LEADING PARTICULARS

NAME ... HUNTER T MK. 7
TYPE ... TWO-SEAT, SINGLE-ENGINE, MID-WING LAND-BASED MONOPLANE
DUTY ... TRAINER

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	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
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

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. 122
Type	Straight flow, turbo-jet
Starter	
Type	B.T.H. T.B.S. 720 Mk. 2
Cartridges	Cordite 720 gramme Type No. 10 Mk.3
Safety device	Relief valve to each breech
Accessories gearbox and drives	
Gearbox	Rotol Type TG5/8
Drive (front)	Type GD9/44

FUEL DATA

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

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.

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	GAL	'A' LB.	'B' LB.	'C' LB.
(with no external tanks fitted)				
Front tanks	200	1 580	1 540	1 640
Centre tanks	72	568.8	554.4	590.4
Wing tanks	140	1 106	1 078	1 148
Total internal capacity	412	3 254.8	3 172.4	3 378.4
Fuel tank capacities				
(with 2 inboard external tanks fitted)				
Front tanks	202	1 595.8	1 555.4	1 656.4
Centre tanks	72	568.8	554.4	590.4
Wing tanks	146	1 153.4	1 124.2	1 197.2
Total internal capacity	420	3 318.0	3 234.0	3 444.0
Fuel tank capacities				
(with 4 external tanks fitted)				
Front tanks	202	1 595.8	1 555.4	1 656.4
Centre tanks	72	568.8	554.4	590.4
Wing tanks	150	1 185	1 155.0	1 230.0
Total internal capacity	424	3 349.6	3 264.8	3 476.8
External tank capacities				
100 gal. on inboard pylon	100	790	770	820
100 gal. on outboard pylon	99	782.1	762.3	811.8

Fuel filter de-icing	
Pump	F.P.3 Mk. 9
Tank capacity	1 gallon
Fluid	AL-8
Oil	
Engine	
Specification	OX-38
Quantity (carried in engine sump)	17 pints approx.
Accessories gearbox	
Specification	OX-38
Capacity	2.5 pints
Cold air unit	
Specification	OX-38

HYDRAULIC SYSTEM

Type	High pressure, live- line
Components	Dowty
Services operated	Alighting gear, wheel brakes, landing flaps, cabin hood, air brakes, power-assisted controls and windscreen wipers
Pump	Dowty
Fluid	OM-15
Accumulator inflation pressures	
Aileron	(Pre Mod. 690) 1575 lbf/in^2 (Post Mod. 690) 900 lbf/in^2
Elevator	1575 lbf/in^2
Wheel brakes	750 lbf/in^2
Hood	1575 lbf/in^2

LEADING PARTICULARS—Contd.

Emergency air bottle pressures	
Alighting gear and flaps	2000 lbf/in^2
Relief valve blow-off pressures	
Hand pump	2800 $^{+100}_{-0}$ lbf/in^2
Flaps	3000 $^{+50}_{-0}$ lbf/in^2
Air brake	3400 $^{+50}_{-0}$ lbf/in^2
Thermal relief valves	4000 to 4150 and 3100 to 3250 lbf/in^2
Pressure regulator valves (flaps, u/c and air brake)	1100 lbf/in^2

ELECTRICAL SYSTEM

Voltage	24 volts nominal
Generators (2)	Type 515A
Voltage regulators (2)	Type 94
Cut-out units (2)	Differential, Type A, Mk. 2
Batteries (2)	Type J, 24 volt, 25 amp.

RADIO

V.H.F.	Type 1985A/1986A twin installations (A.R.I.18064/1 & A.R.I.18085)
Telebriefing	(A.R.I.18012)
Intercommunication amplifier	A.1961
IFF	IFF/SSR/1520 (A.R.I.23134) (Post Mod.1357)

RADAR

D.M.E.	TR.8193 (A.R.I. 23013)
Radar ranging	(A.R.I.5840)

ANTI-'G' SYSTEM

Air bottles (4)	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/in^2

OXYGEN SYSTEM

Cylinders (4)	Mk. 5D with Mk. 7 five-way piece
Capacity	750 litres each
Pressure reducing valve	Mk. 1
Regulator	Mk. 17E or Mk. 17F
Charging pressure (in situ)	1800 lbf/in^2

AIR CONDITIONING SYSTEM

Cold air unit	A.C.R.E. 9 Mk. 8W
Pre-cooler	Marston-Excelsior D–119–7A or D1137–3A
Inter-cooler	Marston-Excelsior D–119–7A or D1137–3A

ARRESTER HOOK (post Mod.1363)

Damper air charging pressure (hook extended)	1000 lbf/in^2

FIRE PROTECTION SYSTEM

Extinguisher bottle	Mk.13A or Type 5AX
Flame switches (12 (Pre Mod.1024)	Mk.4 No. HS/RS/300
Firewire D.C. control unit (1) (Post Mod. 1024)	Graviner Type 1650 (2), D 3600 or 165 D(2)
Firewire 10ft. element (7) (Post Mod.1024)	Graviner Part No. D.2370/120
Firewire 5 ft. element (2) (Post Mod.1024)	Graviner Part No. D.2370/60
Inertia switches (2)	Mk. 1
Firewire 7 ft. 6 in. element (1) (Post Mod.1024)	Graviner Part No. D.2370/89

SEATS

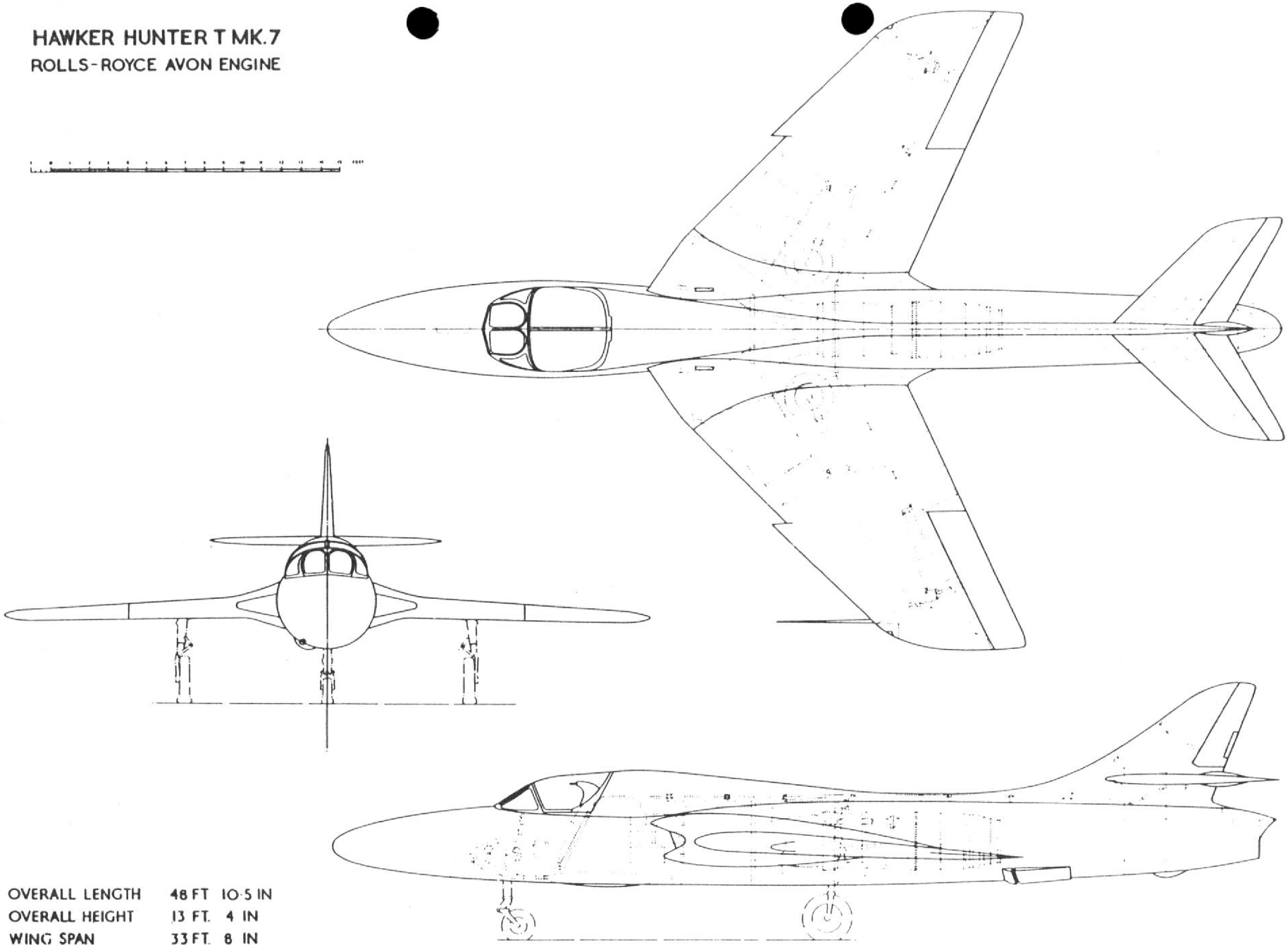
Ejection type		
(Pre Mod.1177)		Port Martin Baker Type Mk. 4H/1 Starboard Martin Baker Type 4H/2
(Post Mod.1177)	Port & starboard	Martin Baker Type Mk. 4HA Mk. 1

ARMAMENT

Type of gun	Aden 30 m.m.
Number of guns	One left-hand
Control	Electrical
Firing mechanisms	Electrical
Number of rounds	150
Gun cocking	Pneumatic (ground supply)
Pylons	
Number	Two under each wing
R.	(See Sect. 7, Chap. 2)

HAWKER HUNTER T MK.7

ROLLS-ROYCE AVON ENGINE



OVERALL LENGTH	48 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