenance and approval of all Airplane Flight Manuals incorporated by reference within this data sheet and those manuals and amendments thereof previously issued by the United Kingdom Civil Aviation Authority in association with DH/HS/BH/BAe.125 Series 1 through 1000 and Hawker 800, 800XP and 1000 Series products designed and/or manufactured under its authority. All such manuals must incorporate the following amendments which relate to this transfer of responsibility.

<u>AFM No.</u>	<u>Particular Amendment</u>	<u>Model Applicability</u>
HS.1.2	P 25	Series 1A/B Models
HS.1.3	P 91	Series 1A-522, 1B-522, 1A/R-522, 1B/R-522, 1A/S-522, 1B/S-522, 3A, 3B, 3A/R, 3B/R, 3A/RA, 3B/RA, 3B/RB, and 3B/RC Models
HS.1.5	P 44	Series 400A, 400B, 400B/1, 401B, 403A(C) and 403B Models
HS.1.7	P 37	Series 600A, 600B, 600B/1, 600B/2 and 600B/3 Models
HS.1.8	P 47	UK CAA Compliant Series F600B and 700B Models
HS.1.9	P 41	US FAA Compliant Series 700A & Garrett converted Series 600A Models
HS.1.10	P 17	Garrett converted Series 3A/RA (with Long Range fuel), F3B/RA, 400A, F400B, and F403B Models
HS.1.11	P 9	Garrett converted Series 1A and 3A (without Long Range fuel) Models
HS.1.15	P 57	UK CAA Compliant Series 800 and Hawker 800 Models
HS.1.16	P 70	US FAA Compliant Series 800 and Hawker 800 Models
HS.1.18	P 40	UK CAA Compliant Series 1000 and Hawker 1000 Models
HS.1.19	P 40	US FAA Compliant Series 1000 and Hawker 1000 Models
HS.1.22	*	US FAA Compliant Hawker 800XP Models
140-590032-0005 *		US FAA Compliant Hawker 800XP Models [see note 67]
140-590035-0005 *		US FAA Compliant Hawker 850XP Models
140-590037-0005 *		US FAA Compliant Hawker 900XP Models
		* Original Manual issued in the U.S.
140-590039-0005 *		US FAA Compliant Hawker 750 Models
		* Original Manual issued in the U.S.

## NOTE 3.

Service Life Limits and Airworthiness Structural Inspections:

Service Life Limits of Structural Components. The service life for aircraft structural parts which are fatigue critical are listed in Hawker Beechcraft Corporation Airworthiness Limitations Document Reference CJE-HPA-C-GEN-AW1667, latest FAA approved revision.

Airworthiness Structural Inspections. For the BAe.125 Series 800/Hawker 800/Hawker 800XP/Hawker 850XP/Hawker 750/Hawker 900XP the structural inspections specified in Part 3 Structural Inspections of the BAe.125 Series 800/Hawker 800/Hawker 800XP/Hawker 850XP/Hawker 750/Hawker 900XP Aircraft Flexible Maintenance Schedule, part number AFMS-800 or AFMS-800XP, are essential to ensure the continued airworthiness of the BAe.125 Series 800/Hawker 800/Hawker 800XP/Hawker 850XP/Hawker 750/Hawker 900XP in operational service. The inspections may be changed only with the mutual agreement between the airworthiness authorities and the aircraft manufacturer.

## NOTE 4.

Kerosene type and wide-cut type fuels conforming to the specifications in the data sheet may be used separately or mixed in any proportions. When the fuel type has been changed, a check must be made at the subsequent take-off to confirm that either the appropriate maximum r.p.m. or maximum ITT is being achieved. Aviation gasoline meeting the following specifications may be used within the limits specified in the appropriate Approved Flight Manual or Supplement:

## NOTE 4. (cont'd)

American: Mil-G-5572, JP4 and JP5 Grades; MIL-T-83133 JP8 Grade, ASTM D1655/JET A, JET A-1 and JET B Grades.  
 British Defense Standards: 91-87, 91-90 and 91-91.  
 Canadian: 3-GP-23h; 3-GP-25; CAN/CGSB 3.23/Jet A and Jet A-1; CAN/CGSB 3.22/Jet B  
 Russian: GOST 10227-86/ T-1, T-2, TS-1 premium and RT Grades.  
 Chinese: GB 6537-94/ No. 3

## NOTE 5.

Airworthiness Certification for aircraft manufactured in the United Kingdom prior to August 1, 1995, and delivered new to the United States. An acceptable minimum standard of equipment was installed on production DH.125 Series aircraft for factory flyaway (ferrying) on a United Kingdom Certificate of Airworthiness for Export. This standard was in accordance with Parts 2 and 6 (and related Appendices and Addendum) of Airworthiness document DO/AW/125/FAA/TC.1 current issue (DH.125 Series 1A, 1A-522, 3A, 1A/R-522, 3A/R, 1A/S-522, 3A/RA, 400A) or DO/AW/125-600/FAA/TC.1 current issue (BH.125 Series 600A, HS.125 Series 600A) or DO/AW/125-700/FAA/TC.1 current issue (HS.125 Series 700A) or DO/AW/125-800/FAA/TC.1 current issue (BAe.125 Series 800A/Hawker 800) or CJE.HPA.C.258.AW2017 current issue (Hawker 800XP) or Parts 2 and 5 (and related Appendices and Addendum) of Airworthiness document CJE-HPA-C-260-AW1660 current issue (BAe.125 Series 1000A and Hawker 1000).

A Standard U.S. Certificate of Airworthiness was issued on proof of satisfactory conformance with Modifications listed in Part 5 (and related Appendices and Addendum) of the above referenced documents except Part 4 of document CJE-HPA-C-260-AW1660 (BAe.125 Series 1000A and Hawker 1000), current issue. Current issues of Documents DO/AW/125/FAA/TC.1, DO/AW/125-600/FAA/TC.1, DO/AW/125-700/FAA/TC.1, DO/AW/125-800/FAA/TC.1, CJE-HPA-C-258-AW2017 and CJE-HPA-C-260-AW1660 may be obtained upon request to the manufacturer.

Each individual aircraft at delivery was further identified as to status of incorporation of factory-installed modifications by the "Modification Statement" appended to the aircraft logbook.

## NOTE 6.

Airworthiness Certification for aircraft manufactured in the United Kingdom after August 1, 1995  
 FAA Standard Airworthiness Certificates and Export Certificates of Airworthiness may be issued to aircraft manufactured in the UK by Raytheon Corporate Jets, Inc. under license from Raytheon Aircraft Company after August 1, 1995, based on the following:

- a. Exemption Number 6142 granted to Raytheon Aircraft Company on August 3, 1995, from FAR 21.183(c) and FAR 21.325(b)(1) for Hawker 800, 800XP and 1000 aircraft.
- b. A certifying statement from the UK CAA stating the aircraft has been examined, tested and found to conform to US Type Certificate A3EU and is in a condition for safe operation.
- c. The aircraft must be fitted with data plates conforming to FAR 45.13 and stating that Raytheon Corporate Jets, Inc. is the builder under license from Raytheon Aircraft Company.
- d. The following serial numbered aircraft were manufactured in the UK by Raytheon Corporate Jets, Inc. under license to Raytheon Aircraft Company.

Hawker 800 (U-125A) 258268, 258288 and 258305

Hawker 800XP 258266, 258277 through 258287, 258289 through 258296, 258298 through 258300, 258302, 258303, 258307, 258308, 258310, 258312, 258314, 258316, 258318, 258321, 258323, 258324, 258327 through 258330, 258332, 258335, 258337.

Hawker 1000 259048 through 259052.

## NOTE 7.

Maximum permissible turbine outlet gas temperatures with Modification 251760 embodied are:

Takeoff (5 minutes maximum)	740°C
Maximum continuous	715°C
Maximum for acceleration	715°C
Starting maximum gas temp.	800°C

NOTE 8.	<u>Maximum Cabin Loads</u>	<u>Total</u>	Forward of Front Spar <u>Frame Datum</u>	Aft of Front Spar <u>Frame Datum</u>
	DH/HS/BH.125 Series -1A, 1A with modification 252605, 1A with modifications 251867 and 252606, 1B, 1A-522, 1B-522, 1A/R-522, 1B/R-522, 1A/S-522, 1B/S-522, 3A, 3A with modification 252603, 3B, 3A/R, 3B/R, 3A/RA, 3B/RA, 400A, 400B, and 400B/1	1950 lbs.	900 lbs.	1350 lbs.
	HS.125 Series 401B	2250 lbs.	1020 lbs.	1350 lbs.
	<u>Maximum Cabin Loads (continued)</u>	<u>Total</u>	Forward of Front Spar <u>Frame Datum</u>	Aft of Front Spar <u>Frame Datum</u>
	HS.125 Series 403A(C) and 403B	2300 lbs.	1150 lbs.	1350 lbs.
	DH.125 Series 3A/RA with modification 252600 DH/BH 125 Series 400A, HS.125 Series F3B/RA, F400B and F403B	2960 lbs.	1515 lbs.	1670 lbs.
	BH/HS.125-600A and HS.125 Series 600B	3050 Lbs.	1550 Lbs.	1680 Lbs.
	BH/HS 125 Series 600A and 600B (with modification 252320), BH/HS 125-600A with modification 252468), HS.125 Series F600B, HS.125 Series 700A, and 700B, BAe.125 Series 800A and 800B, Hawker 800 and Hawker 800XP Hawker 850XP, Hawker 750, and Hawker 900XP.	3070 lbs.	1660 lbs.	1910 lbs.

Maximum load forward or aft of front spar frame datum includes loads of passenger seats, their occupants (including supernumerary) and of the appropriate luggage compartments.

To ensure that airplane C.G. is within allowable limits it may be necessary to reduce loads to less than maximum stated above.

- NOTE 9. The maximum permissible altitude is 40,000 feet except that the maximum permissible altitude can be 41,000 feet when equipment installations are incorporated conforming with either:
1. U.S. Federal Aviation Administration Supplemental Type Certificates SA858WE, SA859WE, and SA860WE and suitably modified to maintain a cabin pressure equivalent to an altitude of 8,000 ft. or;
  2. Modifications No. 251600 plus 251601, or 251721, or 252210 plus 252260 and 252261A.
- NOTE 10. Conversion of DH/HS.125 Series 1A-522, 1B-522, 3A or 3B respectively to 1A/R-522, 1B/R-522, 3A/R or 3B/R, may only be accomplished by incorporation of Approved Service Bulletins corresponding to Modifications No. 251700, 255640 and 255718.
- NOTE 11. Conversion of DH.125 Series 1A-522 or HS.125 Series 1B-522 respectively to Series 1A/S-522 or Series 1B/S-522 may only be accomplished by incorporation of Approved Service Bulletin corresponding to Modification No. 251867. Conversion of DH.125 Series 3A/R or HS.125 Series 3B/R respectively to Series 3A/RA or Series 3B/RA may only be accomplished by incorporation of Approved Service Bulletin corresponding to Modification No. 251916.
- NOTE 12. The Maximum Ramp Weight and Maximum Zero Fuel Weight for the Model DH/HS 125 Series 1A, Series 1B, Series 1A/522, Series 1B/522, Series 1A/S-522, Series 1B/S-522, Series 3A and Series 3B may be increased 200 pounds provided the revised limitation placard is installed in accordance with Modification No. 252022 and the relevant Approved Flight Manual revision is used.

- NOTE 13. When engine anti-icing is in use the maximum permissible oil inlet temperature for continuous operation is 135°C. This value may only be used, when Modification 252149, introducing a modified oil temperature gauge and engine limitation placard, is embodied or an approved equivalent standard is achieved.
- NOTE 14. The Model DH.125 Series 1A and HS.125 Series 1B can be converted retrospectively to a Series 1A-522 and Series 1B-522 by the introduction of Modifications 251301, 251665, 251392, 251591, 251642, 251658, 251659, 257104, 255567 and 251760 in accordance with Service Bulletin 71-9-1301. The Approved Flight Manual, Document No. HS.1.2 (DH.125 Series 1A or HS.125 Series 1B) must be returned to RAC and the Approved Flight Manual, Document HS.1.3 (DH.125 Series 1A-522 or HS.125 Series 1B) must be obtained.
- NOTE 15. The limiting Mach Number is reduced to 0.755 when a Smiths combined ASI/Mach meter Part No. PW 202AMA/4, PW 202AMA/6 or PW 202AMA/8 is fitted. These instruments incorporate a mach scale corrected for position error.
- NOTE 16. The maximum ramp weight and maximum Zero Fuel Weight for the model DH/HS/BH 125 Series 400A and Series 400B may be increased 300 lbs., or 500 lbs. provided  $V_{MO}$  is appropriately reduced.
- Modification 252243 Part C and the related Approved Flight Manual HS.1.5 and Particular Amendment No. P 14 must be embodied to permit the 300 lb. increase for a maximum zero fuel weight and a maximum ramp weight of 14,500 lbs. and 23,600 lbs. respectively.
- Modification 256403 Part D and the related Approved Flight Manual HS.1.5 and Particular Amendment No. P 17 must be embodied to permit the 500 lb. increase for a maximum zero fuel weight and a maximum ramp weight of 14,700 lbs. and 23,800 lbs. Respectively.
- NOTE 17. (a) The maximum operating speeds ( $V_{MO}/M_{MO}$ ) for the BH.125 Series 600A, HS.125 Series 600A and HS.125 Series 600B may be increased by embodiment of Modification 252320 Part A. Particular Amendment No. P 8 must be incorporated in the Approved Flight Manual Document No. HS.1.7 to permit operation at the increased speeds.
- (b) The maximum ramp weight and the maximum fuel weight for the BH.125 Series 600A, HS.125 Series 600A and HS.125 Series 600B may be increased by the embodiment of Modification 252320 Part C. Particular Amendment No. P 9 must be incorporated in the Approved Flight Manual Document No. HS.1.7 to permit operation at the increased weights defined in this sub-paragraph.
- (c) The maximum brake release weight for the BH.125 Series 600A, HS.125 Series 600A and HS.125 Series 600B may be increased by the embodiment of Modification 252320 Part D. Particular Amendment No. P 10 must be incorporated in the Approved Flight Manual Document No. HS 1.7 to permit operation at the increased weights defined in this sub-paragraph.
- NOTE 18. In addition to the requirements listed under "Certification Basis", a BH.125 Series 600A, HS.125 Series 600A and HS.125 Series 600B airplane which has accumulated no flight time by December 31, 1974, must comply with FAR.21.183 and FAR.36.1(d)(3) Amendment 36-2 in order to qualify for the issue of a U.S. Standard Airworthiness Certificate. Compliance may be accomplished by incorporation of Modification No. 252405 and 252384. Particular Amendment No. P 18 and Supplement No. 12 must be incorporated in the associated Approved Flight Manual Document No. HS.1.7 when the above modifications are fitted.
- NOTE 19. The Rolls Royce Viper engines originally fitted to BH/HS 125 Series 600A and the HS.125 Series 600B airplanes may be replaced by Garrett AiResearch TFE 731-3 Turbofan engines by embodiment of modification 252468 or equivalent and the complementary modifications listed therein. In addition to the installation of the TFE 731-3 engines, the above modification also introduces changes to systems consequential to the engine change and a reduction in takeoff (brake release) weights and increase in Maximum zero taxi weight. A BH/HS 125 Series 600A airplane modified as specified above is to be operated in accordance with the Approved Flight Manual, Document No. HS.1.9 with Particular Amendment No. P 7. The HS.125 Series F600B aircraft modified as specified herein and meeting the requirements of Note 54 must also be operated in accordance with the Approved Flight Manual Document HS 1.9 with Particular Amendment No. P 7.

- NOTE 20. Modifications 252622 (Parts A and B) and 258169 (HS.125 Series 700A and Series 700B) or relevant part of 258469 (All Series except Series 700) introduce an Automatic Performance Reserve (APR) system. When these modifications are embodied, the designation of the Garrett AiResearch TFE 731-3 engine must be changed to TFE 731-3R. Limitations and procedures associated with the APR system are provided in the Approved Flight Manuals, Document H.S.1.9 Particular Amendment No. P11 (BH/HS 125 Series 600A with modification 252468, HS.125 Series F600B, 700A, and 700B.), Document H.S.1.10 with Particular Amendment No. P 2 (DH 125 Series 3A/RA with modification 252600, HS.125 Series F3B/RA, BH/DH 125 Series 400A with modification 252550 and HS.125 series F400B) and Document H.S.1.11 with Particular Amendment No. P 4 (DH.125 Series 1A with modifications 251867 and 252605, DH.125 Series 1A with modification 252606, DH.125 Series 3A with modification 252603 and HS.125 Series F3B).
- NOTE 21. The Rolls-Royce Viper engines originally fitted to DH/BH.125 Series 400A airplanes, may be replaced by Garrett AiResearch TFE 731-3 turbofan engines by embodiment of Modification 252550 and the complementary modifications listed therein. The HS.125 Series 400B airplanes may replace the Garrett AiResearch TFE 731-3 turbofan engines by embodiment of Modification 252551 and the complementary modifications listed therein. In addition to the installation of the TFE 731-3 engines, the above modifications also introduce changes to systems consequential to the engine change and an increase in certificated taxi and take-off (brake release) weights. The DH/BH.125 Series 400A aircraft modified as specified herein must be operated in accordance with the Approved Flight Manual Document HS.1.10. The HS.125 Series F400B or F403B aircraft modified as specified herein and meeting the requirements of Note 53 must also be operated in accordance with the Approved Flight Manual Document HS 1.10.
- NOTE 22. The Rolls-Royce Viper engines originally fitted to DH.125 Series 1A and HS.125 Series 1B airplanes may be replaced by Garrett AiResearch TFE 731-3 turbofan engines embodiment of Modification 252605 (aircraft fitted with Modification 251867) or 252606 (aircraft not fitted with Modification 251867) and the complementary modifications listed therein. In addition to the installation of the TFE 731-3 engines, the above modifications also introduce changes to systems consequential to the engine change. A DH.125 Series 1A or Series 1B aircraft modified with Modifications 251867 and 252605 as specified herein must be operated in accordance with the Approved Flight Manual Document H.S.1.11 basic.
- A DH.125 Series 1A or Series 1B aircraft modified with Modification 252606 as specified herein must be operated in accordance with the Approved Flight Manual Document H.S.1.11 and Particular Amendment No. P 2.
- A DH.125 Series 1B aircraft with either modifications seeking U.S. FAA Airworthiness Certificates and registration must also meet the requirements of Note 52.
- NOTE 23. Modification 252672 introduces a revised landing flap setting of 45 degrees to Series 400A and earlier Viper powered airplanes. Embodiment of this modification gives a noise reduction which meets the noise requirements of I.C.A.O. Annex 16. The limitations and procedures associated with this modification are provided in the Approved Flight Manual Documents: H.S.1.2 with Particular Amendment No. P 22 (Series 1A and 1B); H.S.1.3 with Particular Amendment No. P 87 (Series 1A-522, 1B-522, 1A/R-522, 1B/R-522, 1A/S-522, 1B/S-522, 3A, 3B, 3A/R, 3B/R, 3A/RA, 3B/RA and 3B/RB); H.S.1.5 with Particular Amendment No. P 37 (Series 400A and 400B)
- NOTE 24. Modification 256991 introduces an Aeronca Thrust Reverser system to the HS.125 Series 700A and Series 700B aircraft. The limitations and procedures associated with the thrust reverser system are provided in the Approved Flight Manual Document H.S.1.9, by Particular Amendment No. P 12.
- NOTE 25. The Rolls-Royce Viper engines originally fitted to DH.125 Series 3A/RA and HS.125 Series 3B/RA airplanes may be replaced by Garrett TFE 731-3 turbofan engines by embodiment of Modification 252600 or equivalent and the complementary modifications listed therein. In addition to the installation of the TFE 731-3 engines, the above modifications also introduce changes to systems consequential to the engine change and an increase in certificated taxi and take-off (brake release) weights. A DH.125 Series 3A/RA aircraft modified as specified herein must be operated in accordance with the Approved Flight Manual Document. H.S.1.10. A HS.125 Series F3B/RA aircraft modified as specified herein and meeting the requirements of Note 52 must also be operated in accordance with the Approved Flight Manual Document HS.1.10.

- NOTE 26. The Rolls-Royce Viper engines originally fitted to DH.125 Series 3A and HS.125 Series 3B aircraft may be replaced by Garrett TFE 731-3 turbofan engines by embodiment of Modification 252603 on the DH.125 Series 3A and Modification 252604 on the HS.125 Series 3B and the complementary modifications listed therein. In addition to the installation of the TFE 731-3 engines, the modifications also introduce changes to systems consequential to the engine change. A DH.125 Series 3A aircraft modified as specified herein, must be operated in accordance with the Approved Flight Manual Document HS 1.11 with Particular Amendment No. P 3. A HS.125 Series F3B aircraft modified as specified herein and meeting the requirements of Note 52 must also be operated in accordance with the Approved Flight Manual Document HS 1.11 with Particular Amendment No. P 3.
- NOTE 27. The maximum ramp weight may be increased by 500 lbs. to 25,500 lbs. and the take-off weight by 700 lbs. to 25,500 lbs. for the BH/HS.125 Series 600A with modification 252468, HS.125 Series F600B, HS.125 Series 700A and Series 700B aircraft providing that a revised limitations label is installed in accordance with Modification 252818 (Series 600A) or 258332, (Series 700) and the Approved Flight Manual document HS.1.9 containing Particular Amendment No. P 13.
- NOTE 28. Aviation Wide-cut fuel may only be used with TFE 731 engined aircraft when both engines have Modification 252738 embodied.
- NOTE 29. The maximum zero fuel weight may be increased with reductions in  $V_{MO}$  on a HS.125 Series 700A and Series 700B aircraft with modifications 252648 and 258332 by embodiment of modification 258825 Part D and by inclusion in the Approved Flight Manual Document H.S.1.9 of Particular Amendment No. P 26.
- NOTE 30. Modification 259550A introduces the BAe.125 Series 800A (C-29A C-FIN aircraft) intended for operation by the United States Air Force. Document HAW.D.258.AW0159 Issue 4 outlines the changes made to the standard BAe.125 Series 800A aircraft to achieve the delivery standard exported from the manufacturer. These aircraft embody features which would not normally be found on civil aircraft, including various provisions to enable the aircraft to be completed to the USAF requirements in the U.S. (Where provisions have been made for the fitment of equipment by the U.S. customer, these have been shown to comply with the associated installation requirements and be of no hazard to the aircraft, but have not been investigated for their intended function.)
- A BAe.125 Series 800A aircraft modified as specified above must be operated in accordance with the Approved Manual Document No. HS 1.16 containing Particular Amendment No. P 40 and any other applicable approved amendments.
- NOTE 31. The maximum taxiing (ramp) weight and the maximum take-off (brake release) weight for the BAe.125 Series 800A, 800B and Hawker 800 aircraft may be increased to 28,100 lbs. (12,746 kg) and 28,000 lbs. (12,701 kg) respectively, by the embodiment of either Modification 259550 Part B or 259952 Part A. An aircraft modified as specified above must be operated in accordance with the Approved Flight Manual Document No. HS.1.16 containing Particular Amendment No. P 45.
- NOTE 32. The maximum zero fuel weight for the BAe.125 Series 800A, 800B and Hawker 800 aircraft may be increased to 18,000 lbs. when Modification 253169A is embodied.
- NOTE 33. When a baggage pannier (Mod. 259292 or 259500) is embodied in lieu of the ventral tank,  $V_{MO}$  is: 335 knots up to 12,000 feet, less 1 knot per 680 feet, to 310 knots at 29,000 feet.
- NOTE 34. The maximum zero fuel weight may be increased to 16,300 Lbs. for HS.125 Series 700A and Series 700B with Modification 258825 embodied.
- NOTE 35. The Maximum Zero Fuel Weight may be increased to 15,200 lbs. but with a reduction in  $V_{MO}$  on a DH/BH.125 Series 400A or HS.125 Series 400B with Modification 259273 embodied.
- NOTE 36. Modification 259283 introduces Dee Howard TR5000BR Thrust Reversers to the BAe.125 Series 800A, 800B and Hawker 800. The limitations and procedures associated with the thrust reverser are provided in the Approved Flight Manual Document HS.1.16 containing Particular Amendment No. P 32.
- NOTE 37. The maximum zero fuel weight for the BAe.125 Series 800A, 800B and Hawker 800 aircraft may be increased to 17,750 lbs. when Modification 259579A is embodied.

- NOTE 38. The maximum zero fuel weight on the BAe.125 Series 1000A, 1000B and the Hawker 1000 may be increased to 20,300 lbs. provided that a revised limitations label is installed in accordance with Modification 253379A and the Approved Flight Manual contains General Amendment No. G1. The Approved Flight Manuals are document HS.1.19 for FAA certified aircraft and document HS.1.18 for UK CAA certified aircraft.
- NOTE 39. Modification 253410A introduces aerodynamic improvements to the tailplane/elevator configuration. BAe.125 Series 1000 and Hawker 1000 aircraft modified as specified above are to be operated in accordance with the Approved Flight Manual Document No. HS.1.19 containing General Amendment No. G6.
- NOTE 40. Modification 259976 Part A introduces the BAe.125 Series 800A (U-125) aircraft intended for Airborne Flight Inspection Operations. These aircraft embody features which would not normally be found on Civil Transport Aircraft including various provisions to enable the aircraft to be modified under STC action in the U.S. Where these provisions have been made for installations of equipment under STC action, these have been shown to comply with the associated installation requirements and be of no hazard to the aircraft, but have not been investigated for their intended function with installation of any STC.
- A BAe.125 Series 800A aircraft modified as specified above must be operated in accordance with the Approved Flight Manual Document No. HS 1.16 containing Particular Amendment No. P 60.
- NOTE 41. Modification 253686A introduces the Hawker 1000 designation and makes the requisite changes to identification plates and the limitations placard. This change is reflected in the Approved Flight Manual Document No. HS.1.19 containing Particular Amendment No. P 34. The Hawker 1000 is only a name change from the former BAe.125 Series 1000A. All Service Information published for the BAe.125 Series 1000A is equally applicable to the Hawker 1000.
- NOTE 42. Modification 253558A introduces the Hawker 800 designation and makes the requisite changes to identification plates and the limitations placard. This change is reflected in the Approved Flight Manual Document. No. HS 1.16 containing Particular Amendment P 63. The Hawker 800 is only a name change from the former BAe.125 Series 800A. All Service Information published for the BAe.125 Series 800A is equally applicable to the Hawker 800.
- NOTE 43. Modification 253650A introduces the PW305B engine. Embodiment of this modification changes the  $V_{MC}$  (Minimum Control Speed) limits. A BAe.125 Series 1000A, 1000B or Hawker 1000 aircraft modified as specified above is to be operated in accordance with the Approved Flight Manual Document No. HS.1.19 containing Particular Amendment No. P 17.
- NOTE 44. The maximum zero fuel weight on the BAe.125 Series 1000A, 1000B and the Hawker 1000 may be increased to 20,400 lbs. provided that a revised label is installed in accordance with Modification 25A714A and the Approved Flight Manual HS.1.19 containing Particular Amendment No. P 33.
- NOTE 45. An optional Modification Number 253608A deletes the external baggage door on the BAe.125 Series 1000A, 1000B and Hawker 1000 aircraft.
- NOTE 46. The maximum Zero Fuel Weight for the Models DH.125 Series 3A/RA and the HS.125 Series 3B/RA may be increased to 14,700 lbs. provided that Modification 25A767A is embodied and the Approved Flight Manual HS.1.3. contains Particular Amendment No. P 89.  $V_{MO}$  is also reduced.
- NOTE 47. Modification 253564A with associated changes introduces the model Hawker 800XP. The Garrett AiResearch TFE 731-5R Turbofan engines originally fitted to the Hawker 800 airplanes are replaced by Allied Signal Engines TFE 731-5BR. In addition to the installation of the TFE 731-5BR engines, the above modification also introduces the following changes:
- i) Dee Howard TR5000BR thrust reversers fitted as standard.
  - ii) Increase in certificated ramp, take-off and maximum zero fuel weights.
  - iii) Vortilons replace wing fences and Hawker 1000 aileron servo tab gearing is introduced.
  - iv) Rudder Bias moment arm is reduced to 2.72".

## NOTE 47. (cont'd)

- v) Mach Trim System is fitted.
- vi) 3 Wheel ECS is fitted as standard.
- vii) 38 liter TKS tank is fitted.
- viii) A Hawker 800XP airplane is to be operated in accordance with the Approved Flight Manual, Document No. HS.1.22. with appropriate Particular Amendments.

NOTE 48. UK CAA has made an assessment that all mandatory actions are contained in the instructions for Continued Airworthiness as well as embodied during the production of the Hawker model airplanes. This is documented in UK CAA letter reference 9/33/3956/A 24890 dated July 26, 1995.

NOTE 49. Modification 25B047A introduces the Hawker 800 intended for operation by the Japan Air Self Defense Force as a U-125A aircraft. Document CJE.CPD.D.272.001381 Issue 1, outlines the changes made to a standard Hawker 800 aircraft to achieve the delivery standard exported from the manufacturer. This modification was approved by the UK CAA on December 7, 1994 and is accepted by FAA as having demonstrated compliance with the particular requirement of the customer. Where provisions have been made for the fitment of equipment by the Japanese customer, these have been shown to comply with the associated installation requirements and be of no hazard to the aircraft, but have not been investigated for their intended function.

A Hawker 800 aircraft modified as specified above must be operated in accordance with the Approved Flight Manual Document. No. HS.1.16 containing Particular Amendment No. P 64 and any other applicable approved amendments.

NOTE 50. Some aircraft delivered new from the UK to international customers may not necessarily comply in full with the defined certification basis on which this TC has been granted due to overriding Foreign Authority requirements which have been satisfied for aircraft delivered into their country. There are two basic certification standards for the DH/HS/BH/BAe.125/Hawker series of airplanes. One is the US FAA Type Certificate standard. Aircraft certified to this standard are identified with an "A" in the Model suffix. The other certification standard is based on requirements established by the UK Civil Aviation Authority (CAA). Aircraft certified to the UK CAA standards are identified as "B" versions and include the following Models, Series: 1B, 1B-522, 1B/S-522, 1B/R-522, 3B, 3B/R, 3B/RA, 3B/RB, 3B/RC, F3B, F3B/RA, 400B, 400B/1, 401B, 403A(C), 403B, F400B, F403B, 600B, 600B/1, 600B/2, 600B/3, F600B, 700B, 800B, and 1000B. The 'B' models are equivalent to the 'A' models and meet U.S. certification requirements with the exception of the overriding UK CAA requirements and customer requested optional modifications approved by the UK CAA. While most countries outside of the UK and U.S. accept either "A", "B", or both versions of the aircraft, modifications of these aircraft are sometimes required to satisfy national variations in the certification standards established by the importing countries. Due to the wide range of potential configurations, specific instructions for modifying an airplane from one country standard to another are not available in a pre-published format. In those cases where it does become necessary to convert an aircraft from one certification standard to another, or to show the equivalency to the U. S. standard, the document used will be a serial number specific Service Bulletin issued by the Type Certificate Holder. This Service Bulletin will be FAA Approved.

NOTE 51. Raytheon Aircraft Company Service Bulletin No. 00-11 titled "General-Record of UK Airworthiness Directives (AD) at the Time of Transfer of ICAO Annex 8 Responsibilities from UK CAA to US FAA" will be used to document the AD's issued by the UK CAA prior to August 1, 1995.

NOTE 52. Regulatory requirements applicable to HS.125 Series 1B, 1B-522, 1B/R-522, 1B/S-522, 3B, 3B/R, 3B/RA, 3B/RB, 3B/RC, F3B and F3B/RA United Kingdom (UK) certified aircraft ("B" aircraft) to be eligible for U.S. FAA Transport category airworthiness certificates and registration as equivalent to an "A" aircraft are: (i) UK Air Registration Board V. A. Note 1, Issue 1, dated 19 April, 1961, (ii) Modification 251265 or equivalent for stall warning when the throttles are opened while lift dump or air brakes are extended, (iii) Modification 255051 or equivalent for passenger oxygen systems, (iv) Modification 251266 or equivalent for a speed warning device set in accordance with the requirements of FAA S.R. 450A, (v) FAA Exemption Number 573 grants exemption from CAR 4 b.437 Fuel Jettisoning System, and (vi) See Requirements of NOTE 50.

- NOTE 53. Regulatory requirements applicable to HS.125 Series 400B, 400B/1, 401B, 403B, 403A(C), F400B and F403B United Kingdom (UK) certified aircraft (“B” aircraft) to be eligible for U. S. FAA Transport category airworthiness certificates and registration as equivalent to an “A” aircraft are: (i) UK Air Registration Board V. A. Note 1, Issue 1, dated 19 April, 1961, (ii) Modification 251265 or equivalent for stall warning, (iii) Modification 255051 or equivalent for passenger oxygen systems, (iv) Modification 251266 or equivalent for a speed warning horn set in accordance with the requirements of FAA S.R. 450A, and (v) See requirements of NOTE 50.
- NOTE 54. Regulatory requirements applicable to HS.125 Series 600B, 600B/1, 600B/2, 600B/3 and F600B United Kingdom (UK) certified aircraft (“B” aircraft) to be eligible for U. S. FAA Transport category airworthiness certificates and registration as equivalent to an “A” aircraft are: (i) UK Air Registration Board V. A. Note 1, Issue 1, dated 19 April, 1961, (ii) Modification 251721 or equivalent for stall warning, (iii) Modification 256263A or equivalent for passenger oxygen systems, (iv) Modification 252261A or equivalent for a speed warning horn to meet compliance with FAR 25.1303 (c) (1) , (v) If applicable meet NOTE 18, and (vi) See requirements of NOTE 50.
- NOTE 55. The models HS.125 Series 600B/1, 600B/2 and 600B/3 were aircraft that had been exported to various countries and modified to operate within that countries Certification Agencies rules. These aircraft were later exported to the United Kingdom and inspected and modified to operate equivalent to a HS.125 Series 600B aircraft. To be eligible for U.S. FAA Transport category airworthiness certificate and registration these aircraft will be considered a model HS.125 Series 600B and shall meet the requirements of NOTE 54.
- NOTE 56. Regulatory requirements applicable to HS.125 Series 700B United Kingdom (UK) certified aircraft (“B” aircraft) to be eligible for U. S. FAA Transport category airworthiness certificates and registration as equivalent to an “A” aircraft are: (i) UK Air Registration Board V. A. Note 1, Issue 1, dated 19 April, 1961, (ii) Modification 252509 or equivalent for stall warning, (iii) Modification 252036A or equivalent for passenger oxygen systems, (iv) Modification 252523 or equivalent for a speed warning horn to meet compliance with FAR 25.1303 (c) (1), (v) Aircraft must be operated using Approved Flight Manual Document HS.1.9 with the appropriate Particular Amendments, and (vi) See requirements of NOTE 50.
- NOTE 57. Regulatory requirements applicable to BAe.125 Series 800B and some Hawker 800 that were United Kingdom (UK) certified aircraft (“B” aircraft) to be eligible for U. S. FAA Transport category airworthiness certificates and registration as equivalent to an “A” aircraft are: (i) UK Air Registration Board V. A. Note 1, Issue 1, dated 19 April, 1961, (ii) Modification 252509 or equivalent for stall warning, (iii) Modification 252036A or equivalent for passenger oxygen systems, (iv) Modification 252523 or equivalent for a speed warning horn to meet compliance with FAR 25.1303 (c) (1), (v) Aircraft must be operated using Approved Flight Manual Document HS.1.16 with the appropriate Particular Amendments, and (vi) See requirements of NOTE 50.
- NOTE 58. Regulatory requirements applicable to BAe.125 Series 1000B and some Hawker 1000 that were United Kingdom certified aircraft (“B” aircraft) to be eligible for U.S. FAA Transport category airworthiness certificates and registration as equivalent to an “A” aircraft are: (i) UK Air Registration Board V. A. Note 1, Issue 1, dated 19 April, 1961, (ii) Modification 252509 or equivalent for stall warning, (iii) Modification 252036A or equivalent for passenger oxygen systems, (iv) Modification 252523 or equivalent for a speed warning horn to meet compliance with FAR 25.1303 (c)(1), (v) Aircraft must be operated using Approved Flight Manual Document HS.1.19 with the appropriate Particular Amendments, and (vi) See requirements of NOTE 50.
- NOTE 59. The Hawker 800XP aircraft was designed to meet this Type Certificate standard and receive the U. S. FAA Transport Category Airworthiness Certificates. Some individual aircraft may not necessarily comply in full with the defined certification basis on which this TC has been granted due to overriding Foreign Authority requirements which have been satisfied to deliver in their country. Airplanes requesting a U.S. FAA airworthiness certificate should contact the Type Certificate Holder for information regarding the FAA approval status of modifications installed by the Type Certificate Holder to meet foreign registry requirements. Aircraft with Honeywell SPZ-8000 avionics, or Collins EFIS 86 avionics, must be operated using Approved Flight Manual Document HS.1.22 with the appropriate Particular Amendments and Supplements. Aircraft equipped with Collins Pro line 21 avionics must be operated using Airplane Flight Manual 140-590032-0005. [see note 67]. See requirements of NOTE 50.

- NOTE 60. The following serial numbered aircraft were manufactured in the UK by Raytheon Corporate Jets, Inc.  
Hawker 800 (U-125A) 258245, 258247 and 258250  
Hawker 800 258255 through 258265, 258267, 258269 through 258276  
Hawker 1000 259043 through 259047.
- Aircraft manufactured in the UK by Raytheon Corporate Jets, Inc. under license to Raytheon Aircraft Company can be identified in NOTE 6 (d).
- NOTE 61. Some aircraft were manufactured and delivered to the United States using only a North American (NA) reference number on the aircraft data plate. Service Bulletin SB.00-12 provides a cross reference listing of the North American (NA) reference numbers against serial numbers (25XXX or 25XXXX).
- NOTE 62. The contents of the ventral fuel tank are reduced by 4.8 gallons for aircraft which have fitted an external toilet servicing facility.
- NOTE 63. The following serial numbered Hawker 800 (U-125A), Hawker 800XP, Hawker 850XP, and Hawker 1000 aircraft were manufactured by Raytheon Aircraft Company in the USA.:
- Hawker 800 (U-125A) and Hawker 800XP and Hawker 850XP: 258297, 258301, 258304, 258306, 258309, 258311, 258313, 258315, 258317, 258319, 258320, 258322, 258325, 258326, 258331, 258333, 258334, 258336 and 258338 thru 258819, 258821 thru 258835.  
Hawker 1000: 259003
- The following serial numbered Hawker 800 (U-125A), Hawker 800XP, Hawker 850XP, Hawker 750, and Hawker 900XP aircraft were manufactured by Hawker Beechcraft Corporation in the USA.:
- Hawker 800 (U-125A): 258843  
Hawker 800XP: 258840 and 258847  
Hawker 850XP: 258836 to 258838, 258841, 258844, 258845, 258848, 258852, 258855, 258856, 258858, 258859, 258861, 258872 and on.  
Hawker 750: HB-1 and on.  
Hawker 900XP: HA-0001 and on.
- NOTE 64. The BAe.125 Series 800A, BAe.125 Series 800B, BAe 125 Series 1000A, Bae.125 Series 1000B, Hawker 800, Hawker 1000, Hawker 800XP, Hawker 850XP, Hawker 750, and Hawker 900XP have been approved for Reduced Vertical Separation Minimum (RVSM) flight provided one of the following criteria are met:
- For BAe.125 Series 800A, BAe125 Series 800B, Hawker 800 and 800XP aircraft equipped with Honeywell SPZ-8000 avionics, either Mod 25F731A or Raytheon Aircraft Company Service Bulletin 34-3110 must be embodied.
  - For BAe.125 Series 800A, BAe125 Series 800B, Hawker 800 and 800XP aircraft equipped with Rockwell Collins EFIS-86 avionics (with Collins ADC-86), either Modification 25F731B or Raytheon Aircraft Company Service Bulletin 34-3166 must be embodied.
  - For BAe.125 Series 800A, BAe.125 Series 800B, and BAe.125 – Series 800A Major Variant C-29A, equipped with Rockwell Collins EFIS-85 avionics (with Collins ADC-82A), Raytheon Aircraft Company Bulletin 34-3381 must be embodied. (See Section XVI, Serial Number Eligible, for model effectivity)
  - For Hawker 800XP aircraft equipped with Collins ProLine 21 avionics:  
Aircraft 258541, 258556, 258567 through 258586, require embodiment of Raytheon Aircraft Company Service Bulletin 34-3517  
Aircraft 258587 through 258609, 258611 through 258628, 258630 through 258684, 258686 through 258734, 258736 through 258788, 258795, 258802, 258821, 258825, 258829, 258834, 258840, and 258847 are RVSM-capable by type design as delivered new from Raytheon Aircraft Company.

## NOTE 64. (cont'd)

- For Hawker 850XP aircraft equipped with Collins ProLine 21 avionics:
- For Hawker 850XP aircraft equipped with Collins ProLine 21 avionics:  
Serial Number 258789 through 258794, 258796, 258798 through 258801, and 258803 through 258819, 258822, 258823, 258826 through 258828, 258830 through 258833, 258835 through 258838, 258841, 258844, 258845, 258848 and subsequent; are RVSM-capable by type design as delivered new from Raytheon Aircraft Company; (Serial Number 258750 through 258788, 258795, and 258802, when Service Bulletin 01-3776, *To Introduce the Conversion of Model 800XP Aircraft to Model 850XP Aircraft*, which installs manufacturer kit 140-1702, are RVSM-capable by their original Hawker 800XP type design, Pro Line 21 avionics suite equipped, as delivered new from Raytheon Aircraft Company.)
- For Hawker 750 aircraft equipped with Collins ProLine 21 avionics:  
Serial Number HB-1 and subsequent; are RVSM-capable by type design as delivered new from Hawker Beechcraft Corporation.
- For Hawker 900XP aircraft equipped with Collins ProLine 21 avionics:  
Serial Number HA-0001 and subsequent; are RVSM-capable by type design as delivered new from Hawker Beechcraft Corporation.  
(Serial Number 258541, 258556, 258557 through 258609, 258611 through 258628, 258630 through 258684, 258686 through 258734, 258736 through 258796, 258798 through 258819, 258821 through 258823, 258825 through 258838, 258840, 258841, 258844, 258845, 258847, 258848, 258852, 258855, 258856, 258858, 258859, 258861, 258872, 258874, 258876, 258891, 258893, 258895, 258900, 258901, 258904, 258907, 258909, 258912, 258915, 258921, 258959, 258961, 258963, 258977, 258980, 258982 through 258984, with Kit 140-9004, are RVSM-capable by their original Hawker 800XP or Hawker 850XP type design, Pro Line 21 avionics suite equipped, as delivered new from Raytheon Aircraft Company or Hawker Beechcraft Corporation.)
- For BAe.125 Series 1000A, BAe.125 Series 1000B and the Hawker 1000 equipped with Honeywell SPZ-8000 avionics, either Modification 25F856A or Raytheon Aircraft Company Service Bulletin 34-3216 must be embodied. (See Section XVII, Serial Number Eligible, for model effectivity)

Final approval for RVSM operations must be obtained by the operator from the local FAA Flight Standards District Office (FSDO) or equivalent.

NOTE 65. Master Drawing List 800E0165 introduces the FAA approved modifications for the Hawker 800XP aircraft for operation by the Brazilian Air Force for Airborne Flight Inspection Operations. A Hawker 800XP aircraft modified as specified above must be operated in accordance with the Approved Flight Manual Document No. HS 1.22 containing Supplement 9, Issue 2. The following serial numbered aircraft were modified per the above master drawing list 258401, 258421, 258434 and 258447.

NOTE 66. Airplane models 125-1000A and Hawker 1000 are the subject of Special Condition related to operation at high altitude. This special condition includes pressurization system requirements, as well as damage tolerance requirements on the pressure vessel. Therefore, any changes to the pressurization system or modifications or repairs to the pressure vessel must be approved in accordance with the requirements defined in the special condition.

The damage tolerance requirements in the special condition are specified in terms of cabin altitude time history, which is a function of the cabin leak rate. For models 125-1000A and Hawker 1000 the specified cabin altitude time history requirement can be met with a pressure vessel opening of 3.0 square inches, (assuming an emergency descent). The determination of an equivalent crack length will depend upon the particular location of the crack, the pressure vessel configuration in that location, and the direction of the crack, etc. The approval of modifications and/or repairs must take into account the requirements of the special condition and how they apply to the particular location and configuration being modified or repaired. The resulting inspection program must also consider other applicable structural criteria.

- NOTE 67. Collins Pro Line 21 Avionics are embodied in the Hawker 800XP effective serial number: Serial Number 258278, 258541, 258556, 258567 through 258609, 258611 through 258628, 258630 through 258684, 258686 through 258734, 258736 through 258788, 258795, and 258802, 258821, 258825, 258829, 258834, 258840, and 258847. A Collins Pro Line 21 Avionics equipped aircraft is required to operate in accordance with the Airplane Flight Manual 140-590032-0005.
- NOTE 68. Hawker 800XP equipped with Collins Pro Line 21 Serial Number 258750 through 258788, 258795, and 258802, are eligible to be re-designated as a Model Hawker 850XP when modified by Service Bulletin 01-3776, *To Introduce the Conversion of Model 800XP Aircraft to Model 850XP Aircraft*, which installs manufacturer kit 140-1702. Original Hawker 800XP data plate (14 CFR 21.182 and 14 CFR 45.11) shall not be removed when incorporating Service Bulletin 01-3776.
- NOTE 69. Master Data List 900E301900 defines the introduction of the Hawker 900XP airplanes equipped with Collins Pro Line 21 Avionics in conjunction with Honeywell Aerospace TFE731-50R engines. Serial Number HA-0001 and subsequent are required to operate in accordance with the Airplane Flight Manual 140-590037-0005.
- NOTE 70. Master Data List 750E314272 defines the introduction of the Hawker 750 airplanes equipped with Collins Pro Line 21 Avionics in conjunction with Honeywell Aerospace TFE731-5BR engines. Serial Number HB-1 and subsequent are required to operate in accordance with the FAA Approved Airplane Flight Manual 140-590039-0005.
- NOTE 71. Hawker 800XP and Hawker 850XP equipped with Collins Pro Line 21 Serial Number 25841, 258556, 258567 through 258609, 258611 through 258628, 258630 through 258684, 258686 through 258734, 258736 through 258796, 258798 through 258819, 258821 through 258823, 258825 through 258838, 258840, 258841, 258844, 258845, 258847, 258848, 258852, 258855, 258856, 258858, 258859, 258861, 258872, 258874, 258876, 258891, 258893, 258895, 258900, 258901, 258904, 258907, 258909, 258912, 258915, 258921, 258959, 258961, 258963, 258977, 258980, 258982 through 258984 are eligible to be re-designated as a Model Hawker 900XP when modified by 140-9004, Kit 800XP/850XP Engine Upgrade. Original Hawker 800XP and/or Hawker 850XP data plate (14 CFR 21.182 and 14 CFR 45.11) shall not be removed when incorporating Kit 140-9004. These serial numbers when modified by Kit 140-9004 are required to operate in accordance with the Airplane Flight Manual 140-590037-0005.

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