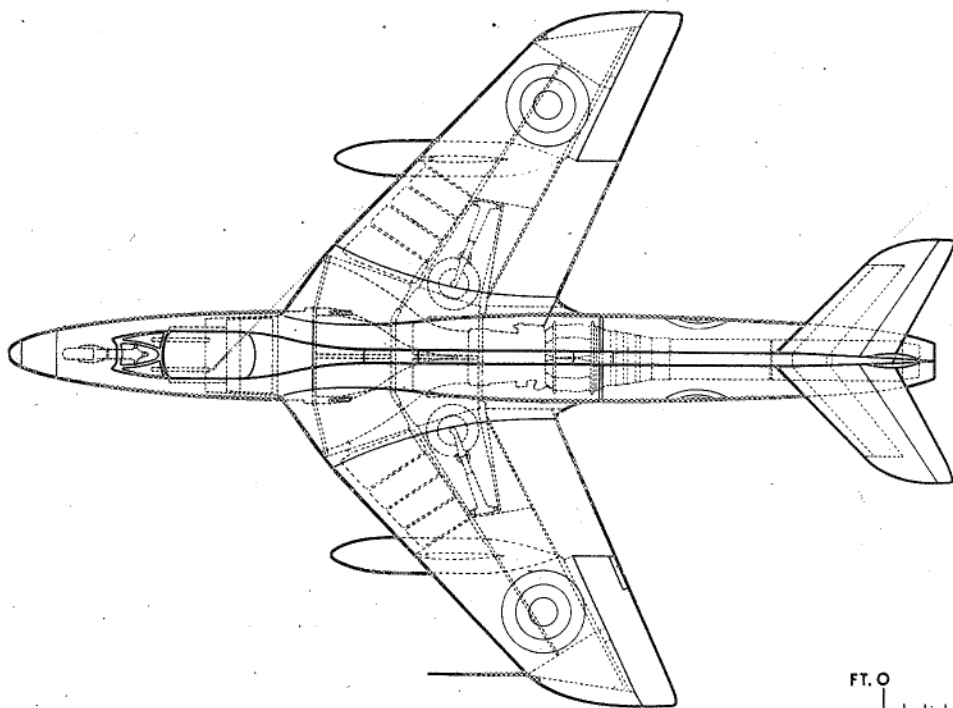
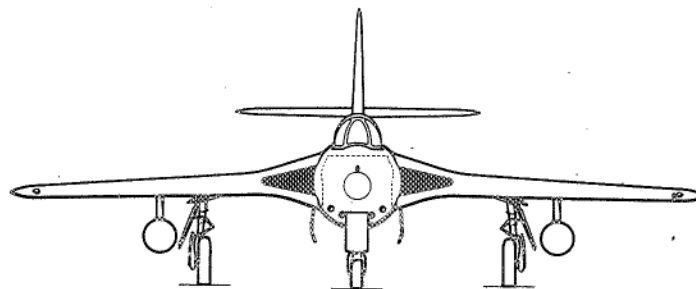
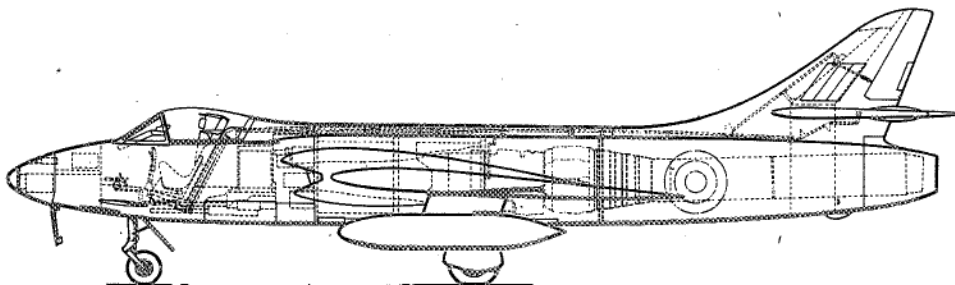


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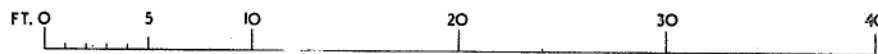
HAWKER HUNTER F Mk.4

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. × 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. × 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 breach
 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 $\begin{matrix} +100 \\ -0 \end{matrix}$ lb. per sq. in.
Flaps	...	...	...	...	...	3,000 $\begin{matrix} +0 \\ -500 \end{matrix}$ 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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