

LEADING PARTICULARS

NAME ... HUNTER FGA MK. 9
TYPE ... SINGLE-SEAT, SINGLE-ENGINE, MID-WING
LAND-BASED MONOPLANE
DUTY ... FIGHTER GROUND ATTACK

MAIN DIMENSIONS

Refer to the general arrangement illustration

MAIN PLANES

Aerofoil section ... Hawker High Speed 0.085 t/c 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 0.08 t/c 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 ... 349 sq. ft.
Ailerons, net total ... 26.52 sq. ft.
Flaps, landing, gross ... 29.63 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
Fluid used ... OM-15
Pressure ... Refer to A.P.104 series

Wheels

Type ... Dunlop A.H.50701, A.H.51338 or A.H.50207
Tyres ... Dunlop 29 in x 6.25 in x 16 in, Code D.T.1821
Tubes ... Dunlop (Ref. No. 27A/3921)
Inflation pressure ... Refer to Servicing Schedule

Brakes

Type ... Dunlop hydraulic A.H.50247 and 8
Working pressure ... 1 500 lb/in²

NOSE UNDERCARRIAGE

Type ... One cantilever unit, retracting forward

Shock-absorber unit

Type ... Dowty liquid-spring
Fluid used ... OM-15
Pressure ... Refer to A.P.104 series

Wheel

Type ... Dunlop A.H.9336

LEADING PARTICULARS—Contd.

Tyre Dunlop 19 in x 6.25 in x 9 in, Code D.R.2266
 Tube Dunlop Code D.T.2200
 Inflation pressure Refer to Servicing Schedule

ENGINE

Name Avon Mk. 207
 Type Straight flow, turbo-jet
 Starter
 Type Plessey I.P.N. Liquid Fuel
 Fuel (starter) AVPIN—N.A.T.O. Code No. S-746
 Tank capacity 2 gallons

Accessories gearbox and drives
 Gearbox Rotol Type TG5/5
 Turret (vertical drive arm) Type GA7/2
 Drive (front) Type GD9/37
 Drive (rear) Type GD9/100

FUEL DATA

UK Joint Service NATO D Eng RD
 designation Code No. spec

APPROVED FUELS

Fuel	Fuel	Weight	Notes
Avtur/FSII	F-34	2453	7.9 lb per gal. See column 'A'
Avtag/FSII	F-40	2454	weight approx. 7.7 lb per gal. See column 'B'

Both fuels contain AL-38 [99% FSII (AL-31) and 1% Hitec E515 (lubricity agent)].
 If either fuel is from non-RAF sources Note (1) applies.

EMERGENCY SUBSTITUTE FUELS

Fuel	Fuel	Weight	Notes
Avtur	F-35	2494	weight approx. 7.9 lb per gal. See column 'A'
Avcat	F-44	2498	weight approx. 8.2 lb per gal. See column 'C'

Neither of these fuels contain FSII or Hitec E515. Note (1) applies to each.

Fuel	Notes
F-42	— French equivalent to F-44 but contains FSII. Note (1) applies.

Note ...

- (1) (a) F-34 and F-40 from non-RAF sources and F-42 contain FSII but not Hitec E-515.
- (b) AVCAT and F-35 contain neither FSII nor Hitec E-515.
- (c) A maximum of one flight only without Hitec E-515 is permitted unless arrangements are made to blend in AL-38 when no restriction applies. The double-dosing with FSII is permissible where it occurs.
- (d) All uplifts of fuel not containing AL-38 are to be annotated in the F-700.

Fuel tank capacities
 (with no external tanks fitted)
 Front tanks
 Rear tanks
 Wing tanks

	GAL	'A' LB.	'B' LB.	'C' LB.
Front tanks	200	1 580	1 540	1 640
Rear tanks	52	410.8	400.4	426.4
Wing tanks	140	1 106	1 078	1 148
Total internal capacity	392	3 096.8	3 018.4	3 214.4

Fuel tank capacities
 (with 2 inboard external tanks fitted)
 Front tanks
 Rear tanks
 Wing tanks

	GAL	'A' LB.	'B' LB.	'C' LB.
Front tanks	202	1 595.8	1 555.4	1 656.4
Rear tanks	52	410.8	400.4	426.4
Wing tanks	146	1 153.4	1 124.2	1 197.2
Total internal capacity	400	3 160	3 080	3 280

Fuel tank capacities
 (with 4 external tanks fitted)
 Front tanks
 Rear tanks
 Wing tanks

	GAL	'A' LB.	'B' LB.	'C' LB.
Front tanks	202	1 595.8	1 555.4	1 656.4
Rear tanks	52	410.8	400.4	426.4
Wing tanks	150	1 185	1 155.0	1 230.0
Total internal capacity	404	3 191.6	3 110.8	3 312.8

External tank capacities

	GAL	'A' LB.	'B' LB.	'C' LB.
100 gal. on inboard pylon	100	790	770	820
100 gal. on outboard pylon	99	782.1	762.3	811.8
230 gal. (without outboard external tanks)	233	1 840.7	1 794.1	1 910.6
230 gal. (with outboard external tanks)	239	1 888.1	1 840.3	1 959.8

Note ...

The capacities of the front and rear compartments of 230 gal. tanks post Mod. 1242 are:—

	Front Compartment	Rear Compartment
Without outboard external tanks	178 gal	55 gal.
Without outboard external tanks	182.5 gal.	56.5 gal.

The fuel in the rear compartment is consumed first.

Fuel filter de-icing

Component	Capacity	Notes
Pump	...	F.P.3 Mk. 9
Tank capacity	...	1 gallon
Fluid	...	AL-8

Oil

Component	Capacity	Notes
Engine	...	OX-38
Specification	...	9½ pints approx
Quantity (carried in engine sump)	...	...
Accessories gearbox	...	OX-38
Specification	...	2.5 pints
Capacity	...	...
Turret (vertical drive arm)	...	OX-38
Specification	...	¾ pint
Capacity	...	...

LEADING PARTICULARS—Contd.

Cold air unit
Specification OX-38

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
Fluid OM-15
Accumulator inflation pressures

Aileron (Pre Mod. 690) 1575 lbf/in²
... .. (Post Mod. 690) 900 lbf/in²
Elevator 1575 lbf/in²
Wheel brakes 750 lbf/in²

Emergency air bottle pressures
Alighting gear and flaps 2000 lbf/in²

Relief valve blow-off pressures

Hand pump 2800 +100 lbf/in²
... .. -0
Flaps 3000 +50 lbf/in²
... .. -0
Air brake 3400 +50 lbf/in²
... .. -0

Thermal relief valves 4000 to 4150 and 3100 to 3250 lbf/in²
Pressure regulator valves (Flaps, u/c and air brake) 1100 lbf/in²

ELECTRICAL SYSTEM

Voltage 28 volts nominal
Generators (2) Type 517
Voltage regulators (2) Type 94
Cut-out units (2) Differential Type A, Mk.2
Batteries (2) Type J, 24 volt, 25 amp.

RADIO

U.H.F. (Main) A.R.C.52 (Post Mod. 968) (A.R.I.18124/1)
U.H.F. (Standby) TR.10056 (A.R.I.23057)
Telebriefing (A.R.I.18012)
Radio compass Marconi sub-miniature (A.R.I.5877)

RADAR

D.M.E. TR.8193 (A.R.I.23013)
I.F.F. Type 4585 (A.R.I.5848)
Radar ranging (A.R.I.5820)

ANTI-'G' SYSTEM

Air bottles (2) Dunlop ACM/16782
Capacity 110 cu. in. each
Anti-'G' valve Hymatic Type AG.2
Pressure reducing valve Palmer Type C.58
Selector valve Hymatic Type SV.9
Charging pressure (in situ) 2000 lbf/in²

OXYGEN SYSTEM

Cylinders (3) Mk. 5D
Capacity 750 litres each
Pressure reducing valve Mk. 1
Regulator Mk.17E or Mk.17F
Charging pressure (in situ) 1800 lbf/in²

AIR CONDITIONING SYSTEM

Cold air unit Part No. 120277
Pre-cooler Marston-Excelsior D-119-5A (Modified to A.203406)
Inter-cooler Marston-Excelsior D-119-6A (Modified to A.203407)

SEAT

Ejection type Martin Baker Mk. 2H or 3H

ARMAMENT

Pre-armed gun package
Type of guns Aden 30 m.m.
Number of guns Four (two right-hand, two left-hand)
Control Electrical
Firing mechanism Electrical
Number of rounds per gun 150
Total number of rounds 600
Gun cocking Pneumatic (ground supply)
Pylons
Number Two under each wing
R.P. (See Sect. 7, Chap. 2)
Bombs (See Sect. 7, Chap. 4)

FIRE PROTECTION SYSTEM

Extinguisher bottle (2) Mk. 12A or Mk. 4AX,
Mk. 13A or Mk.5AX
Flame switches (12) (Pre Mod.960) Mk.4 No. HS/RS/300
Firewire D.C. control unit (1)
(Post Mod.960) Gravier Type D3000, D3600 or 165 D(2)
Firewire 10 ft. element (8)
(Post Mod.960) Gravier Part No. D.2370/120
Firewire 5 ft. element (1)
(Post Mod.960) Gravier Part No. D.2370/60
Inertia switches (2) Mk. 1

HAWKER SIDDELEY HUNTER FGA MK.9

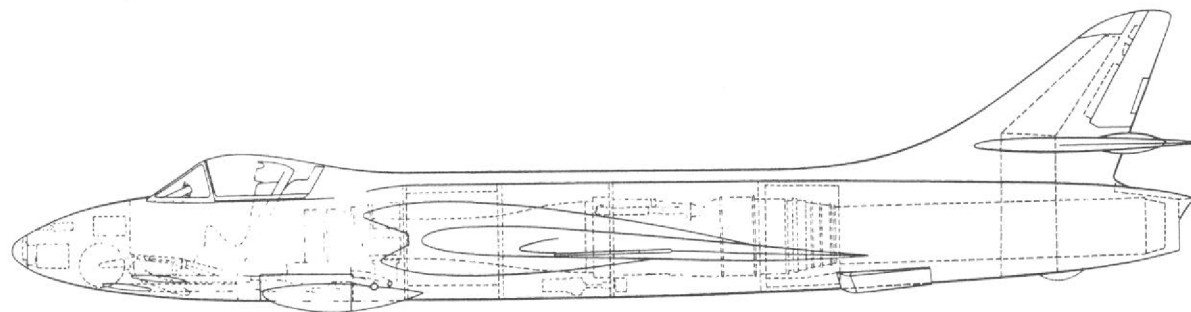
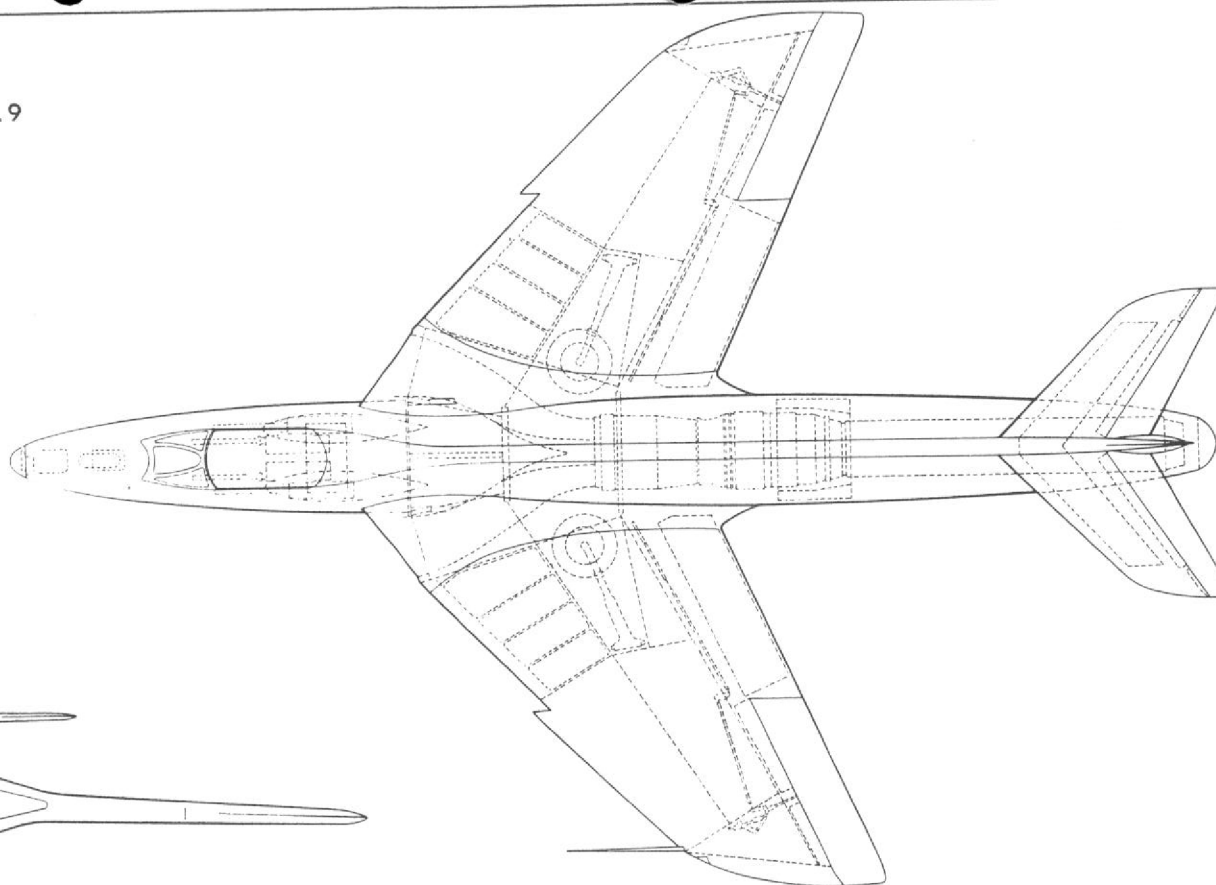
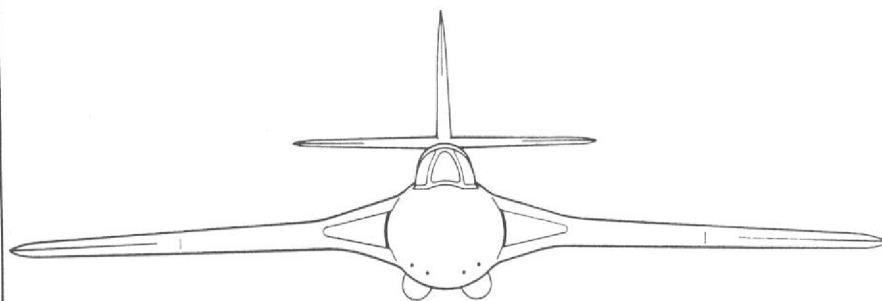
Rolls-Royce Avon Engine

Overall length 45ft. 10.5in.

Overall height 13ft. 4.0in.

Wing span 33ft. 8.0in.

Tail plane span 11ft. 10.0in.



General Arrangement

This file was downloaded
from the RTFM Library.

Link: www.scottbouch.com/rtfm

Please see site for usage terms,
and more aircraft documents.

