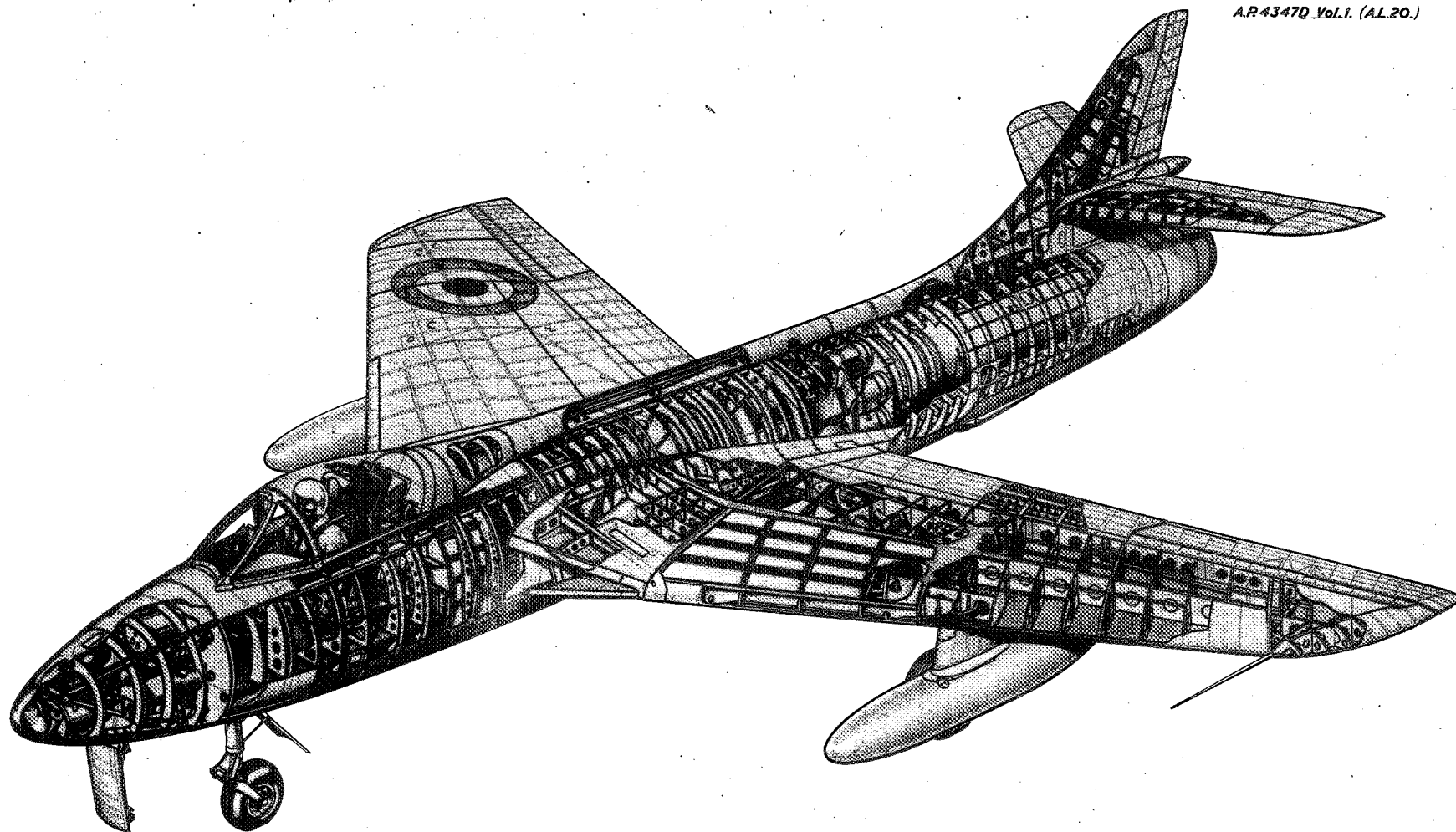


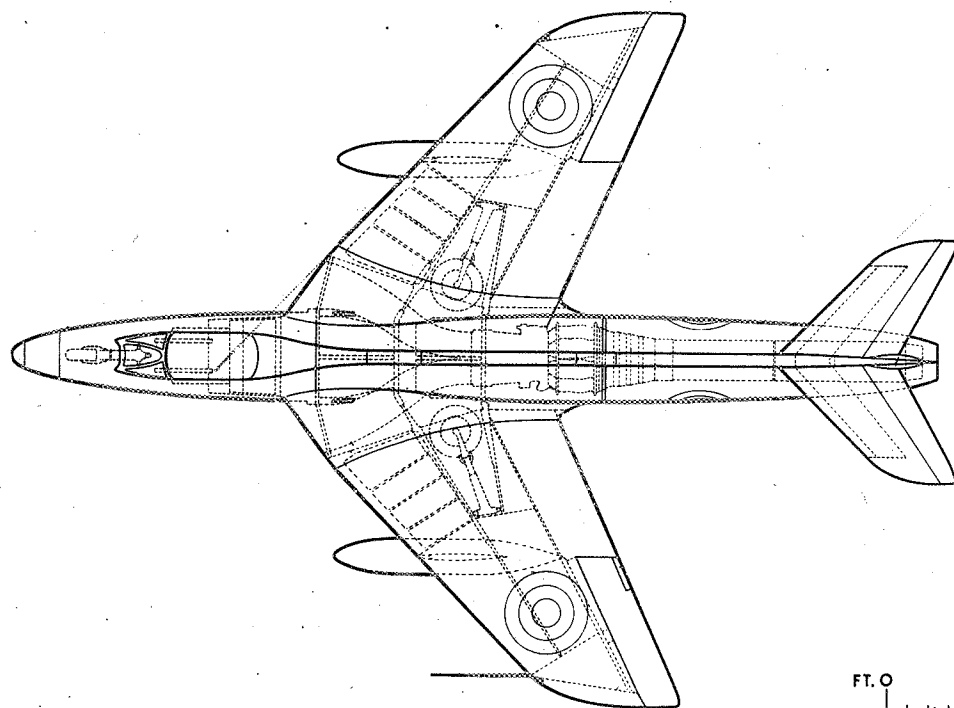
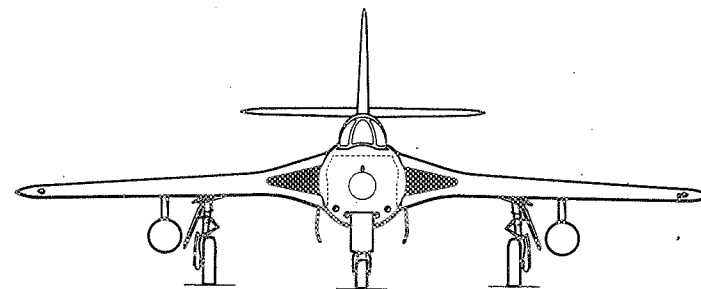
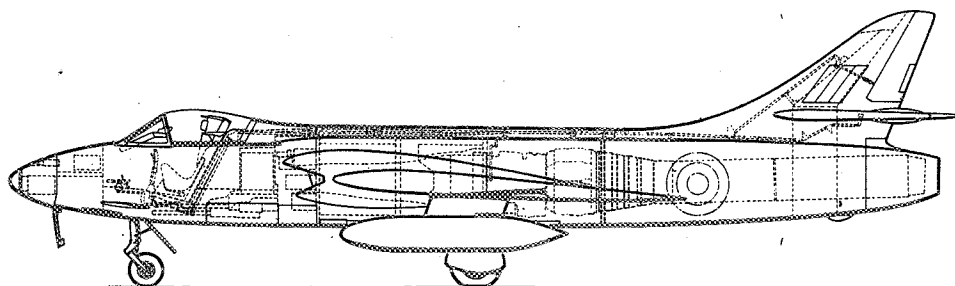


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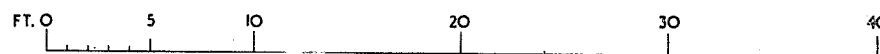
HAWKER HUNTER F Mk.4

ROLLS ROYCE AVON ENGINE

(A.L.20. Mar. 55)



OVERALL LENGTH	45 FT. 10-5 IN.
OVERALL HEIGHT	13 FT. 4 IN.
WING SPAN	33 FT. 8 IN.
TAIL PLANE SPAN	11 FT. 10 IN.



GENERAL ARRANGEMENT

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LEADING PARTICULARS

NAME	...	...	...	...	...	...	...	HUNTER F Mk. 4
TYPE	...	...	...	...	...	...	...	SINGLE-SEAT, SINGLE-ENGINE, MID-WING LAND-BASED MONOPLANE
DUTY	...	...	...	...	...	...	...	INTERCEPTOR FIGHTER

MAIN DIMENSIONS

Refer to the general arrangement illustration

MAIN PLANES

Aerofoil section	...	...	Hawker High Speed 8 $\frac{1}{2}$ % thick at 37.5% of chord
Mean chord	...	...	10.2 ft.
Aspect ratio	...	...	3.33
Incidence	...	...	+1 deg. 30 min.
Dihedral	...	...	-1 deg.
Angle of sweepback at 25% of chord	...	...	39.9 deg.

TAIL PLANE

Aerofoil section	...	Hawker symmetrical t/c 0.08 (max. thickness at 34% of chord)
Mean chord	...	4.55 ft.
Incidence	...	Variable
Dihedral	...	Nil
Angle of sweepback at 25% of chord	...	41.9 deg.

AREAS

Wings, with ailerons and flaps—gross	...	340 sq. ft.
Ailerons, net total	...	26.52 sq. ft.
Flaps, landing, gross	...	31.2 sq. ft.
Tail plane, with elevators—gross	...	53.9 sq. ft.
Elevators—gross	...	16.3 sq. ft.
Fin with rudder and tab—gross	...	35 sq. ft.
Rudder, with tab	...	6.1 sq. ft.
Rudder, tab	...	0.4 sq. ft.

RANGE OF MOVEMENT AND SETTING OF CONTROL SURFACES

Refer to Sect. 3, Chap. 4

MAIN UNDERCARRIAGE

Type	...	Two cantilever units, retracting inward
Track	...	14.75 ft.
Shock-absorber struts		
Type	...	Dowty liquid-spring (Part No. A.7900Y A/B, Mk. B, Pre Mod. 197) or (Part No. A.7950Y A/B, Mk. B, Post Mod. 197)
Fluid used	...	OM-15 (Stores Ref. 34B/159 or 100572)
Pressure	...	Refer to A.P.1803E, Vol. 1, Sect. 2
Wheels		
Type	...	Dunlop A.H.50207
Tyres	...	Dunlop (29 in. $\times$ 6.75 in. — 16 in.) Code DR.1821
Tubes	...	Dunlop Code D.T.1808
Inflation pressure	...	Refer to Servicing Schedule

Brakes

Type	...	Dunlop hydraulic A.H.50247 and 8
Working pressure	...	1,500 lb. per sq. in.

NOSE UNDERCARRIAGE

Type	...	One cantilever unit, retracting forward
Shock-absorber unit		
Type	...	Dowty liquid-spring (Part No. A.4503Y)
Fluid used	...	OM-15 (Stores Ref. 34B/159 or 100572)
Pressure	...	Refer to A.P.1803E, Vol. 1, Sect. 6
Wheel		
Type	...	Dunlop A.H.9336
Tyre	...	Dunlop (19 in. $\times$ 6.25 in. — 9 in.) Code D.R.2266
Tube	...	Dunlop Code D.T.2200
Inflation pressure	...	Refer to Servicing Schedule

ENGINE

Name	...	Avon Mk. 107 or 113
Type	...	Straight flow, turbo-jet
Starter		
Type	...	B.T.H. T.B.S.720 Mk. 1
Cartridges	...	Cordite, 720 Gramme Type No. 10 Mk. 1 (Stores Ref. 12D/1204)
Safety device	...	Relief valve to each breech
Accessories gear box and drive		
Type	...	Rotol A.D.E.171
Fuel		
Specification	...	Avtur 100 (Stores Ref. 34A/179)
Fuel tank capacities		
Front tanks		
Port	...	...
Starboard	...	...
Centre tanks		
Port	...	...
Starboard	...	...
Wing tanks		
Port (4 tanks)	...	...
Starboard (4 tanks)	...	...
Total internal fuel capacity	...	...
Drop tanks (two), each	...	...
Oil		
Engine		
Specification	...	OX-38 (Stores Ref. 34A/266 or 100591)
Quantity (carried in engine sump)	...	17 pints approx.
Accessories gearbox		
Specification	...	Pre-Mod. 499 O.E.P. 71 (Stores Ref. 34A/206 or 100540) Post-Mod. 499 OX-38 (Stores Ref. 34A/266 or 100591)
Capacity	...	2.5 pints approx.

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LEADING PARTICULARS—contd.

HYDRAULIC SYSTEM

Type	...	...	...	...	...	High pressure, live-line
Components	...	...	...	...	...	Dowty
Services operated	...	...	...	...	...	Alighting gear, wheel brakes, landing flaps, air brakes and power-assisted controls
Pump	...	...	...	...	Dowty Part No. A.5050Y/RH/3,000	(Stores Ref. 371/8000)
Fluid	...	...	...	...	OM-15	(Stores Ref. 34B/159 or 100572)
Accumulator inflation pressures	...	...	...	...	...	...
Aileron and elevator	...	...	...	...	...	1,575 lb. per sq. in.
Wheel brakes	...	...	...	...	...	750 lb. per sq. in.
Emergency air bottle pressures	...	...	...	...	...	...
Alighting gear and flaps	...	...	...	...	...	1,800 to 2,000 lb. per sq. in.
Relief valve blow-off pressures	...	...	...	...	...	...
Hand pump	...	...	...	...	...	2,800 $\pm$ 100 -0 } lb. per sq. in.
Flaps	...	...	...	...	...	3,000 $\pm$ 0 -500 } lb. per sq. in.
Thermal relief valves	...	...	...	...	...	4,000 to 4,150 and 3,100 to 3,250 lb. per sq. in.

ELECTRICAL SYSTEM

Voltage	...	...	...	...	...	24 volts nominal
Generators (2)	...	...	...	...	...	Type 515A (Stores Ref. 5UA/6273)
Voltage regulators (2)	...	...	...	...	...	Type 57 (Stores Ref. 5U/5201)
Cut-out units (2)	...	...	...	...	...	Differential, Type A, Mk. 2 (Stores Ref. 5C/4211)
Batteries (2)	...	...	...	...	...	Type C, 12-volt, 25-amp. (Stores Ref. 6140/101532)

RADIO

V.H.F.	...	...	...	...	...	T.R.1934/1935, twin installation (A.R.I.5490)
D.M.E.	...	...	...	...	...	T.R.3708 (A.R.I.5849)

RADAR

I.F.F.	...	...	...	...	...	R.3121 (A.R.I.5131)
Radar ranging	...	...	...	...	...	(A.R.I.5820)

ANTI-'G' SYSTEM

Air bottles (2)	...	...	...	...	...	Dunlop ACM/16780 or 16782
Capacity	...	...	...	...	...	106 or 110 cu. in. each
Anti-'G' valve	...	...	...	...	...	Hymatic Type AG.2 (Stores Ref. 27VB/3254)
Pressure reducing valve	...	...	...	...	...	Palmer Type C.58 (Stores Ref. 6D/1602)
Selector valve	...	...	...	...	...	Hymatic Type SV.9 (Stores Ref. 27VB/3441)
Charging pressure (in-situ)	...	...	...	...	...	1,800 to 2,000 lb. per sq. in.

OXYGEN SYSTEM

Cylinders (2)	...	...	...	...	...	Mk. 5D (Stores Ref. 6D/1383)
Capacity	...	...	...	...	...	750 litres each
Pressure reducing valve	...	...	...	...	...	Mk. 1 (Stores Ref. 6D/1616)
Regulator	...	...	...	...	...	Mk. 17 or 17B (Stores Ref. 6D/1700 or 1710)
Charging pressure (in-situ)	...	...	...	...	...	1,800 lb. per sq. in.

AIR CONDITIONING SYSTEM

Cold air unit	...	...	...	...	...	A.C.R.E. 9 Mk. 6W (Stores Ref. 27UA/401)
Oil	...	...	...	...	...	Pre-Mod. 499 O.E.P. 71 (Stores Ref. 34A/206 or 100540)
	...	...	...	...	...	Post-Mod. 499 OX-38 (Stores Ref. 34A/266 or 100591)
Pre-cooler	...	...	...	...	...	Marston-Excelsior D.119-4A
Inter-cooler	...	...	...	...	...	Marston-Excelsior D.119-3A

FIRE PROTECTION SYSTEM

Extinguisher bottle	...	...	...	...	...	Mk. 5A (Stores Ref. 27N/69)
Flame switches	...	...	...	...	...	Mk. 4 No. HS/RS.300 (Stores Ref. 27N/91)

SEAT

Ejection type	...	...	...	...	...	Martin Baker Mk. 2H (Stores Ref. 27L/50007)
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ARMAMENT

Pre-armed gun package	...	...	...	...	...	...
Type of guns	...	...	...	...	...	Aden 30 mm.
Number of guns	...	...	...	...	...	Four (two right-hand, two left-hand)
Control	...	...	...	...	...	Electrical
Firing mechanisms	...	...	...	...	...	Electrical
Number of rounds per gun	...	...	...	...	...	150
Total number of rounds	...	...	...	...	...	600
Gun cocking	...	...	...	...	...	Pneumatic (ground supply)
Universal pylon	...	...	...	...	...	...
Number	...	...	...	...	...	One under each wing

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