

WING AEROFOIL SECTION AT TIP CHORD
 PERCENTAGE LINES ARE STRAIGHT TAPERED IN PLAN AND ELEVATION BETWEEN BASIC FOOT & TIP CHORDS

Dist. A	Dist. B
12.00	14.61
3.00 FWD	11.81
16.00	9.41
3.00	7.35
0	5.61
3.00	4.16
6.00	2.57
3.00	2.02
12.00	1.23
15.00	.75
18.00	.33
24.00	-.05

WING AEROFOIL SECTIONS

Root Chord	% Chord	1/8	1/4	3/8	1/2	3/4	1.00	1.25	1.50	1.75	2.00	2.50	3.00	4.00	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00	100.00
140.00	DIST. AFT OF LIE	0	21	35	50	70	105	140	175	210	245	280	315	350	385	420	455	490	525	560	595	630	665	700	735	770	805	840	875	910	945	980	1015	1050	
140.00	DIST. AFT OF LE	0	515	1030	1545	2060	2575	3090	3605	4120	4635	5150	5665	6180	6695	7210	7725	8240	8755	9270	9785	10300	10815	11330	11845	12360	12875	13390	13905	14420	14935	15450	15965	16480	
140.00	DIST. AFT OF LE	0	515	1030	1545	2060	2575	3090	3605	4120	4635	5150	5665	6180	6695	7210	7725	8240	8755	9270	9785	10300	10815	11330	11845	12360	12875	13390	13905	14420	14935	15450	15965	16480	

TAILPLANE AEROFOIL SECTIONS

Root Chord	% Chord	1/8	1/4	3/8	1/2	3/4	1.00	1.25	1.50	1.75	2.00	2.50	3.00	4.00	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00	100.00
66.00	DIST. AFT OF LIE	0	165	330	495	660	825	990	1155	1320	1485	1650	1815	1980	2145	2310	2475	2640	2805	2970	3135	3300	3465	3630	3795	3960	4125	4290	4455	4620	4785	4950	5115	5280	
66.00	DIST. AFT OF LE	0	550	1100	1650	2200	2750	3300	3850	4400	4950	5500	6050	6600	7150	7700	8250	8800	9350	9900	10450	11000	11550	12100	12650	13200	13750	14300	14850	15400	15950	16500	17050	17600	
66.00	DIST. AFT OF LE	0	550	1100	1650	2200	2750	3300	3850	4400	4950	5500	6050	6600	7150	7700	8250	8800	9350	9900	10450	11000	11550	12100	12650	13200	13750	14300	14850	15400	15950	16500	17050	17600	

FIN AEROFOIL SECTIONS

Root Chord	% Chord	1/8	1/4	3/8	1/2	3/4	1.00	1.25	1.50	1.75	2.00	2.50	3.00	4.00	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00	100.00
86.93	DIST. AFT OF LIE	0	22	43	65	87	109	131	153	174	196	218	240	262	284	306	328	350	372	394	416	438	460	482	504	526	548	570	592	614	636	658	680	702	
86.93	DIST. AFT OF LE	0	22	43	65	87	109	131	153	174	196	218	240	262	284	306	328	350	372	394	416	438	460	482	504	526	548	570	592	614	636	658	680	702	
86.93	DIST. AFT OF LE	0	22	43	65	87	109	131	153	174	196	218	240	262	284	306	328	350	372	394	416	438	460	482	504	526	548	570	592	614	636	658	680	702	

FIN AND RUDDER

NETT AREA (EXCLUDING FUSELAGE)	25.80 FT ²
FIN ARM .25E TO .25E WING	16.20 FT
ANGLE OF SWEEPBACK AT LIE	47° 22'
ANGLE OF SWEEPBACK AT .25 CHORD	40° 22'
RUDDER AREA AFT OF HINGE LINE	5.275 FT ²
RUDDER MOVEMENT (NORMAL TO HINGE LINE)	2.15"
MOMENT OF AREA ABOUT HINGE LINE	2.73 FT ³
RUDDER TRIM TAB MOVEMENT	1.5"
THICKNESS/CHORD RATIO: ROOT 8%, TIP 6.5%	

WINGS

AREA GROSS	186.40 FT ²
AREA NETT	132.10 FT ²
ASPECT RATIO	2.73
TAPER RATIO	.400
ANGLE OF SWEEPBACK AT .25 CHORD (TRUE)	34° 00'
ANGLE OF SWEEPBACK AT LIE (TRUE)	40° 0' 23"
MEAN CHORD	98.00 IN
THICKNESS/CHORD RATIO: ROOT 10% TIP 5.5%	

TAILPLANE

AREA GROSS	47.53 FT ²
AREA NETT	41.33 FT ²
TAL ARM .25E TO .25E WING	16.831 FT
MEAN CHORD	3.414 FT
TAILPLANE MOVEMENT	+12' -10"
ANGLE OF SWEEPBACK AT .25 CHORD (TRUE)	32° 53' 25"
ANGLE OF SWEEPBACK AT LIE (TRUE)	38° 43' 7"
THICKNESS/CHORD RATIO: ROOT 7% TIP 7%	

AIRBRAKE

AREA	6.65 FT ²
MOVEMENT ABOUT HINGE LINE	4.5"

FLAPS

AREA (PORT AND STBD)	13.25 FT ²
MOVEMENT ABOUT HINGE LINE	50" DOWN

AIR INTAKE

TOTAL THROAT AREA (2 SIDES)	9.30 FT ²
ENGINE ENTRY FACE AREA	10.30 FT ²

FUSELAGE

MAX CROSS SECTIONAL AREA	29.80 FT ²
NETTED AREA - NETT	495.20 FT ²
OVERALL LENGTH	42.54 FT

INTERNAL FUEL CAPACITY: 632 IMP GALLONS
 PRIMARY POWER UNIT: BRISTOL SIDDELEY PERGASUS 5

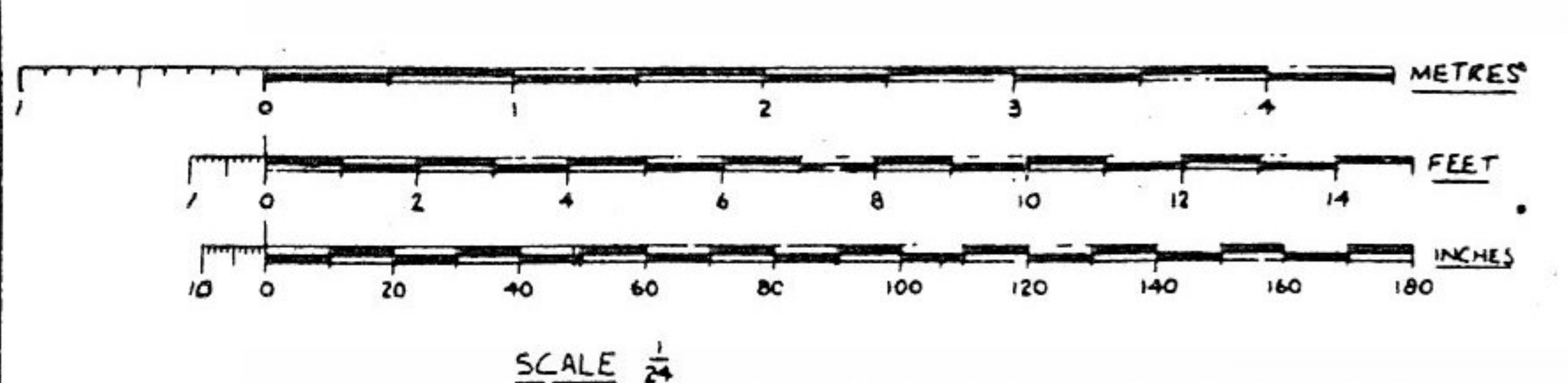
AILERONS

AREA AFT OF HINGE LINE (PORT AND STBD)	10.54 FT ²
MOVEMENT ABOUT HINGE LINE: HIGH SPEED 2 1/8"	
MOVEMENT ABOUT HINGE LINE: LOW SPEED 2 1/8"	
MOMENT OF AREA ABOUT HINGE LINE (EACH)	3.31 FT ³

UNDERCARRIAGE

NOSE WHEEL	24" x 7.25" x 110 PSI
MAIN WHEELS	26" x 7.75" x 115 PSI
OUTRIGGER WHEELS	32.5" x 4.0" x 136 PSI

1 IMP. GALLON = 1.20 USA GALLON
 1 IMP. GALLON = 4.55 LITRE
 1 P.S.I. = 0.703 K.G./CM²
 1 FOOT = 304.8 METRE



UNLESS OTHERWISE STATED ALL DIMENSIONS IN TABLES ABOVE ARE IN INCHES.

TITLE: LEADING PARTICULARS OF KESTREL FGA MK1 VSTOL STRIKE AIRCRAFT
 DRAWN W J GALLON 6-9-63 CHECKED APPROVED
 TRACED CHECKED
 HANMER SIDDELEY 64433 5 5 CONVEY & NEWBURN LTD E 261249