

I. Hawker Siddeley Model DH.125, Series 1A (Transport Aircraft), Approved September 25, 1964 (See Note 14).

<u>Engines.</u>	2 Bristol Siddeley Viper 521 turbine engines.	
<u>Fuel.</u>	Aviation Kerosene to specification D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM.D.1655 Jet A or Jet A1. Aviation Widecut to specification D.Eng.RD.2486, D.Eng.RD.2454, 3-GP-22 Type 2, or ASTM.D-1655 Jet B. (See Note 4).	
<u>Engine Limits.</u>	Take-off static thrust, standard day, sea level conditions (unrestricted) lb.	3,120
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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
	Continuous operation (See Note 13)	125°C
	Maximum permissible air bleed extraction of primary engine airflow	74%
<u>Airspeed Limits. (IAS)</u>	V _{MO} (Maximum operating) Sea level to 26,800 ft.	290 knots
	M _{MO} (Maximum operating) 26,800 ft. and above	M = 0.735
	V _A (Manoeuvring) 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 _{FE} (Flap speeds)	
	<u>Deflection</u>	<u>KTS</u>
	15°	210
	25°	160
	50° or 45° (See Note 23)	145
	(Landing Gear Operation)	
	V _{LO} 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° in ISA-20°C conditions)	93 knots
	V _{MCG} (with flaps at 0° or 15° in ISA-20°C conditions)	94 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. (SMC)</u>	90.24 in. The leading edge of the S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).	

C.G. Range. (Gear and Flaps retracted)	Wt. lb.	Fwd of Datum				Aft of Datum			
		In-flight		T.O. & Land		Autopilot disengaged		Autopilot engaged	
		% SMC	In.	% SMC	In.	% SMC	In.	% SMC	In.
	21,200	22.4	0.75	23.6*	(0.75)	33.8	9.8	32.6	8.70
	20,550	-	-	-	-	34.3	10.2	33.0	9.0
	19,000	-	-	-	-	34.1	9.95	32.8	8.82
	17,800	18.8	3.78	20.2	2.52	-	-	-	-
	16,800	-	-	-	-	33.1	9.1	-	-
	16,600	-	-	-	-	-	-	31.6	7.8
	13,000	18.0	4.51	20.0	2.71	-	-	-	-
	12,350	-	-	-	-	37.5	13.10	35.5	11.30
	12,100	18.0	4.51	20.0	2.71	-	-	-	-
	10,800	-	-	26.0*	(2.71)	37.5	13.10	35.5	11.30

*(Aft of Datum)

Straight line variation between weights

Item (Extending)	Moment Change lb.in.
Wing Flaps 15 ⁰	+538
25 ⁰	+879
50 ⁰ or 45 ⁰ (See Note 25)	+1,593
Main Landing Gear	-1,800
Nose Landing Gear	+1,380

The airplane is normally weighted 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 lb. (See Note 12)
Maximum Brake release weight	21,200 lb.
Maximum Landing Weight	19,550 lb.
Maximum Zero Fuel Weight	13,000 lb. (See Note 12)

Minimum Crew.

For all flights, 2 pilots

Maximum Passengers.

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Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See NOTE 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Aft	395 to 425	60	130
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	

Fuel Capacity.

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
Tank 1	615	4,100	5.7
Tank 2	615	4,100	5.7
Engines and lines	<u>1.5</u>	<u>11</u>	81
TOTAL	1,231.5	8211	5.69

Oil Capacity.

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 Lb. In.
No. 1	1.87	14	82	1153
No. 2	<u>1.87</u>	<u>14</u>	82	1153
TOTAL	3.74	28	82	2306

Maximum Operating Altitude.

40,000 feet (See Note 9)

Serial Numbers Eligible.

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

II. Hawker Siddeley Model DH.125 Series 1A/522 (Transport Aircraft), Approved February 3, 1966.

(The DH.125 Series 1A-522 aircraft differs from the DH.125 Series 1A aircraft in the following major features: (i) introduction of Bristol Siddeley Viper 522 engines (ii) values of M_{MO} and V_{MO} (See Note 14).

Engines.

2 Bristol Siddeley Viper 522 turbine engines.

Fuel.

Aviation Kerosene to specification D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, 3-GP-22 Type 2, ASTM.D.1655 Jet B. (See Note 4).

Engine Limits.

Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lb.	3,330	
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	3,100	
Maximum permissible engine rotor	100%	
Operating speed (5 minutes maximum)	(13,760 r.p.m.)	
Maximum permissible turbine outlet gas temperature:		
Take-off (5 minutes maximum)	730°C	See Note 7
Maximum continuous	705°	
Maximum for acceleration	705°C	
Starting maximum gas temperature	800°C	
Maximum permissible oil inlet temperature:		
Continuous operation	125°C (See Note 13)	
Maximum permissible air bleed extraction of primary engine airflow	74%	

<u>Airspeed Limits.</u> (IAS)	VMO (Maximum operating) Sea level to 27,800 ft.	285 knots
	MMO (Maximum operating) 27,800 ft. and above	M = 0.750
	VA (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.

VFE (Flap speeds)	
<u>Deflection</u>	<u>KTS</u>
15 ⁰	210
25 ⁰	160
50 ⁰ or 45 ⁰ (See Note 23)	45
VLO (Landing Gear Operation)	
Retract	210 knots
Extend	210 knots
VLE (Landing Gear Extended)	210 knots
VMC (Minimum Control Speed)	
VMCA (with flaps at 0 ⁰ or 15 ⁰ at sea level for temperatures below 10 ⁰ C)	93 knots
VMCG (with flaps at 0 ⁰ or 15 ⁰ at sea level for temperatures below 10 ⁰ 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 S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

<u>C.G. Range.</u> (Gear and Flaps retracted)	<u>Wt. lb.</u>	<u>Fwd of Datum</u>				<u>Aft of Datum</u>			
		<u>In-flight</u>		<u>T.O. & Land</u>		<u>Autopilot disengaged</u>		<u>Autopilot engaged</u>	
		% SMC	In.	% SMC	In.	% SMC	In.	% SMC	In.
	21,200	22.4	0.75	23.6*	(0.75)	33.8	9.8	32.6	8.70
	20,550	-	-	-	-	34.3	10.2	33.0	9.0
	19,000	-	-	-	-	34.1	9.95	32.8	8.82
	17,800	18.8	3.78	20.2	2.52	-	-	-	-
	16,800	-	-	-	-	33.1	9.1	-	-
	16,600	-	-	-	-	-	-	31.6	7.8
	13,000	18.0	4.51	20.0	2.71	-	-	-	-
	12,350	-	-	-	-	37.5	13.10	35.5	11.30
	12,100	18.0	4.51	20.0	2.71	-	-	-	-
	10,800	-	-	26.0*	(2.71)	37.5	13.10	35.5	11.30

* (Aft of Datum)

Straight line variation between weights

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

The airplane is normally weighted 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 lb. (See NOTE 12)
Maximum Brake release weight	21,200 lb
Maximum Landing Weight	19,550 lb.
Maximum Zero Fuel Weight	13,000 lb. (See NOTE 12)

Minimum Crew. For all flights, 2 pilots

Maximum Passengers. 8

Maximum Baggage

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Aft	395 to 425	60	130
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	

Fuel Capacity.

<u>Usable Fuel</u>			
<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm. In.</u>
Tank 1	615.0	4,100	5.7
Tank 2	615.0	4,100	5.7
Engines and lines	1.5	11	81
TOTAL	1,231.5	8,211	5.69

Oil Capacity.

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

<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm In.</u>	<u>Moment Lb. In.</u>
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 Model DH.125 Series 1A

III. Hawker Siddeley Model DH.125 Series 3A (Transport Aircraft), Approved November 7, 1966.

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

<u>Engines.</u>	2 Bristol Siddeley Viper 522 turbine engines.	
<u>Fuel.</u>	Aviation Kerosene to specification D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, 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 (5 minutes maximum) lb.	3,330
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	3,100
	Maximum permissible engine rotor	100%
	Operating speed (5 minutes maximum)	(13,760 r.p.m.)
	Maximum permissible turbine outlet gas temperature:	
	Take-off (5 minutes maximum)	730°C
	Maximum continuous	750°C
	Maximum for acceleration	705°C
	Starting maximum gas temperature	800°C
	Maximum permissible oil inlet temperature:	
	Continuous operation	125°C (See NOTE 13)
	Maximum permissible air bleed extraction of primary engine airflow	74%
<u>Airspeed Limits. (IAS)</u>	V_{MO} (Maximum operating) 285 kts. from sea level to 27,200 feet decreasing linearly to 273 kts. at 30,800 feet	
	M_{MO} (Maximum operating) 30,800 ft. and above	M-0.765 (See NOTE 15)
	V_A (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.	
<u>Airspeed Limits (IAS)</u>	V_{FE} (Flap speeds)	
	<u>Deflection</u>	<u>KTS</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
<u>Airspeed Limits (IAS)</u> (Continued)	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

See
Note
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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 S.M.C. is 20.76. in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

<u>C.G. Range.</u> (Gear and Flaps retracted)	<u>Wt.Lb.</u>	<u>Fwd. of Datum</u>				<u>Aft of Datum</u>			
		<u>In-Flight</u>		<u>T.O. & Land</u>		<u>Autopilot Disengaged</u>		<u>Autopilot Engaged</u>	
		% SMC	In.	% SMC	In.	% SMC	In.	% SMC	In.
21,700	23.6	*(0.5)	24.7	*(1.6)	33.7	9.6	32.4	8.5	
21,200	22.4	0.5	23.6	*(0.6)	-	-	-	-	
21,000	22.2	0.6	-	-	-	-	32.8	8.8	
20,550	-	-	-	-	34.3	10.2	33.0	9.0	
19,000	-	-	-	-	34.1	10.0	32.8	8.8	
17,750	18.8	3.8	20.2	2.5	-	-	-	-	
16,800	-	-	-	-	33.1	9.1	-	-	
16,600	-	-	-	-	-	-	31.7	7.8	
13,000	18.0	4.4	20.0	2.7	-	-	-	-	
12,350	-	-	-	-	37.5	13.0	35.5	11.3	
12,100	18.0	4.4	20.0	2.7	-	-	-	-	
10,800	-	-	26.0	*(2.7)	37.5	13.0	35.5	11.3	

*(Aft of Datum)

Straight line variation between weight.

<u>Item (Extending</u>	<u>Moment Change Lb. In.</u>
Wing Flaps 15 ^o	+538
25 ^o	+879
50 ^o or 45 ^o (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 lb. (See NOTE 12)
Maximum Brake Release Weight	21,700 lb.
Maximum Landing Weight	20,000 lb.
Maximum Zero Fuel Weight	13,500 lb. (See NOTE 12)

Minimum Crew. For all flights, 2 pilots

Maximum Passengers. 8

Maximum Baggage.

Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See Note 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Aft	395 to 425	60	130
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	

Fuel Capacity.

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lb.	Arm In.
Tank 1	615.0	4,100	5.70
Tank 2	615.0	4,100	5.70
Engines and Lines	1.5	11	81.00
Total	1,231.5	8,211	5.69

Oil Capacity.

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 Lb. In.
No. 1	1.87	14	82	1153
	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 thru 25172

IV. Hawker Siddeley Model DH.125, Series 1A/R-522 (Transport Aircraft), Approved August 9, 1967.

(The DH.125, Series 1A/R-522 aircraft differs from the DH.125 Series 1A/522 aircraft by the incorporation of Hawker Siddeley Modifications Nos. 25/1700 & 25/5640, 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 D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, 3-GP-22 Type 2, ASTM.D.1655 Jet B. (See NOTE 4).

Engine Limits.

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

Maximum permissible turbine outlet gas temperature:

Take-off (5 minutes maximum)	730°C	See Note 7
Maximum continuous	705°	
Maximum for acceleration	705°C	
Starting maximum gas temperature	800°C	

Maximum permissible oil inlet temperature: Continuous operation	125°C (See NOTE 13)
Maximum permissible air bleed extraction of primary engine airflow	74%

C.G. Range (Gear and Flaps
Retracted)

Wt. Lb.	Fwd. of Datum		Aft of Datum	
	% SMC	In.	% SMC	In.
22,300	29.5	*(5.9)	37.8	13.3
22,200	29.4	*(5.8)	37.9	13.4
22,100	-	-	38.0	13.5
21,400	25.6	2.35	-	-
19,200	-	-	37.9	13.4
18,840	-	-	34.0	9.9
17,750	22.4	0.5	-	-
17,400	-	-	33.4	9.3
13,000	23.0	0	37.5	13.1
12,000	23.0	0	-	-
11,000	28.0	*(4.5)	37.5	13.1

*(Aft of Datum)

Straight line variation between weights.

<u>Item (Extending)</u>	<u>Moment Change Lb. In.</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 lb.
Maximum Brake Release Weight	22,200 lb.
Maximum Landing Weight	19,550 lb.
Maximum Zero Fuel Weight	13,200 lb.

Minimum Crew.

For all flights, 2 pilots

Maximum Passengers.

8

Maximum Baggage

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Aft	395 to 425	60	130
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	

Fuel Capacity.

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
Tank 1	615.0	4,100	5.7
Tank 2	615.0	4,100	5.7
Engines and lines	1.5	11	81.7
Long Range Tank	134.5	896	88.7
TOTAL	1,366.0	9,107	13.9

Oil Capacity.

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 Lb. In.
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 Model DH.125 Series 1A

V. Hawker Siddeley Model DH.125, Series 3A/R (Transport Aircraft), Approved August 9, 1967.

(The DH.125 Series 3A/R aircraft differs from the DH.125 3A aircraft by the incorporation of Hawker Siddeley Modifications Nos. 25/1700 and 25/5640, 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 D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, 3-GP-22 Type 2, ASTM.D.1655 Jet B. (See NOTE 4).

Engine Limits.

Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lb.	3,330	
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	3,100	
Maximum permissible engine rotor Operating speed (5 minutes maximum)	100% (13,760 r.p.m.)	
Maximum permissible turbine outlet gas temperature:		
Take-off (5 minutes maximum)	730°C	See Note 7
Maximum continuous	750°	
Maximum for acceleration	705°C	
Starting maximum gas temperature	800°C	
Maximum permissible oil inlet temperature: Continuous operation	125°C (See NOTE 13)	
Maximum permissible air bleed extraction of primary engine airflow	75%	

<u>Airspeed Limits.</u> (IAS)	V_{MO} (maximum operating) with fuel in long-range tank	260 knots
	with long-range tank empty 285 knots from sea level to 27,200 feet decreasing linearly to 273 knots at 30,800 feet	
	V_{MO} (maximum operating) 30,800 ft. and above	M - 0.765
	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
	V_{fe} (Flap Speeds)	
	Maximum Flap	
	<u>Deflection</u>	<u>KTS</u>
	15°	210
	25°	160
	50° or 45° (See NOTE 23)	145
	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 skin located beneath the starboard engine pod.

Standard Mean Chord. (SMC) 90.24 in. The leading edge of the S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

<u>C.G. Range.</u> (Gear and Flaps Retracted)	WT.	Fwd. of Datum		Aft of Datum	
	Lb.	% SMC	In.	% SMC	In.
	22,800	31.0	*(7.2)	37.0	12.6
	22,150	-	-	38.0	13.5
	21,700	25.7	*(2.5)	-	-
	19,200	-	-	37.9	13.4
	18,850	-	-	34.0	9.9
	17,750	22.4	0.5	-	-
	17,400	-	-	33.3	9.3
	13,000	23.0	0.0	37.5	13.1
	12,000	23.0	0.0	-	-
	11,000	28.0	*(4.5)	37.5	13.1

*Aft of Datum

Straight line variation between weights.

<u>C.G. Range.</u>	<u>Item (Extending)</u>	<u>Moment Change Lb. In.</u>
	Wing Flaps 15 ⁰	+538
	25 ⁰	+879
	50 ⁰ or 45 ⁰ (See NOTE 23)	+1,593
	Main Landing Gear	-1,800
	Nose Landing Gear	+1,380
	The airplane is normally weighted 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	22,800 lb.
	Maximum Brake Release Weight	22,700 lb.
	Maximum Landing Weight	20,000 lb.
	Maximum Zero Fuel Weight	13,700 lb.

Minimum Crew. For all flights, 2 pilots

Maximum Passengers. 8

<u>Maximum Baggage</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds (See NOTE 8)</u>
	<u>Compartment</u>		
	Forward		
	6 seater	205 to 260	60
	8 seater	205 to 250	60
	Aft	395 to 425	60
	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

<u>Fuel Capacity.</u>	<u>Usable Fuel</u>		
	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm. In.</u>
	<u>Location</u>		
	Tank 1	615.0	4,100
	Tank 2	615.0	4,100
	Engines and lines	1.5	11
	Long Range Tank	<u>134.5</u>	<u>896</u>
	TOTAL	1,366.0	9,107

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

	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm In.</u>	<u>Moment Lb. In.</u>
No. 1	1.87	14	82	1153
No. 2	<u>1.87</u>	<u>14</u>	82	1153
TOTAL	3.74	28	82	2306

Maximum Operating Altitude. 41,000 feet (See NOTE 9)

Serial Numbers Eligible. Same as listed previously for Hawker Siddeley Model DH.125 Series 3A

VI. Hawker Siddeley Model DH.125 Series 1A/S-522 (Transport Aircraft), Approved February 15, 1968

(The DH.125 Series 1A/S-522 aircraft differs from the DH.125 Series 1A/522 aircraft by the incorporation of Hawker Siddeley modification No. 25/1867 which introduces structural additions enabling the aircraft to be operated to the same limitations as the DH.125 Series 3A except for the maximum landing weight which remains at 19,550 lb., and maximum operating altitude). (See NOTE 11).

<u>Engines.</u>	2 Bristol Siddeley Viper 522 turbine engines.	
<u>Fuel.</u>	Aviation Kerosene to specification D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, 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 (5 minutes maximum) lb.	3,330
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	3,100
	Maximum permissible engine rotor	100%
	Operating speed (5 minutes maximum)	(13,760 r.p.m.)
	Maximum permissible turbine outlet gas temperature:	
	Take-off (5 minutes maximum)	730°C
	Maximum continuous	705°
	Maximum for acceleration	705°C
	Starting maximum gas temperature	800°C
		See Note 7
	Maximum permissible oil inlet temperature: Continuous operation	125°C (See NOTE 13)
	Maximum permissible air bleed extraction of primary engine airflow	74%
<u>Airspeed Limits. (IAS)</u>	V _{MO} (Maximum operating) 285 kts. from sea level to 27,200 feet decreasing linearly to 273 kts. at 30,800 feet	
	M _{MO} (Maximum operating) 30,800 ft. and above	M-0.765 (See NOTE 15)
	V _A (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 _{FE} (Flap speeds)	
	<u>Deflection</u>	<u>KTS</u>
	15°	210
	25°	160
	50° or 45° (See NOTE 23)	145
	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 S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

C.G. Range. (Gear and Flaps)

Wt. Lb.	Fwd. of Datum				Aft of Datum			
	In-Flight		T.O. & Land		Autopilot Disengaged		Autopilot Engaged	
	% SMS	In.	% SMS	In.	% SMS	In.	% SMS	In.
21,700	23.6	*(0.5)	24.7	*(1.6)	33.7	9.6	32.4	8.5
21,200	22.4	0.5	23.6	*(0.6)	-	-	-	-
21,000	22.2	0.6	-	-	-	-	32.8	8.8
20,550	-	-	-	-	34.3	10.2	33.0	9.0
19,000	-	-	-	-	34.1	10.0	32.8	8.8
17,750	18.8	3.8	20.2	2.5	-	-	-	-
16,800	-	-	-	-	33.1	9.1	-	-
16,600	-	-	-	-	-	-	31.7	7.8
13,000	18.0	4.4	20.0	2.7	-	-	-	-
12,350	-	-	-	-	37.5	13.0	35.5	11.3
12,100	18.0	4.4	20.0	2.7	-	-	-	-
10,800	-	-	26.0	*(2.7)	37.5	13.0	35.5	11.3

*Aft of Datum

Straight line variation between weight.

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

Minimum Crew. For all flights, 2 pilots

Maximum Passengers. 8

Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See NOTE 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Aft	395 to 425	60	130
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	

Fuel Capacity.

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
Tank 1	615.0	4,100	5.7
Tank 2	615.0	4,100	5.7
Engines and lines	1.5	11	81
TOTAL	1,231.5	8,211	5.69

Oil Capacity. 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 Lb. In.
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 Model DH.125 Series 1A

VII. Hawker Siddeley Model DH.125 Series 3A/RA (Transport Aircraft), Approved February 15, 1968

(The DH.125 Series 3A/RA aircraft differs from the DH.125 Series 3A-R aircraft by (i) incorporation of Hawker Siddeley modification No. 25/1916 which introduces structural additions to permit a maximum zero fuel weight of 14,200 lb. (ii) a maximum ramp weight of 23,100 lb). (See NOTE 11).

Engines. 2 Bristol Siddeley Viper 522 turbine engines.

Fuel. Aviation Kerosene to specification D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, 3-GP-22 Type 2, ASTM.D.1655 Jet B. (See NOTE 4).

Engine Limits.

Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lb.	3,330	
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	3,100	
Maximum permissible engine rotor	100%	
Operating speed (5 minutes maximum)	(13,760 r.p.m.)	
Maximum permissible turbine outlet gas temperature:		
Take-off (5 minutes maximum)	730°C	See Note 7
Maximum continuous	705°	
Maximum for acceleration	705°C	
Starting maximum gas temperature	800°C	
Maximum permissible oil inlet temperature: Continuous operation	125°C (See NOTE 13)	
Maximum permissible air bleed extraction of primary engine airflow	74%	
<u>Airspeed Limits. (IAS)</u>		
V _{MO} (maximum operating) *See Note 46		
with fuel in long-range tank	260 knots	
with long-range tank empty - sea level to 27,800 feet	285 knots	
M _{MO} (maximum operating) 27,800 ft. and above	M = 0.750	
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

Airspeed Limits (IAS) (cont'd)

V _{fe} (Flap Speeds)	
<u>Deflection</u>	<u>KTS</u>
15°	210
25°	160
50° or 45° (See NOTE 23)	145
V _{lo} (Landing Gear Operation)	
Retract	210 knots
Extend	210 knots
V _{le} (Landing Gear Extended)	210 knots

Airspeed Limits. (IAS)

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 skin located beneath the starboard engine pod.

Standard Mean Chord. (SMC)

90.24 in. The leading edge of the S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

C.G. Range. (Gear and Flaps Retracted)

Wt. Lb.	Fwd. of Datum		Aft of Datum	
	% SMC	In.	% SMC	In.
23,100	28.9	*(5.3)	38.0	13.5
22,200	25.2	*(2.0)	-	-
19,200	-	-	38.0	13.5
18,950	22.4	1.9	-	-
18,850	-	-	34.0	9.9
18,400	-	-	33.8	9.7
14,200	23.0	0	37.5	13.1
12,000	23.0	0	-	-
11,000	28.0	*(4.5)	37.5	13.1

*(Aft of Datum)

Straight line variation between weights.

<u>Item (Extending)</u>	<u>Moment Change Lb.In.</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	23,100 lb.
Maximum Brake Release Weight	22,700 lb.
Maximum Landing Weight	20,000 lb.
Maximum Zero Fuel Weight	14,200 lb. (See Note 46.)

Minimum Crew. For all flights, 2 pilots

Maximum Passengers. 8

<u>Maximum Baggage</u>	Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See NOTE 8)
	Forward			
	6 seater	205 to 260	60	210
	8 seater	205 to 250	60	160
	Aft	395 to 425	60	130
	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	

<u>Fuel Capacity.</u>	Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
	Tank 1	615.0	4,100	5.7
	Tank 2	615.0	4,100	5.7
	Engines and lines	1.5	11	81.7
	Long Range Tank	134.5	896	88.7
	TOTAL	1,366.0	9,107	13.9

Oil Capacity. 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 Lb. In.
No. 1	1.87	14	82	1153
No. 2	1.87	14	82	1153
TOTAL	3.74	28	82	2306

Maximum Operating Altitude. 41,000 feet (See NOTE 9)

Serial Numbers Eligible. Same as listed previously for Hawker Siddeley Model DH.125 Series 3A/RA

VIII. Hawker Siddeley Model DH.125 Series 400A (Transport Aircraft), Approved November 15, 1968

(The DH.125 Series 400A aircraft differs from the DH.125 Series 3A/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 125 Series 400A (Transport Aircraft) Approved 14 July 1970

(The Hawker Siddeley Model DH.125 Series 400A is, from aircraft Serial Number NA.753 and subsequent, identified as the Beechcraft HAWKER 125 Series 400A (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. The following details are applicable to both the Hawker Siddeley Model DH.125 Series 400A and the Beechcraft HAWKER 125 Series 400A.

Engines. 2 Bristol Siddeley Viper 522 turbine engines.

<u>Fuel.</u>	Aviation Kerosene to specification D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM D.1655 Jet A or Jet A1. Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, 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) lb.	3,330
	Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	3,100
	Maximum permissible engine rotor	100%
	Operating speed (5 minutes maximum)	(13,760 r.p.m.)
	Maximum permissible turbine outlet gas temperature:	
	Take-off (5 minutes maximum)	730°C
	Maximum continuous	705°
	Maximum for acceleration	705°C
	Starting maximum gas temperature	800°C
	Maximum permissible oil inlet temperature: Continuous operation	125°C (See NOTE 13)
	Maximum permissible air bleed extraction of primary engine airflow	74%
<u>Airspeed Limits.</u> (IAS)	V _{MO} (Maximum Operating) with fuel in long-range tank	260 knots
	with long-range tank empty:	
	from sea level to 27,200 feet	285 knots
	at 30,800 feet and above	273 knots
	from sea level to 27,500 feet	282 knots
	at 31,350 feet and above	270 knots
	(See NOTE 16)	
	* Decreasing linearly as altitude increases	
	M _{MO} (maximum operating) (See NOTE 15)	0.765
	V _a (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
	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 0° to 15° at sea level:	
	For temperature below 10°	93 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 S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

<u>C.G. Range.</u> (Gear and Flaps Retracted)	Wt.		Aft Limit	
	Lb.	Forward Limit	SMC	In.
	23,300	29.7 *6.00	37.0	12.67
	22,400	28.8 *5.16	-	-
	22,400	26.0 *2.70	-	-
	22,100	-	38.0	13.50
	19,200	-	38.0	13.50
	18,850	-	34.0	9.90
	18,400	22.45 0.48	-	-
	17,400	-	33.4	9.30
	16,800	22.4 0.54	-	-
	14,200	-	36.1	11.82
	13,000	-	37.5	13.08
	12,000	23.0 0	-	-
	11,000	28.0 *(4.50)	37.5	13.08

*(Aft of Datum)

C.G. Range. Straight line variation between weights:

<u>Item (extending)</u>	<u>Moment Change Lb. In.</u>
Wing flaps	
15 ^o	+538
25 ^o	+879
50 ^o or 45 ^o (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> (in pounds)	Maximum Ramp Weight	*23,300
	Maximum Brake-Release Weight	23,300
	Maximum Landing Weight	20,000
	Maximum Zero Fuel Weight	*14,200

* See also NOTE 16

Minimum Crew. For all flights, 2 pilots

Maximum Passengers. 8

Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See NOTE 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Aft	395 to 425	60	130
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	

Fuel Capacity.

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
Tank 1	615.0	4,100	5.7
Tank 2	615.0	4,100	5.7
Engines and lines	1.5	11	81.7
Long Range Tank	<u>134.5</u>	<u>896</u>	<u>88.7</u>
TOTAL	1,366.0	9,107	13.9

Oil Capacity.

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 Lb. In.
No. 1	1.87	14	82	1153
No. 2	<u>1.87</u>	<u>14</u>	82	1153
TOTAL	3.74	28	82	2306

Maximum Operating Altitude.

41,000 feet (See NOTE 9)

Serial Numbers Eligible.

25173 thru 25255, 25257, 25259 thru 25290

IX. Beechcraft HAWKER Model BH.125 Series 600A (Transport Aircraft) Approved 17 August 1972.

The BH.125 Series 600A aircraft differs from the BH.125 Series 400A 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 (VMO), rough air speed (VRA), flap operating speeds (VFE), and landing gear operating speed (VLE), (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 cleaner aircraft lines.

Hawker Siddeley 125 Series 600A (Transport Aircraft) Approved 6 January 1976.

The Beechcraft HAWKER 125 Series 600A, is, from aircraft Serial No. 256055, identified as the Hawker Siddeley 125 Series 600A. The Hawker Siddeley 125 Series 600A is in all respects identical to the Beechcraft HAWKER 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. The following details are applicable to both the Beechcraft HAWKER 125 Series 600A and the Hawker Siddeley 125 Series 600A.

Engines.

2 Rolls Royce (1971) Ltd., Bristol Engine Division Viper 601-22 turbine engines (Alternate engine Instl.)

Fuel.

Aviation Kerosene to specifications D.Eng.RD.2482, D.Eng.RD.2494, D.Eng.RD.2453, 3-GP-23 Type 1, ASTM.D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, 3-GP-22 Type 2, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade (See NOTE 4).

Engine Limits.

Take-off static thrust, standard day, sea level conditions (5 minutes maximum) lb.	3,675
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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
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 at 0° or 15° at sea level for temperatures below 10°C)	96 knots
V _{MCG} (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 S.M.C. is 20.76. in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

C.G. Range. (Gear and Flaps Retracted)

Wt. Lb.	<u>Forward of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
25,000	27.55	*(4.130)	33.85	9.78
24,590	27.27	*(3.865)	-	-
24,590	25.45	*(2.220)	-	-
24,420	-	-	35.0	10.80
23,700	24.90	*(1.740)	-	-
23,700	21.85	1.020	-	-
20,800	-	-	35.00	10.80
20,510	-	-	30.35	6.67
20,300	18.60	3.925	-	-
18,570	-	-	29.25	5.62
15,540	18.00	4.520	-	-
14,200	-	-	31.90	8.03
12,800	18.00	4.520	31.47	7.65

*(Aft of Datum)

Straight line variation between weights

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

The airplane is normally weighted 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	25,000 lb.)
Maximum Brake-Release Weight	25,000 lb.) See NOTE
Maximum Landing Weight	22,000 lb.) 17
Maximum Zero Fuel Weight	15,550 lb.)

Minimum Crew.

For all flights, 2 pilots

Maximum Passengers.

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Maximum Baggage

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward	180.25 to 223.11	100	310
Aft	397.8 to 422.3	60	130
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	

Fuel Capacity.

Usable Fuel

<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm. In.</u>
Tank 1	611	4,073	5.6
Tank 2	611	4,073	5.6
Engines and lines	1.5	11	81.0
Long Range (ventral tank)	134.5	896	88.6
Dorsal tank	<u>61</u>	<u>408</u>	<u>119.3</u>
TOTAL	1,419.0	9,461	18.5

Oil Capacity.

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

<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm In.</u>	<u>Moment Lb. In.</u>
No. 1	2.03	15.3	83	1224
No. 2	<u>2.03</u>	<u>15.3</u>	<u>83</u>	<u>1224</u>
TOTAL	4.06	30.6	83	2448

Maximum Operating Altitude.

41,000 feet (See NOTE 9)

Serial Numbers Eligible.

25256, 25258, 256001 thru 256035, 256037 thru 256071

X. Hawker Siddeley 125 Series 700A (Transport Aircraft) Approved May 20, 1977

The HS.125 Series 700 aircraft differs from the BH/HS.125 Series 600A aircraft in the following major respects: (i) Garrett AiResearch TFE 731-3-1H 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 Mod. 25/2320 Part A) to 0.77.

Engines.

2 Garrett AiResearch TFE 731-3-1H turbofan engines, or 2 Garrett AiResearch TFE 731-3R-1H turbofan engines (See NOTE 20).

Fuel.

Aviation Kerosene to specification D.Eng.RD.2453, D.Eng.RD.2494, 3-GP-23, ASTM.D.1655 Jet A or Jet A1.

Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade, 3 GP-22 (See NOTE 28).

Engine Limits.

	<u>TFE 731-3-1H and TFE 731-3R-1H with apr. not operating</u>	<u>TFE 731-3R-1H with apr. operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lb.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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)	101 (29,989 rpm)
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	907°C	929°C
Take-off (10 seconds 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
Opening-up engine	+30°C	+30°C
	<u>TFE 731-3-1H and TFE 731-3R-1H with apr. not operating</u>	<u>TFE 731-3R-1H 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 _{MO} (maximum operating) With fuel in the dorsal and/or ventral tank	<u>pre-mod. 252648</u>	<u>post mod. 252648</u>
	280 knots	280 knots
With the dorsal and ventral tanks empty	320 knots up to 11,700 ft. less 1 knot per 600 ft. to 292 knots at 28,500 ft.	320 knots up to 12,400 ft. less 1 knot per 600 ft. to 292 knots at 29,200 ft.
M _{MO} (maximum operating) 28,500 ft. and above	0.77 M.Ind.	0.78 M.Ind.
V _A (manoeuvring) 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	

Airspeed Limits.

V _{FE} (flap speeds)		
Flap Deflection - 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 _{MCG} (with flaps 0° or 15° at sea level for temperatures below 22°C)	92 knots	95 knots
V _{MCA} (with either rudder bias strut inoperative)	110 knots	113 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 S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

<u>C.G.Range.</u> (Gear and flaps retracted)	<u>Wt.</u> <u>Lb.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		% SMC	In.	% SMC	In.
	25,000	25.10	*(1.890)	34.60	10.464
	24,200	24.60	*(1.439)	-	-
	24,200	21.80	1.088	36.50	12.180
	22,500	-	-	36.50	12.180
	22,000	19.70	2.982	30.85	7.080
	20,950	-	-	36.30	12.000
	20,850	18.60	3.975	33.80	9.744
	20,650	-	-	33.70	9.649
	20,400	-	-	30.20	6.492
	19,000	-	-	29.40	5.772
	16,050	18.00	4.517	29.19	4.512
	14,700	-	-	31.90	8.028
	13,100	18.00	4.517	31.50	7.656

*(Aft of Datum)

Straight line variations between weights

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

The airplane is normally weighted 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	25,000 lb. or 25,500 lb.	See
Maximum brake release weight	24,800 lb. or 25,500 lb.	NOTE
Maximum landing weight	22,000 lb.	27
Maximum zero fuel weight	16,050 lb. (See Note 34)	
Maximum zero fuel weight	13,100 lb.	

Minimum Crew.

For all flights, 2 pilots

Maximum Passengers.

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Maximum Baggage

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward	180.25 to 223.11	109	310
Aft	397.8 to 422.3	60	130
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)	

Fuel Capacity.	Usable Fuel			
	Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
	Tank 1	612.50	4,079	5.6
	Tank 2	612.50	4,079	5.6
	Engines and lines	1.50	11	107.6
	Ventral tank	131.00	872	88.6
	Dorsal tank	61.00	408	119.3
	TOTAL	1,418.50	9,449	18.482

Oil Capacity. 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 Lb. In.
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	93.90	2,118

Maximum Operating Altitude. 41,000 feet (See NOTE 9)

Serial Numbers Eligible. 257001 thru 257215

XI. Hawker Siddeley Model DH.125, Series 1A with Modification 252606 and Series 1A with Modifications 251867 and 252605 (Transport Aircraft), Approved (See NOTE 22).

Engines. 2 Garrett AiResearch TFE 731-3-1H turbofan engines, or 2 Garrett AiResearch TFE 731-3R-1H turbofan engines (See NOTE 20).

Fuel. Aviation Kerosene to specification D.Eng.RD.2453, D.Eng.RD.2494, 3-GP-23, ASTM.D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade (See NOTE 28).

<u>Engine Limits.</u>	<u>TFE 731-3-1H and TFE 731-3R-1H with apr. not operating</u>	<u>TFE 731-3R-1H with apr. operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lb.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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)	101 (29,989 rpm)

Engine limits (cont'd)	Maximum permissible interstage turbine temperature (ITT):		
	Take-off (5 minutes maximum)	907°C	929°C
	Take-off (10 seconds 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
	Maximum permissible oil temperature:		
	Engine starting	-40°C	-40°C
	Opening-up engine	+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. (IAS)</u>	V _{MO} (maximum operating)		285 knots IAS up to 27,200 feet less one knot per 300 feet of altitude to 273 knots IAS at 30,800 feet and above.
	M _{MO} (maximum operating)		0.755 M. Ind.
	V _A (manoeuvring)		185 knots IAS
	V _{FE} (flap speeds)		
	Flap Deflection T.O. 15°		210 knots
	APP 25°		160 knots
	LAND 45°		145 knots
	V _{LO} (landing gear operation)		
	Retract	210 knots	
	Extend		210 knots
<u>Airspeed Limits (Cont.)</u>	V _{LE} (landing gear extended)		210 knots
		<u>Apr. Not</u>	<u>Apr.</u>
		<u>Operating</u>	<u>Operating</u>
	V _{MC} (minimum control speed)		
	V _{MCA} (with flaps 0° or 15° at sea level for temperatures below 22°C)		100 knots 104 knots
	V _{MCA} (with either rudder bias strut in-operative)		110 knots 113 knots
	V _{MCG} (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 lower skin immediately aft of the equipment bay access hatch.

Standard Mean Chord. (SMC) 90.24 in. The leading edge of the S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

C.G. Range. (Gear and Flaps Retracted)

Series 1A with Mod. 252606

<u>Wt. Lb.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	<u>% SMC</u>	<u>In.</u>	<u>% SMC</u>	<u>In.</u>
11,400	23.3	*(0.2)	37.5	13.1
11,600	22.2	0.7	-	-
12,300	-	-	37.5	13.1
13,700	22.0	0.9	-	-
16,800	-	-	33.1	9.1
18,000	21.7	1.2	-	-
21,200	24.7	*(1.6)	33.8	9.7

*(Aft of Datum)

Series 1A with Mod. 251867 and 252605

11,400	23.3	*(0.2)	37.5	13.1
11,600	22.2	0.7	-	-
12,300	-	-	37.5	13.1
13,700	22.0	0.9	-	-
16,800	-	-	33.1	9.1
18,500	21.7	1.2	-	-
19,000	-	-	34.1	10.0
20,500	-	-	34.3	10.2
21,700	24.7	*(1.6)	33.6	9.6

*(Aft of Datum)

C.G. Range. Gear and Flaps Retracted) (Continued)

Straight line variation between Weights

<u>Item (Extending)</u>	<u>Moment Change Lb. In.</u>
Wing Flaps 15 ^o	+538
25 ^o	+879
45 ^o	+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

Series 1A with Mod. 252606

Maximum Weights.

Maximum ramp weight	21,400 lb.
Maximum brake release weight	21,200 lb.
Maximum landing weight	19,550 lb.
Maximum zero fuel	11,400 lb.
Minimum zero fuel weight	13,200 lb.

Minimum Crew.

For all flights, 2 pilots

Maximum Passengers. 8

Maximum Baggage.

Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See NOTE 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 260	60	160
Aft	396 to 425	60	130
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	

Fuel Capacity.

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
Tank 1	615	4,100	5.7
Tank 2	615	4,100	5.7
Engines and lines	1.5	11	81
Total	1,231.5	8,211	

Oil Capacity.

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 Lb. In.
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	93.90	2,118

Maximum Operating Altitude. 41,000 feet (See NOTE 9)

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

XII. Hawker Siddeley Model DH.125, Series 3A with Modification 252603 (Transport Aircraft) (See NOTE 26)

Engines. 2 Garrett AiResearch TFE 731-3-1H turbofan engines, or 2 Garrett AiResearch TFE 731-3R-1H turbofan engines (See NOTE 20).

Fuel. Aviation Kerosene to specification D.Eng.RD.2453, D.Eng.Rd.2494, 3-GP-23, ASTM.D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, ASTM.D.1655 Jet B, MIL-T-5624 JP4-Grade (See NOTE 28).

Engine Limits.

	<u>TFE 731-3-1H and TFE 731-3R-1H with apr. not operating</u>	<u>TFE 731-3R-1H with apr. operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lb.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	3,700	3,700

Engine Limits (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)	100 (29,989 rpm)
	Maximum permissible interstage turbine temperature (ITT):		
	Take-off (5 minutes maximum)	907°C	929°C
	Take-off (10 seconds 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
	Opening-up engine	+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. (IAS)</u>		
V _{MO} (maximum operating)	285 knots IAS up to 27,200 feet less one knot per 300 feet of altitude to 273 knots IAS at 30,800 feet and above		
M _{MO} (maximum operating)	0.755 M. Ind.		
V _A (manoeuvring)	185 knots IAS		
V _{FE} (flap speeds)			
Flap Deflection T.O.15°	210 knots		
APP 25°	160 knots		
LAND 45°	145 knots		
V _{LO} (landing gear operation)			
Retract	210 knots		
Extend	210 knots		
V _{LE} (landing gear extended)	210 knots		
	<u>Apr. Not</u>	<u>Apr.</u>	
	<u>Operating</u>	<u>Operating</u>	
V _{MC} (minimum control speed)			
V _{MCA} (with flaps 0° or 15° at sea level for temperatures below 22°C)	100 knots	104 knots	
V _{MCA} (with either rudder bias strut inoperative)	110 knots	113 knots	

Airspeed Limits (IAS) (cont.) VMCG (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 in the fuselage lower skin immediately aft of the equipment bay access hatch.

Standard Mean Chord. (SMC) 90.24 in. The leading edge of the S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

<u>C.G. Range. (Gear and Flaps (Retracted))</u>	<u>Wt.Lb</u>		<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
			% SMC	In.	% SMC	In.
	11,400		23.3	*(0.2)	37.5	13.1
	11,600		22.2	0.7	-	-
	12,300		-	-	37.5	13.1
	13,700		22.0	0.9	-	-
	16,800		-	-	33.1	9.1
	18,500		21.7	1.2	-	-
	19,000		-	-	34.1	10.0
	20,500		-	-	34.3	10.2
	21,700		24.7	*(1.6)	33.6	9.6

*(Aft of Datum)

Straight Line variation between Weights

<u>Item (Extending)</u>		<u>Moment Change Lb.In.</u>
Wing flaps	15°	+538
	25°	+879
	45°	+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	21,900 lb.
	Maximum brake release weight	21,700 lb.
	Maximum landing weight	20,000 lb.
	Maximum zero fuel weight	13,700 lb.
	Minimum zero fuel weight	11,400 lb.

Minimum Crew. For all flight, 2 pilots

Maximum Passengers. 8

Maximum Baggage.

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 260	60	160
Aft	395 to 425	60	130
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	

Fuel Capacity.

<u>Usable Fuel</u>			
<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm. In.</u>
Tank 1	615	4,100	5.7
Tank 2	615	4,100	5.7
Engines and lines	1.5	11	81
Total	1,231.5	8,211	5.69

Oil Capacity.

<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 Lb.</u>	<u>Arm In.</u>	<u>Moment Lb. In.</u>
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	93.90	2,118

Maximum Operating Altitude.

41,000 feet (See NOTE 9)

Serial Numbers Eligible.

Same as listed previously for Hawker Siddeley Model DH.125 Series 3A

XIII. Hawker Siddeley Model DH.125, Series 3A/RA with Modification 252600 (Transport Aircraft), (See NOTE 25)Engines.

2 Garrett AiResearch TFE 731-3-1H turbofan engines, or 2 Garrett AiResearch TFE 731-3R-1H turbofan engines (See NOTE 20).

Fuel.

Aviation Kerosene to specification D.Eng.RD.2453, D.Eng.RD.2494, 3-GP-23, ASTM.D.1655 Jet A or Jet A1.
 Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade, 3-GP-22 (See NOTE 28).

Engine Limits.

	<u>TFE 731-3-1H and TFE 731-3R-1H with apr. not operating</u>	<u>TFE 731-3R-1H with apr. operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lb.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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)	101 (29,989 rpm)
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	907°C	929°C
Take-off (10 seconds 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
Maximum permissible oil temperature:		
Engine starting	-40°C	-40°C
Opening-up engine	+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)

VMO (maximum operating)		
When long range tank contains fuel	257 knots I.A.S.	
When long range tank is empty	282 knots I.A.S. up to 27,500 feet less 1 knot per 320 feet to 270 knots I.A.S. at 31,350 feet	
MMO (maximum operating)		
VA (maneuvering)	0.755 indicated 193 knots I.A.S.	
VFE (flap speeds)		
Flap Deflection - T.O. 15°	210 knots	
APP 25°	160 knots	
LAND 45°	145 knots	
VLO (landing gear operation)		
Retract	210 knots	
Extend	210 knots	
VLE (landing gear extended)		
	210 knots	
	<u>Apr. Not.</u>	<u>Apr.</u>
	<u>Operating</u>	<u>Operating</u>
VMC (minimum control speed)		
VMCA (with flaps 0° or 15° at sea level for temperatures below 22°C)	100 knots	104 knots
VMCA (with either rudder bias strut inoperative)		
	110 knots	113 knots
VMCG (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 lower skin immediately aft of the equipment bay access hatch.

Standard Mean Chord. (SMC)

90.24 in. The leading edge of the S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

<u>C.G. Range.</u> (Gear and Flaps Retracted)	<u>Wt. Lb.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		% SMC	In.	% SMC	In.
	11,400	26.0	*(2.7)	37.5	13.1
	11,600	25.0	(1.8)	-	-
	13,000	-	-	37.5	13.1
	13,750	25.0	*(1.8)	-	-
	14,700	26.2	*(2.9)	-	-
	16,100	23.8	*(0.7)	-	-
	17,400	-	-	33.2	9.2
	18,500	23.9	*(0.8)	-	-
	19,300	-	-	34.0	10.0
	19,600	-	-	38.0	13.5
	21,900	-	-	38.0	13.5
	22,900	27.4	*(4.0)	-	-
	22,900	30.3	*(6.6)	-	-
	23,300	-	-	37.0	12.6
	23,600	30.8	*(7.0)	36.0	11.7

*(Aft of Datum)

Straight line variation between weights

<u>Item (extending)</u>	<u>Moment Change Lb. In.</u>
Wing flaps	
15°	+538
25°	+879
45°	+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. (in pounds)

Maximum Ramp Weight	23,800 lb.
Maximum Brake-release weight	23,600 lb.
Maximum landing weight	20,000 lb.
Maximum Zero Fuel Weight	14,700 lb.
Maximum Zero Fuel Weight	11,400 lb.

Minimum Crew.

For all flight, 2 pilots

Maximum Passengers.

8

Maximum Baggage.

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 260	60	160
Aft	305 to 425	60	130
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	

Fuel Capacity.

<u>Usable Fuel</u>			
<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm. In.</u>
Tank 1	615	4,100	5.7
Tank 2	615	4,100	5.7
Engines and lines	1.5	11	81
Long Range Tank	134.5	896	88.7
Total	1,366.0	9,107	13.9

Oil Capacity.

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

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

Maximum Operating Altitude.

41,000 feet (See NOTE 9)

Serial Numbers Eligible.

Same as listed previously for Hawker Siddeley Model DH.125 Series 3A

IV. Hawker Siddeley Model BH/HS.125 Series 400A with Modification 252550 (Transport Aircraft)

(See NOTE 21)

Engines.

2 Garrett AiResearch TFE 731-3-1H turbofan engines, or 2 Garrett AiResearch TFE 731-3R-1H turbofan engines (See NOTE 20).

Fuel.

Aviation Kerosene to specification D.Eng.RD.2543, D.Eng.RD.2494, 3-GP-23, ASTM.D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade, 3-GP-22 (See NOTE 28).

Engine Limits.

	<u>TFE 731-3-1H and TFE 731-3R-1H with apr. not operating</u>	<u>TFE 731-3R-1H with apr. ___ operating</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lb.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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 seconds 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
Opening-up engine	+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 _{MO} (maximum operating) (See NOTE 35)		
When long range tank contains fuel	257 knots I.A.S.	
When long range tank is empty	282 knots I.A.S. up to 27,500 feet less 1 knot per 320 feet to 270 knots I.A.S. at 31,350 feet	
M _{MO} (maximum operating)	0.755 indicated	
V _A (manoeuvring)	193 knots I.A.S.	
V _{FE} (flap speeds)		
Flap Deflection - T.O. 15°	210 knots	
APP 25°	160 knots	
LAND 45°	145 knots	
V _{LO} (landing gear operation)		
Retract	210 knots	
Extend	210 knots	
V _{LE} (landing gear extended)	210 knots	
	<u>Apr. Not</u>	<u>Apr. _____</u>
	<u>Operating</u>	<u>Operating</u>
V _{MC} (minimum control speed)		

VMCA (with flaps 0° or 15° at sea level for temperatures below 22°C)	100 knots	104 knots
VMCA (with either rudder bias strut inoperative)	110 knots	113 knots
VMCG (with flaps 0° or 15° at 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 lower skin immediately aft of the equipment bay access hatch.

Standard Mean Chord. (SMC)

90.24 in. The leading edge of the S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

C.G. Range. (Gear and Flaps Retracted)

<u>Wt. Lb.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
11,400	26.0	*(2.7)	37.5	13.1
11,600	25.0	(1.8)	-	-
13,000	-	-	37.5	13.1
13,750	25.0	*(1.8)	-	-
14,700	26.2	*(2.9)	-	-
16,100	23.8	*(0.7)	-	-
17,400	-	-	33.2	9.2
18,500	23.9	*(0.8)	-	-
19,300	-	-	34.0	10.0
19,600	-	-	38.0	13.5
21,900	-	-	38.0	13.5
22,900	27.4	*(4.0)	-	-
22,900	30.3	*(6.6)	-	-
23,300	-	-	37.0	12.6
23,600	30.8	*(7.0)	36.0	11.7

*(Aft of Datum)

Straight line variation between weights

C.G. Range

<u>Item (extending)</u>	<u>Moment Change Lb. In.</u>	
Wing flaps	15°	+538
	25°	+879
	45°	+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. (in pounds)

Maximum Ramp Weight	23,800 lb.
Maximum Brake-release weight	23,600 lb.
Maximum landing weight	20,000 lb.
Maximum Zero Fuel Weight	14,700 lb. (See NOTE 35)
Minimum Zero Fuel Weight	11,400 lb.

Minimum Crew.

For all flights, 2 pilots

Maximum Passengers.

8

Maximum Baggage.

Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See NOTE 8)
Forward			
6 seater	205 to 260	60	210
8 seater	205 to 250	60	160
Aft	395 to 425	60	130
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	

Maximum Operating Altitude. 41,000 feet (See NOTE 9)

Serial Numbers Eligible. Same as listed previously for Hawker Siddeley Model DH.125 Series 400A and Beechcraft Hawker 125 Series 400A.

XV. Hawker Siddeley Model BH/HS.125 Series 600A with Modification 252468 (Transport Aircraft) (See NOTE 19)

Engines. 2 Garrett AiResearch TFE 731-3-1H turbofan engines, or 2 Garrett AiResearch TFE 731-3R-1H turbofan engines (See NOTE 20).

Fuel. Aviation Kerosene to specification D.Eng.RD.2453, D.Eng.RD.2494, 3-GP-23, ASTM.D.1655 Jet A or Jet A1.
Aviation Wide-cut to specification D.Eng.RD.2486, D.Eng.RD.2454, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade, 3-GP-22 (See NOTE 28).

Engine Limits.

	<u>TFE 731-3-1H and TFE 731-3R-1H with apr. not operating</u>	<u>TFE 731-3R-1H with apr. operating.</u>
Take-off static thrust standard day, sea level conditions (5 minute limit) lb.	3,700	3,880
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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)

Engine Limits (Cont.)

Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	907°C	929°C
Take-off (10 seconds 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
Opening-up engine	+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_{MO} (maximum operating)	<u>pre-mod. 252648</u>	<u>post mod. 252648</u> (See Note 29)
With fuel in the dorsal and/or ventral tank	280 knots	280 knots
With the dorsal and ventral tanks empty	320 knots up to 11,700 ft. less 1 knot per 600 ft. to 292 knots at 28,500 ft.	320 knots up to 12,400 ft. less 1 knot per 600 ft. to 292 knots at 29,200 ft.
M_{MO} (maximum operating) 28,500 ft. and above	0.77 M.Ind.	0.78 M.Ind.
VA (manoeuvring)	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
V_{FE} (flap speeds)		
	Flap Detection - 15°C	220 knots
	25°C	175 knots
	45°C	160 knots

Airspeed Limits (IAS) (cont'd)

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)	100 knots	104 knots
V_{MCG} (with flaps 0° or 15° at sea level for temperatures below 22°C)	91 knots	95 knots
V_{MCA} (with either rudder bias strut inoperative)	110 knots	113 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 S.M.C. is 20.76 in. forward of the datum (for SMC definition, see ARB-approved Airplane Flight Manual).

C.G. Range. (Gear and flaps retracted)

Wt. Lb.	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
	% SMC	In.	% SMC	In.
25,500	27.40	*(3.90)	33.55	9.48
25,000	25.10	*(3.92)	34.60	10.464
24,200	24.60	*(1.44)	-	-
24,200	21.80	1.08	36.50	12.180
22,500	-	-	36.50	12.180
22,000	19.70	2.94	36.40	12.09
20,950	-	-	36.30	12.000
20,850	18.55	3.46	33.80	9.744
20,650	-	-	33.70	9.649
20,400	-	-	30.20	6.492
19,000	-	-	30.20	5.772
16,050	18.00	4.50	28.00	4.512
14,700	-	-	31.90	8.028
13,100	18.00	4.50	31.50	7.656

*(Aft of Datum)

Straight line variation between weights.

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

The airplane is normally weighted 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	25,000 lb. (or 25,500 lb.) See
Maximum brake release weight	24,800 lb. (or 25,500 lb.) NOTE
Maximum landing weight	22,000 lb. 27
Maximum zero fuel weight	16,050 lb. (or 16,300 lb.) See NOTE 29
Minimum zero fuel weight	13,100 lb.

Minimum Crew. For all flights, 2 pilots

Maximum Passengers. 15

Maximum Baggage

Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See NOTE 8)
Forward	180.25 to 223.11	109	310
Aft	397.8 to 422.3	60	130
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	

Fuel Capacity.

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
Tank 1	612.50	4,079	5.6
Tank 2	612.50	4,079	5.6
Engines and lines	1.50	11	107.6
Ventral tank	131.00	872	88.6
Dorsal tank	61.00	408	119.3
Total	1,418.50	9,449	18.482

Oil Capacity.

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 Lb. In.
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	93.90	2,118

Maximum Operating Altitude. 41,000 feet (See NOTE 9)

Serial Numbers Eligible. Same as listed previously for Beechcraft Hawker Model BH.125 Series 600A and Hawker Siddeley 125 Series 600A.

XVI. British Aerospace 125 Series 800A (Transport Aircraft) approved July 12, 1984
Hawker 800 (name change) approved January 28, 1994

The BAe. 125 Series 800A/Hawker 800 differs from the HS.125 Series 700A aircraft in the following major respects: (i) Garrett Turbine Engine Company TFE 731-5R-1H engines replace the Garrett AiResearch TFE 731-3-1H engines.

(ii) The wing span is increased by 4 ft. 6 ins. (iii) Curved windcreens 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 nosewheel 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. (x) Increase of M_{MO} from 0.77 to 0.80. (See NOTE 36 and Note 42).

Engines.

2 Garrett Turbine Engine Company TFE 731-5R-1H turbofan engines.

Fuel.

Aviation Kerosene to specification D.Eng.R.D.2494, D.Eng.R.D.2453, ASTM D1655 Jet A or Jet A-1, 3-GP-23.

Aviation Wide-cut fuel to specification D.Eng.R.D.2486, D.Eng.R.D.2454, ASTM.D.1655 Jet B, MIL-T-5624 JP4 Grade, 3-GP-22 Wide cut type.

Engine Limits.

	<u>TFE 731-5R-1H with</u> <u>apr. not operating</u>	<u>TFE 731-5R-1H</u> <u>with apr. operating</u>
Take-off static thrust, standard day, sea level conditions (5 minute limit) lb.	4,304	4,500
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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)
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	952°C	974°C
Take-off (5 seconds maximum)	984°C	984°C
Take-off (2 seconds maximum)	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 secs)	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
Opening-up engine	+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 _{MO} (maximum operating)		
When the ventral tank contains fuel		280 knots
When the ventral tank is empty or with the baggage pannier fitted to BAe Mod. 259292 (See NOTE 33).		335 knots up to 12,000 ft. less 1 knot per 680 ft. to 310 knots at 29,000 ft.
M _{MO} (maximum operating)		0.80 M.Ind.
V _A (manoeuvring) 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} (Wing flaps extended)		
Flap Deflection - 15°	220 knots	
25°	175 knots	
45°	165 knots	
V _{LO} (landing gear operation)	220 knots	
V _{LE} (landing gear extension)	220 knots	
V _{MC} (minimum control speed)		
V _{MCG} (with flaps 0° or 15° at sea level for temperatures below 23°C)	112 knots	
V _{MCA} (with flaps 0° or 15° at sea level for temperatures below 23°C)	115 knots	
V _{MCA} (with either rudder bias strut inoperative)	125 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 S.M.C. is 15.70 in. forward of the datum (for SMC definition, see CAA-approved Airplane Flight Manual).

<u>C.G. Range.</u> (Gear and flaps retracted)	<u>Wt. Lb.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		% SMC	In.	% SMC	In.
	27,520	25.8	*(6.79)	31.6	11.83
	26,600	-	-	35.0	14.78
	26,000	23.7	*(4.97)	-	-
	25,800	19.2	*(1.03)	-	-
	24,000	-	-	35.0	14.78
	22,600	-	-	33.2	13.29
	22,400	-	-	28.0	8.66
	21,400	-	-	26.2	7.14
	21,000	15.0	-2.57	-	-
	20,000	-	-	26.4	7.29
	17,520	15.7	-1.97	24.6	5.74
	16,600	-	-	29.6	10.10
	15,400	15.7	-1.97	-	-
	14,120	19.0	*(0.85)	28.6	9.17

*(Aft of datum)

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

The airplane is normally weighted 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	27,520 lb. (See NOTE 31)
Maximum brake release weight	27,400 lb. (See NOTE 31)
Maximum landing weight	23,350 lb.
Maximum zero fuel weight	17,520 lb. (See NOTE 32, 37)
Minimum zero fuel weight	14,120 lb.

Minimum Crew.

For all flights, 2 pilots

Maximum Passengers.

15

Maximum Baggage.

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds (See NOTE 8)</u>
Forward	180.25 to 223.11	100	310
Aft	397.8 to 422.3	50	60
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	

Fuel Capacity.

<u>Usable Fuel</u>			
<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm. In.</u>
Tank 1	631.75	4,208	8.2
Tank 2	631.75	4,208	8.2
Ventral tank	231.80	1,544	100.4
Total	1,495.30	9,960	22.493

Oil Capacity.

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

<u>Location</u>	<u>Volume U.S. Gal</u>	<u>Maximum Weight Lb.</u>	<u>Arm In.</u>	<u>Moment Lb. In.</u>
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 800 - 258001 thru 258150, 258152 thru 258158, 258160 thru 258254;
Hawker 800 - 258255 thru 258265, 258267 thru 258276, 258305 and 258306.

**XVII. British Aerospace 125 Series 1000A (Transport Aircraft) approved October 31, 1991.
Hawker 1000 (name change) approved January 28, 1994.**

The BAe 125 Series 1000A/Hawker 1000 differs from the BAe 125 Series 800A/Hawker 800 in the following major respects;

(i) Pratt and Whitney (Canada) PW305B engines with Full Authority Digital Engine Control replace Garrett Turbine Engine Company TFE 731-5R-1H Engines. (ii) Fuselage is lengthened by 33 inches; (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) An increase in the Maximum Operating Altitude to 43,000 feet is introduced; (vii) An increase in certificated taxiing, take-off, landing and zero fuel weights is introduced(See Note 41)

Engines.

2 Pratt & Whitney (Canada) PW305B turbofan engines (Post Mod. 253650A)

Fuel.

Aviation Kerosene to specification D.Eng.R.D.2494, D.Eng.R.D.2453, ASTM D1655 Jet A or Jet A-1, MIL-T-83133 JP8 Grade, CAN/CGSB 3.23-M86 Jet A-1, IATA Kerosene.

Engine Limits.

	<u>PW305B</u>
Normal take-off static thrust (to 15°C OAT)	5204 lbs
Maximum take-off static thrust (to 22°C OAT)	
Maximum take-off static thrust (to 23.5°C OAT)	5266 lbs
Maximum continuous thrust (to 19.4°C OAT)	-
Maximum continuous thrust (to 27.5°C OAT)	4483 lbs
Maximum permissible engine rotor operating speed	
	102%
- L.P. Shaft (N1)	(10,820 rpm)
	102%
- H.P. Shaft (N2)	(47,469 rpm)
Maximum permissible interstage turbine temperature (ITT)	
- Take-off (5 minutes maximum)	785°C
- Take-off (20 seconds maximum)	795°C
- Maximum continuous	785°C
- Engine starting and relighting (unrestricted)	680°C

Maximum permissible oil temperature		
-	Maximum oil temperature	135°C
-	Transient limit (20°C)	143°C
Minimum permissible oil temperature		
-	Engine starting	-40°C
-	Opening-up engine	10°C
Maximum permissible air bleed extraction (percentage of H.P. compressor flow)		
-	L.P. air source	5
-	H.P. air source	7
-	Combined total air source	10

Airspeed Limits.

V _{MO} (Maximum operating) (See NOTE 39)		
-	with ventral tanks empty or full	280 Kts IAS, up to an altitude of 33,730 ft.
M _{MO} (Maximum operating)		0.80 M Indicated
V _A (Manoeuvring)		200 Kts IAS
V _{FE} (Wing Flaps Extended)		
<u>Deflection</u>		<u>Airspeed</u>
15°		220 Kts IAS
25°		180 Kts IAS
45°		170 Kts IAS
V _{LO} (Landing Gear Operation)		220 Kts IAS
V _{LE} (Landing Gear Extension)		220 Kts IAS
V _{MC} (Minimum Control Speed) (See Note 43)		
V _{MCG} (with flaps 0° to 15° at S.L. for temperature below 20°C)		119 Kts IAS
V _{MCA} (with flaps at 0° at S.L. for temperature below 20°C)		124 Kts IAS
V _{MCA} (with flaps at 15° at S.L. for temperature below 20°C)		119 Kts IAS

Datum.

The centre of gravity datum (353.04 in.) is 12.25 ft forward of the fuselage reference point and is defined by an eye bolt on the fuselage skin located beneath the starboard engine pod.

Standard Mean Cord (SMC)

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

<u>C.G. Range.</u> (Gear and Flaps retracted)(See NOTE 39)	<u>Weight</u>		<u>Fwd of Datum</u>		<u>Aft of Datum</u>	
	(lb)	% SMC	Inches	% SMC	Inches	
	31,100	22.2	3.65	31.0	11.33	
	31,000	22.0	3.48	31.0	11.33	
	30,500	21.0	2.60	-	-	
	30,300	-	-	33.4	13.42	
	30,200	-	-	33.4	13.42	
	*29,000	12.5	-4.80	-	-	
	28,200	-	-	33.7	13.68	
	26,500	16.0	-1.75	-	-	
	25,000	-	-	31.7	11.93	
	*24,000	12.5	-4.80	-	-	
	22,500	-	-	31.4	11.68	
	22,000	15.0	-2.63	-	-	
	19,800	16.0	-1.75	26.6	7.49	
	19,000	15.0	-2.63	25.5	6.53	
	17,600	15.7	-2.02	25.5	6.53	

(* = in-flight only)

<u>Item (Extending)</u>	<u>Moment Change Lb. in.</u>
Wing Flap 15 ⁰	+538
25 ⁰	+879
45 ⁰	+1593
Main Landing Gear	-1980
Nose Landing Gear	+1380

Leveling Means.

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

Maximum Weights.

Max. Ramp Weight	31,100 lbs
Max. Brake Release Weight	31,000 lbs
Max. Landing Weight	25,000 lbs
Max. Zero Fuel Weight	19,800 lbs (See NOTE 38 and 44)
Min. Zero Fuel Weight	15,800 lbs

Minimum Crew.

For all flights, 2 pilots

Maximum Passengers.

15

Maximum Baggage.

<u>Compartment</u>	<u>Body Station</u>	<u>Maximum Load Lb/Ft²</u>	<u>Capacity Pounds</u>
Forward Stowage	107.35 to	100	80
Wardrobe	192.25		
Aft Luggage Compartment	410.30 to 445.40	100	500
Wardrobe	370.81 to 381.56	100	20
Forward Cabin (a) Side Floor	214.75 to 303.85	50	-

Maximum Baggage. (cont'd)

(b) Centre floor	214.75 to 303.85	60	-
Aft Cabin			
(a) Side floor	303.85 to 381.75	50	-
(b) Centre floor	303.85 to 381.75	60	-

Fuel Capacity.

Usable Fuel			
Location	Volume U.S. Gal	Maximum Weight Lb.	Arm. In.
Tank 1	630.5	4,200	8.24
Tank 2	630.5	4,200	8.24
Forward tank	163.3	1,088	-87.78
Aft Ventral tank	269.0	1,792	109.07
Total	1,693.3	11,280	15.00

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 is an integral part of the engine.

Maximum Operating Altitude.

43,000 ft.

Serial Numbers Eligible.

BAe.125 Series 1000 - 258151, 258159, 259003 thru 259033; Hawker 1000 - 259034 and on.

XVIII. Hawker 800XP (Transport Aircraft) approved July 28, 1995 (See NOTE 47).Engines.

2 Allied Signal Engines TFE 731-5BR-1H turbofan engines.

Fuel.

Aviation Kerosene to specification D.E.R.D. 2494, D.E.R.D. 2453, ASTM D1655 Jet A or Jet A-1, MIL-T-83133/JP8, CAN/CGSB 3.23/Jet A or CAN/CGSB 3.23/Jet A1, GOST 10227-86 TS-1 or GOST 10227-86 T-1 or GOST 10227-86 RT.

Aviation Wide-cut fuel to specification D.E.R.D. 2454, ASTM.D.1655 JetB, MIL-T-5624 JP4 Grade, CAN/CGSB 3.22/Jet B, GOST 10227-86 T-2.

Engine Limits.

	<u>TFE 731-5BR-1H with apr. not operating</u>	<u>TFE 731-5BR-1H with apr. operating</u>
Take-off static thrust, standard day, sea level conditions (5 minute limit) lb.	4,750	4,750
Maximum continuous static thrust, standard day, sea level conditions (unrestricted) lb.	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 % (30,300 rpm)	100.8 % (30,540 rpm)

Engine Limits. (cont'd)

	<u>TFE 731-5BR-1H with apr. not operating</u>	<u>TFE 731-5BR-1H with apr. operating</u>
Maximum permissible interstage turbine temperature (ITT):		
Take-off (5 minutes maximum)	978°C	996°C
Take-off (5 seconds maximum)	1006°	1006°
Take-off (2 seconds maximum)	1016°	1016°
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
Opening-up engine	+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 _{MO} (maximum operating)		
When the ventral tank contains fuel		280 knots
When the ventral tank is empty		335 knots up to 12,000 ft. less 1 knot per 680 ft. to 310 knots at 29,000 ft.
M _{MO} (maximum operating)		
M _{MO} (Mach Trimmer unserviceable/ inoperative)		0.80 M.Ind. 0.75 M.Ind.
V _A (manoeuvring)		
	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} (Wing flaps extended)		
Flap Deflection		
	15°	220 knots
	25°	175 knots
	45°	165 knots

<u>Airspeed Limits</u> (IAS)	V _{LO} (landing gear operation)	220 knots
	V _{LE} (landing gear extension)	220 knots
	V _{MC} (minimum control speed)	
	V _{MCG} (with flaps 0° or 15° at sea level for temperatures below 23°C)	117.5 knots
	V _{MCA} (with flaps 0° at sea level for temperatures below 23°C)	114.8 knots
	V _{MCA} (with flaps 15° at sea level for temperatures below 23°C)	109.1 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 S.M.C. is 15.70 in. forward of the datum (for SMC definition, see CAA-approved Airplane Flight Manual).

<u>C.G. Range.</u> (Gear and flaps retracted)	<u>Wt. Lb.</u>	<u>Fwd. of Datum</u>		<u>Aft of Datum</u>	
		% SMC	In.	% SMC	In.
	28,120	25.0	*(6.09)	32.1	12.28
	27,100	23.4	*(4.70)	35.0	14.81
	26,950	19.2	*(1.41)	-	-
	24,000	-	-	35.0	14.81
	22,600	-	-	33.1	13.15
	22,400	-	-	28.4	9.06
	22,000	15.0	-2.62	-	-
	21,400	-	-	26.3	7.23
	20,400	-	-	26.6	7.49
	18,450	15.7	-2.01	24.7	5.83
	17,700	-	-	29.2	9.75
	17,000	-	-	29.6	10.10
	15,700	15.0	-12.62	-	-
	15,400	15.7	-2.01	-	-
	14,120	19.0	*(0.86)	28.6	9.23

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

The airplane is normally weighted with wing flaps retracted.

Levelling 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	28,120 lb.
	Maximum take-off weight	28,000 lb.
	Maximum landing weight	23,350 lb.
	Maximum zero fuel weight	18,450 lb.
	Minimum zero fuel weight	14,120 lb.

Minimum Crew. For all flights, 2 pilots

Maximum Passengers. 15

Maximum Baggage.

Compartment	Body Station	Maximum Load Lb/Ft ²	Capacity Pounds (See NOTE 8)
Forward	180.25 to 234.24	100	225
Aft	397.8 to 422.3	100	210
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	

Fuel Capacity. Usable Fuel (Pressure refuelled)

Location	Volume U.S. Gal.	Maximum Weight lb.	Arm In.
Tank 1	631.75	4,208	8.2
Tank 2	631.75	4,208	8.2
Ventral Tank	<u>224.5</u>	<u>1,496</u>	<u>100.4</u>
TOTAL	1,488	9,912	22.493

Oil Capacity.

Engine Tank

Location	Volume U.S. Gal.	Weight Lb.	Arm In.	Moment Lb. In.
No. 1	1.65	12.4	90.84	1,126
No. 2	<u>1.65</u>	<u>12.4</u>	<u>90.84</u>	<u>1,126</u>
TOTAL	3.3	24.8	90.84	2,252

Maximum Operating Altitude. 41,000 feet.

Serial Numbers Eligible. 258266, 258277 thru 258287, 258289 thru 258304, 258307 and on

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 Hawker Siddeley DH/HS.125 Aircraft Maintenance Schedule publications reference MS.125 (Series 1A, 1A-522, 3A, 1A/R-522, 3A/R, 1A/S-522, 3A/RA, 400A and 600A) and MS.125 GE (Series 700A), contain lists of all required equipment pertinent to the model variants specified herein, optional equipment installations approved by the Civil Aviation Authority (Airworthiness Division), and identifies all life-limited items (See NOTE 3). Document 25.6PF.61 Fin Tank Refuel instructions is required for HS.125 Series 600A Certification. Document 25.7PF.83 Single Point Pressure Refuel Instructions is required for HS.125 Series 700A Certification. Document 28.8PF.59-1 Pressure Refuelling Instructions is required for BAe 125 Series 800A Certification. Document 25-9PF 212 Pressure Refuelling Instructions is required for BAe 125 Series 1000A 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 Civil Aviation Authority (Airworthiness Division) approved data contained in the Maintenance Manual. Publication reference MM.125 (Series 1A, 1A-522, 3A, 1A/R-522, 3A/R, 1A/S-522, 3A/RA, 400A and 600A) or MM.125-700 (HS.125 Series 700A) or AMM 125-800 Vol 1-3 (BAe 125 Series 800A/Hawker 800) or AMM 125-1000A Vol. 1-3 (BAe. 125 Series 1000A/Hawker 1000) or AMM Hawker 800XP Vol 1-3 (Hawker 800XP).

Certification Basis.

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, 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 DH.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.

Application for Type Certificate dated September 28, 1960. 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 with FAR 25 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).

HS.125 Series 1A, 3A, 3A/RA and BH/HS.125 Series 400A and 600A airplanes fitted with Garrett AiResearch TFE 731-3-1H engines comply with the later requirements of 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 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 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 first paragraph 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

For Hawker 800XP airplanes fitted with Allied Signal Engines TFE731-5BR-1H 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:

25.1316 as amended through amendment 25-80

plus 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

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 certain 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 required for U.S. Type Certification are as follows:

25.25	25.1021
25.33	25.1045(d)
25.361(b)	25.1091(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-1)	25.1303(c)(1)
25.857(d)(6)	25.1305(c)(6)(7)
25.901(c)	25.1309(a)(b)(c)(d)(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)(c)
25.993(c)	25.1457(c)
25.994	25.1459(a)(4) and (e)
25.997	25.1521(b)(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.

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.

Service Information.

Service bulletins, structural repair manuals, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is C.A.A. approved, or C.A.A. approved through the Manufacturer's C.A.A. Approval Ref. DAI/1103/38, DAI/1011/55, or DAI/2652/55 on or after May 1, 1992, and 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.

NOTES.

NOTE 1.

(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:

Airplane Total. (DH.125 Series 1A, 1A/522, 3A, ...etc)

	<u>Volume U.S. Gal.</u>	<u>Weight Lb.</u>	<u>Arm In.</u>
Tank trapped	2.4	16	12
Drainable unusable fuel	<u>9.0</u>	<u>60</u>	16.5
Total unusable fuel	11.4	76	15.6

Airplane Total. (BH.125 and HS.125 Series 600A and HS.125 Series 700A).

	<u>Volume U.S. Gal.</u>	<u>Weight Lb.</u>	<u>Arm In.</u>
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)	<u>Nil</u>	<u>Nil</u>	-
Total Unusable Fuel	15.8	105.2	- 9.1

Airplane Total. (BAe. 125 Series 800A/Hawker 800/Hawker 800XP)

	<u>Volume U.S. Gal.</u>	<u>Weight Lb.</u>	<u>Arm In.</u>
Tank trapped	3.30	22.0	-15.60
Drainable (Wing)	8.10	54.0	-14.00
Unusable (Ventral) fuel	<u>0.70</u>	<u>5.0</u>	+74.40
Total unusable fuel	12.10	81.0	9.00

Airplane Total. (BAe. 125 Series 1000A/Hawker 1000)

	<u>Volume U.S. Gal.</u>	<u>Weight Lb.</u>	<u>Arm In.</u>
Tank trapped	3.30	22.0	-15.60
Drainable (Wing)	8.10	54.0	-14.00
Unusable forward ventral	4.20	28.0	-57.60
Unusable aft ventral	<u>2.60</u>	<u>17.6</u>	60.00
Total unusable fuel	18.20	121.6	-13.48

Engine Oil.

The total quantity of oil in each engine is 3.01 U.S. gallons. The weight of this is included in the Basic Aircraft Weight.

(d) Engine System oil is the total engine oil less than the quantity drainable from the tank.

(DH.125 Series 1A, 1A-522, 3A, 1A/R-522, 3A/R, 1A/S-522, 3A/RA, 400A, BH.125 Series 400A, and BH/HS.125 Series 600A fitted with Viper Engines).

<u>Location</u>	<u>Volume U.S. Gal.</u>	<u>Weight Lb.</u>	<u>Arm In.</u>	<u>Moment Lb. In.</u>
No. 1	0.3			
No. 2	<u>0.3</u>			
TOTAL	0.6	4.6	82.5	378

(DH.125 Series 1A, 3A, 3A/RA, 400A, BH/HS.125 Series 600A, HS.125 Series 700A, and BAe125 Series 800A/Hawker 800/Hawker 800XP 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 Lb. In.</u>
No. 1	1.5	11.3	106.23	1200
No. 2	<u>1.5</u>	<u>11.3</u>	106.23	<u>1200</u>
TOTAL	3.0	23.6	106.23	2400

NOTE 2.

The aircraft must be operated according to the appropriate Civil Aviation Authority approved airplane Flight Manual, Document No. HS.1.2 (DH.125-1A) or Document No. HS.1.3 (DH.125-1A/522) or Document No. H.S.1.3 (DH.125-3A) or Document No. HS.1.3 (DH.125-1A/R-522), or Document No. HS.1.3 (DH.125-3A/R), or Document No. HS.1.3 (DH.125-1A/S-522) or Document No. HS.1.3 (DH.125-3A/RA), or Document No. HS.1.5 (DH/BH.125-400A), or Document No. HS.1.7 (BH/HS.125-600A) or Document No. HS.1.9 (HS.125-700A), or Document No. HS.1.9 with amendment P/7 (BH/HS.125-600A with Modification 252468), or Document No. HS.1.10 (DH.125-3A/RA with Modification 252600 and DH/BH.125-400A with Modification 252550), or Document No. HS.1.11 (DH.125-1A with Modifications 251867 and 252605, DH.125-1A with Modification 252606, and DH.125-3A with Modification 252603) or Document No. H.S.1.16 (BAe 125-800A/Hawker 800), or Document HS.1.19 (BAe 125-1000A/Hawker 1000) or Document No. HS.1.22 (Hawker 800XP).

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/BAe125/Hawker 800/1000 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>"P" Amdmt.</u>	<u>Model Applicability</u>
HS.1.2	P/25	Series 1A/B Models
HS.1.3	P/91	Series 1A-522, 1B-522 & 3A/B Models
HS.1.5	P/44	Series 400A/B Models
HS.1.7	P/37	Series 600A/B Models
HS.1.8	P/47	Series 700B & Garrett converted Series 600B Models
HS.1.9	P/41	Series 700A & Garrett converted Series 600A Models
HS.1.10	P/17	Garrett converted Series 1A/B, Series 3A/B (with Long Range fuel) & 400A/B Series Models
HS.1.11	P/9	Garrett converted Series 1A/B, Series 3 (without Long Range fuel) Models
HS.1.12	P/3	F3B
HS.1.15	P/57	UK-CAA Compliant Series 800 Models
HS.1.16	P/70	US-FAA Compliant Series 800 Models
HS.1.18	P/40	UK-CAA Compliant Series 1000 Models
HS.1.19	P/40	US-FAA Compliant Series 1000 Models

NOTE 3. Service Life Limits and Airworthiness Structural Inspections:

Service Life Limits of Structural Components. The service life limits for aircraft structural parts which are fatigue critical are listed in Raytheon Corporate Jets Document Reference CJE-HPA-C-GEN-AW1667, latest CAA approved revision.

Airworthiness Structural Inspections. For the BAe 125-800/Hawker 800/Hawker 800XP the structural inspections specified in CJE.HTS.R.258.AW0949, Issue 1 are essential to ensure the continued airworthiness of the BAe 125-800/Hawker 800/Hawker 800XP in operational service. The inspections may be changed only with the mutual agreement between the airworthiness authorities, the aircraft manufacturer and the operator.

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 J.P.T. is being achieved. Aviation gasoline meeting the following specifications may be used within the limits specified in the appropriate CAA approved Airplane Flight Manual or Supplement:

British D. Eng. R.D. 2485
 Canadian 3-GP-25
 American Mil-G-5572, all Grades
 Maximum lead content: 5.5 mls TEL/IMP Gal.

NOTE 5. An acceptable minimum standard of equipment is installed on production DH. 125 Series aircraft for factory flyaway (ferrying) on a United Kingdom Certificate of Airworthiness for Export. This standard is in accordance with Parts 2 and 6 (and related Appendices and Addendum) of H.S.A. Airworthiness document DO/AW/125/T.C.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/T.C.1 current issue (BH. 125 Series 600A, HS. 125 Series 600A) or DO/AW/125-700/FAA/T.C.1 current issue (HS. 125 Series 700A) or DO/AW/125-800/FAA/T.C.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-G-260-AW1660 current issue (BAe. 125 Series 1000A).

A Standard U.S. Certificate of Airworthiness may be issued on proof of satisfactory conformance with H.S.A. Modifications listed in Part 5 (and related Appendices and Addendum) of the above referenced documents, or Part 4 of document CJE-HPA-G-260-AW1660 (BAe. 125 Series 1000A), current issue, or the equivalent U.S. Supplemental Type Certificates.

Current issues of H.S.A. Documents DO/AW/125/FAA/T.C.1, DO/AW/125-600/FAA/T.C.1, DO/AW/125-700/FAA/T.C.1, DO/AW/125-800/FAA/T.C.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 is further identified as to status of incorporation of factory-installed modifications by the H.S.A. "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 U.K. 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.

NOTE 7. Maximum permissible turbine outlet gas temperatures with H.S.A. Modifications 25/1760 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. Maximum Cabin Loads

	Total	Forward of Front Spar Frame Datum	Aft of Front Spar Frame Datum
DH.125-A1, 1A-522, 3A, 1A/R-522, 3A/R, 1A/S-522, 3A/RA, 400A	1950 lbs.	900 lbs.	1350 lbs.
BH/HS.125-600A (Pre-Modification 252468)	2960 lbs.	1515 lbs.	1670 lbs.
HS.125-700A and BH/HS 125-600A with modi- fication 252468) and BAe 125-800A/Hawker 800/ Hawker 800XP	3050 lbs.	1550 lbs.	1680 lbs.
BAe. 125 Series 1000A	3070 lbs.	1660 lbs.	1910 lbs.

Maximum load forward or aft of front spar frame datum includes loads of passenger seats, their occupants (including supernumery) 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 when equipment installations are incorporated conforming with either:

1. U.S. Federal Aviation Administration Supplemental Type Certificates S.A. 858/869/860 WE and suitably modified to maintain a cabin pressure equivalent to an altitude of 8,000 ft. or
2. HSA (DH) External Modification Nos. 25/1600 plus 25/1601, or 25/1721, or 25/2210 plus 25/2260 plus 25/2261A, the maximum permissible altitude is 41,000 ft.

NOTE 10. Conversion of DH.125 Series -1A/522 or -3/A to -1A/R-522 and -3A/R respectively, may only be accomplished by incorporation of Air Registration Board approved H.S.A. Service Bulletins corresponding to H.S.A. Modifications Nos. 25/1700, 25/5640 and 25/5718.

NOTE 11. Conversion of DH.125 Series -1A/522 to Series -1A/S-522 may only be accomplished by incorporation of Air Registration Board approved H.S.A. Service Bulletin corresponding to H.S.A. Modifications No. 25/1867.

Conversion of DH.125 Series -3A/R to Series -3A/RA may only be accomplished by incorporation of Air Registration Board approved H.S.A. Service Bulletin corresponding to H.S.A. Modification No. 25/1916.

NOTE 12. The Maximum Ramp Weight and Maximum Zero Fuel Weight for the Model DH.125 Series 1A, Series 1A/522, Series 3A and Series 1A/S-522 may be increased 200 pounds provided the revised limitation placard is installed in accordance with H.S.A. Modification No. 25/2022 and the relevant A.R.B. approved Airplane 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 Mod. 25/2149, introducing a modified oil temperature gauge and engine limitation placard, is embodied or an approved equivalent standard is achieved.

- NOTE 14. The Hawker Siddeley Model DH.125 Series 1A can be converted retrospectively to a Series 1A/522 by the introduction of modifications 25/1301, 25/1665, 25/1392, 25/1591, 25/1642, 25/1658, 25/1659, 25/7104, 25/5567 and 25/1760 in accordance with H.S.A. Service Bulletin 71-9-(1301). The Airplane Flight Manual, Doc. No. HS.1.3 (DH.125-1A) must be returned to ARB and the Airplane Flight Manual, Doc. HS.1.3 (DH.125-1A/522) must be obtained.
- NOTE 15. The limiting Mach Number is reduced to 0.755 when a Smiths combined ASI/Machmeter 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 BH 125 Series 400A may be increased 300 lb. or 500 lb. provided V_{MO} is appropriately reduced.
- HSA modification 25/2243 Part C and the related CAA approved Airplane Flight Manual Amendment No. P/14 must be embodied to permit the 300 lb. increase. HSA modification 25/6403 Part D and the related CAA approved Airplane Flight Manual Amendment No. P/17 must be embodied to permit the 500 lb. increase.
- NOTE 17. (a) The maximum operating speeds (V_{MO}/M_{MO}) for the BH.125 and HS.125 Series 600A Pre-Modification 252468 may be increased to the following values by embodiment of HSA Modification 25/2320 Part A:
- Maximum Operating Speed (V_{MO})
When the dorsal and ventral fuel tanks are empty, V_{MO} is 320 knots IAS up to an altitude of 15,000 ft. less one knot per 600 ft. to 298 knots IAS at 28,200 ft.
- Maximum Operating Mach No. M_{MO}
 M_{MO} is 0.78 indicated.
- The V_{MO} applicable when the dorsal and/or ventral fuel tanks contain fuel remains unchanged at 280 knots I.A.S., Amendment P/8 must be incorporated in the CAA Approved Flight Manual Doc. No. HS.1.7 to permit operation at the above increased speeds.
- (b) The maximum ramp weight and the maximum fuel weight for the BH.125 and HS.125 Series 600A may be increased to 25,500 and 16,050 pounds, respectively, by the embodiment of HSA Modification 25/2320 Part C.
- Amendment P/9 must be incorporated in the CAA Approved Flight Manual Doc. 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 126-600A may be increased by 500 lb by the embodiment of HSA Mod. 252320 Part D.
- Amendment P/10 must be incorporated in the CAA Approved Flight Manual Doc. 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 and HS.125 Series 600A airplane which has accumulated no flight time by December 31, 1974, must comply with FAR.21.183 and FAR.36.1(d)(3) Amdt. 36-2 in order to qualify for the issue of a U.S. Standard Airworthiness Certificate. Compliance may be accomplished by incorporation of HSA Modification No. 25/2405 and 25/2384. Amendment P/18 and Supplement No. 12 must be incorporated in the associated CAA-approved Flight Manual Doc. 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 airplanes may be replaced by Garrett AiResearch TFE 731-3-1H Turbofan engines by embodiment of HSA modification 252468 and the complementary modifications listed therein.
- In addition to the installation of the TFE 731-3-1H engines, the above modification also introduces changes to systems consequential to the engine change and a reduction in certificated taxi and takeoff (brake release) weights.
- A BH/HS 125 Series 600A airplane modified as specified above is to be operated in accordance with CAA-approved airplane Flight Manual, Document No. HS.1.9 with amendment P/7.
- NOTE 20. British Aerospace Modifications 252622 (Parts A and B) and 258169 (Series 700A) or relevant part of 258469 (all series less 700A) introduce an Automatic Performance Reserve (APR) system. When these modifications are embodied, the designation of the Garrett AiResearch TFE 731-3-1H engine must be changed to TFE 731-3R-1H. Limitations and procedures associated with the A.P.R. system are provided in C.A.A. Approved Airplane Flight Manual, Document H.S.1.9 Particular (P) Amendment No. 11 (Series 700A and 600A), H.S.1.10 P Amendment No. 2 (Series 400A and 3A/RA), and H.S.1.11 P. Amendment No. 4 (Series 3A and 1A).
- NOTE 21. The Rolls-Royce Viper engines originally fitted to DH/BH.125 Series 400A airplanes, may be replaced by Garrett AiResearch TFE 731-3-1H turbofan engines by embodiment of British Aerospace Modification 252550 and the complementary modifications listed therein.
- In addition to the installation of the TFE 731-3-1H 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/BH.125 Series 400A aircraft modified as specified herein must be operated in accordance with CAA-approved Flight Manual Doc. HS.1.10.
- NOTE 22. The Rolls-Royce Viper engines originally fitted to DH.125 Series 1A airplanes may be replaced by Garrett TFE 731-3-1H turbofan engines by embodiment of British Aerospace Modification 252605 (aircraft fitted with H.S. Modification 251867) or 252606 (aircraft not fitted with H.S. modification 251867) or 252606 (aircraft not fitted with H.S. modification 251867) and the complementary modifications listed therein.
- In addition to the installation of the TFE 731-3-1H engines, the above modifications also introduce changes to systems consequential to the engine change.
- A DH.125 Series 1A aircraft modified as specified herein must be operated in accordance with C.A.A.-Approved Flight Manual Doc. H.S.1.11 basic (1A with BAe modifications 251867 and 252605) or with Particular Amendment No. 2 (1A with BAe modification 252606).
- NOTE 23. British Aerospace Modification 252672 introduces a revised Land flap setting of 45 deg. to Series 400A and earlier Viper engined airplanes. Embodiment of this modification gives a noise reduction which meet the noise requirements of I.C.A.O. Annex 16. The limitations and procedures associated with this modification are provided in the CAA-approved airplane Flight Manual Document H.S.1.5 Particular (P) Amendment No. 37 (Series 3A/RA, 400A), H.S.1.3 P. Amendment No. 87 (Series 1A-522), 1A/S-522, 3, 3A/RA, and H.S.1.2 P. Amendment No. 22 Series 1A).
- NOTE 24. British Aerospace modification 256991 introduces an Aeronca Thrust Reverser, system to the Series 700A. The limitations and procedures associated with the thrust reverser system are provided in CAA-approved Airplane Flight Manual Document H.S.1.9, by Particular Amendment No. 12.
- NOTE 25. The Rolls-Royce Viper engines originally fitted to DH.125 Series 3A/RA airplanes may be replaced by Garrett TFE 731-3-1H turbofan engines by embodiment of British Aerospace Modification 252600 and the complementary modifications listed therein.
- In addition to the installation of the TFE 731-3-1H 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 CAA-approved Flight Manual Doc. H.S.1.10.

- NOTE 26. The Rolls-Royce Viper engines originally fitted to DH.125 Series 3A airplanes may be replaced by Garrett TFE 731-3-1H turbofan engines by embodiment of British Aerospace Modification 252603 and the complementary modifications listed therein. In addition to the installation of the TFE 731-3-1H 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 C.A.A.-approved flight Manual Doc. H.S.1.11 with Particular Amendment No. 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 Series 600A with modification 252468 and 700A aircraft providing that a revised limitations label is installed in accordance with British Aerospace modification 258332, (Series 700) or 252818 (Series 600A) and the C.A.A.-approved airplane Flight Manual contains Particular amendment No. 13.
- NOTE 28. Aviation Wide-cut fuel may only be used with TFE 731 engined aircraft when both engines have British Aerospace Modification 252738 embodied.
- NOTE 29. The maximum zero fuel weight may be increased with reductions in V_{MO} on a H.S.125 Series 700A with modifications 252648 and 258332 by embodiment of modification 258825 Part D and by inclusion in the C.A.A. Flight Manual doc.H.S.1.9 of 'P' Amendment No. 26.
Modification 258825 Part D:
Maximum Zero Fuel Weight - 16,300 lbs
 V_{MO} with fuel in the dorsal/ventral tanks is unchanged.
With the dorsal and ventral tanks empty, V_{MO} is 320 knots I.A.S. up to 10,600 feet less 1 knot per 600 feet to 288 knots at 29,800 feet.
- NOTE 30. British Aerospace Modification 259550A introduces the BAe 125 Series 800A (C-29A C-FIN aircraft) intended for operation by the United States Air Force. British Aerospace document HAW.D.258.AW0159 Issue 4 outlines the changes made to the standard Series 800 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.A. (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 CAA approved Flight Manual Doc. No. HS 1.16 containing Particular Amendment Nos. P/40 and any other applicable approved amendments.

Conversion of the aircraft to a Standard Series 800A can be achieved by embodiment of the Basic Airworthiness and U.S. Type Certification modifications given in BAe Document Ref.DO/AW/125-800/FAA/T.C.1.
- NOTE 31. The maximum taxiing (ramp) weight and the maximum take-off (brake release) weight for the BAe 125 Series 800A may be increased to 28,100 lb (12,746 kg) and 28,000 lb (12,701 kg) respectively, by the embodiment of either British Aerospace Modification 259550 Part B or 259952 Part A.

A BAe 125 Series 800A aircraft modified as specified above must be operated in accordance with CAA approved Flight Manual Doc. No. HS.1.16 containing Particular Amendment No. P/45.
- NOTE 32. The maximum zero fuel weight may be increased to 18,000 lb when BAe modification 253169A is embodied.
- NOTE 33. When a baggage pannier (BAe 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 lb for Series 700A with modification 258825 embodied.

- NOTE 35. The Maximum Zero Fuel Weight may be increased to 15,200 lb but with a reduction in V_{MO} on a H.S. 125 Series 400A with modification 259273 embodied.
- When the long range fuel tank contains fuel, V_{MO} is 253 knots IAS.
- When long range fuel tanks are empty V_{MO} is 276 knots IAS up to 27,500 feet less 1 knot per 340 feet to 260 knots IAS at 32,940 feet and above.
- NOTE 36. British Aerospace modification 259283 introduces Dee Howard TR 5000 Thrust Reversers to the BAe 125 Series 800A. The limitations and procedures associated with the thrust reverser are provided in CAA-Approved Airplane Flight Manual Document HS.1.16 by Particular Amendment No. P/32.
- NOTE 37. The Maximum Zero Fuel Weight may be increased to 17,750 lb when BAe modification 259579A is embodied.
- NOTE 38. The maximum zero fuel weight may be increased to 20,300 lb provided that a revised limitations label is installed in accordance with BAe Modification 253379A and the CAA Approved Flight Manual contains General Amendment No. G1.
- NOTE 39. British Aerospace Modification 253410A introduces aerodynamic improvements to the tailplane/elevator configuration.
- BAe 125 Series 1000A modified as specified above is to be operated in accordance with CAA approved Flight Manual Doc. No. HS1.19 containing General Amendment No. G6.
- NOTE 40. British Aerospace 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 USA. 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 C.A.A. approved Flight Manual Doc. No. HS 1.16 containing Particular Amendment No. P/60.
- NOTE 41. Raytheon Corporate Jets, Inc. 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 CAA approved Flight Manual Doc. No. HS 1.19 by Particular Amendment P34. The Hawker 1000 is only a name change from the former BAe 125-1000A. All Service Information published for the BAe 125 Series 1000A are equally applicable to the Hawker 1000.
- NOTE 42. Raytheon Corporate Jets, Inc. 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 CAA approved Aircraft Flight Manual Doc. No. HS 1.16 by Particular Amendment P63. The Hawker 800 is only a name change from the former BAe 125-800A. All Service Information published for the BAe 125 Series 800A are equally applicable to the Hawker 800.
- NOTE 43. Corporate Jets Modification 253650A introduces the PW305B engine, with this modification embodied the VMC (Minimum Control Speed) limits are as follows:
- | | |
|--|-----------------|
| VMC (Minimum Control Speed) | <u>Airspeed</u> |
| VMCG (with flaps 0° to 15° at S.L. ISA conditions) | 119 kts IAS. |
| VMCA (with flaps at 0° at S.L. IAS Conditions) | 124 kts IAS. |
| VMCA (with flaps at 15° at S.L. ISA Conditions). | 119 kts IAS. |
- A BAe 125 Series 1000A modified as specified above is to be operated in accordance with CAA approved Flight Manual Doc. No. HS.1.19 containing particular Amendment No. P17.

NOTE 44. The maximum zero fuel weight on the BAe 125-1000A may be increased to 20,400 lb provided that a revised label is installed in accordance with Corporate Jets Modification 25A714A and the Flight Manual HS.1.19 contains Particular Amendment No. P33.

NOTE 45. An optional Corporate Jets Ltd. Modification No. 253608A deletes the external baggage door on the BAe 125 Series 1000A.

NOTE 46. The maximum Zero Fuel Weight for the Model DH 125 Series 3A/RA may be increased to 14,700 lb provided that RCJ Modification 25A767A is embodied and Airplane Flight Manual HS.1.3. contains Particular Amendment P/89. Vmo must also be appropriately reduced as below.

Vmo (maximum operating)

with fuel in long range tank	255 knots IAS
with long range tank empty	281 knots IAS up to 27,500 feet less 1 knot per 280 feet to 265 knots IAS at 31980 feet

NOTE 47. The Garrett AiResearch TFE 731-5R-1H Turbofan engines originally fitted to Hawker 800 airplanes may be replaced by Allied Signal Engines TFE 731-5BR-1H Turbofan engines by embodiment of RCJ modification 253564A and the associated modifications listed therein.

In addition to the installation of the TFE 731-5BR-1H engines, the above modification also introduces the following changes:

- i) Dee Howard TR50000BR 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".
- v) Mach Trim System is fitted.
- vi) 3 Wheel ECS is fitted as standard.
- vii) 38 litre TKS tank is fitted.
- viii) Introduction of Hawker 800XP designation.

A Hawker 800 airplane modified as specified above is to be operated in accordance with CAA approved Airplane Flight Manual, Document No. HS.1.22.

NOTE 48. CAA UK 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 CAA letter reference 9/33/3956/A 24890 dated July 26, 1995.

NOTE 49. Raytheon Corporate Jets, Inc. Modification 25AB047A introduces the Hawker 800 intended for operation by the Japanese Self Defence Agency as a U-125A aircraft. An RCJ document, ref. CJE.CPD.D.272.001383 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. Aircraft manufactured under this Type Certificate are eligible for export once they have been found to conform to the specification outlined in RCJ document ref. CJE.CPD.D.272.001381 Issue 1.

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

NOTE 50. 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. Such foreign requirements may also invoke different limitations, recommended procedures and information to those defined in this TCDS.

There are two basic certification standards for the DH/HS/BH/BAe125/Hawker series of airplanes. One is the US FAA Type Certificated 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 CAA standards, sometimes referred to as "B" versions, include the following Models, Series: 1, 1B-521, 1B-522, 1B/S-522, 1B/R-522, F1B, 2, 3B, 3B/R, 3B/RA, 3B/RB, 3B/RC, F3B, F3B/RA, 400B, 400B/1, 401B, 402B, 403A(C), 403B, F400B, F403B, 600B, 600B/1, 600B/2, 600B/3, F600B, 700B, 800B, 1000B. While most countries outside of the UK and USA 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, the document used to detail such a conversion 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 U.K. 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 ADs issued by the UK-CAA prior to August 1, 1995.

....END....