AVRO ARROW

GENERAL INFORMATION

CONTENTS.

1. ORIGINAL C-105 WING DESIGN WITH ORIGINAL UNDERCARRAIGE.

2. 3-VIEW DRAWING OF THE C-105.

3. 1/24 SCALE WIND TUNNEL MODEL IN C-105 AND CF-105 FORMS.

4. 3-VIEW DRAWING OF THE CF-105.

5. EXPLODED DRAWING OF THE ARROW Mk1.

6. STRUCTURAL DRAWING OF THE ARROW Mk1.

7. 3-VIEW DRAWING OF THE ARROW Mk1.

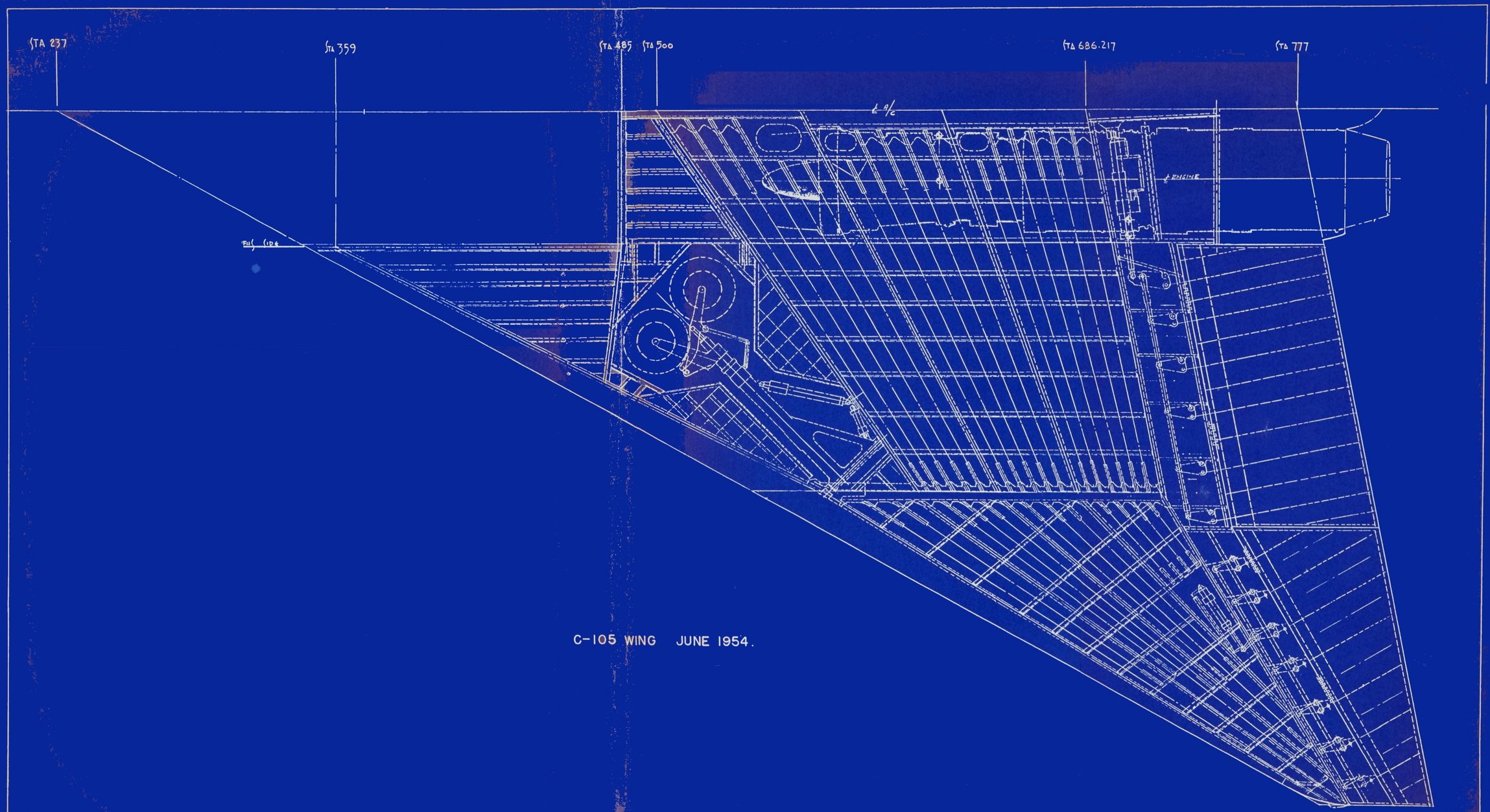
8. ORIGINS DRAWING OF THE ARROW Mk1.

9. FUSELAGE CROSS-SECTIONS OF THE ARROW Mk1.

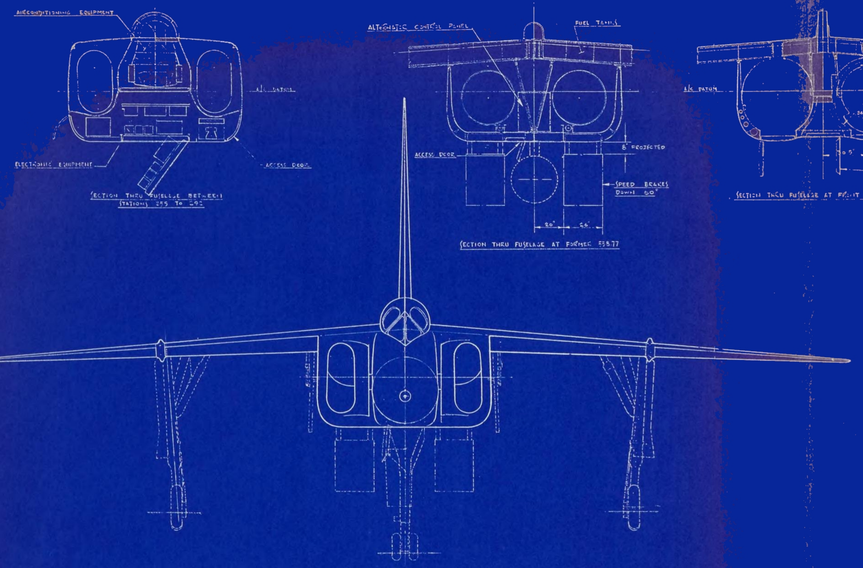
10. 3-VIEW DRAWING OF THE ARROW Mk2.

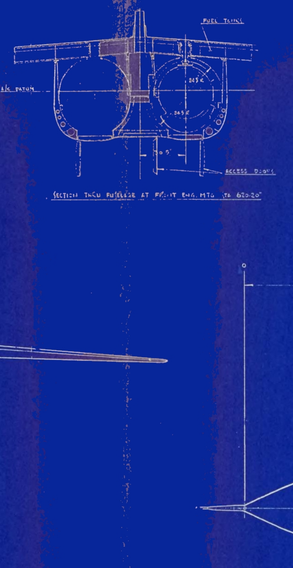
11. ORIGINS DRAWING OF THE ARROW Mk2.

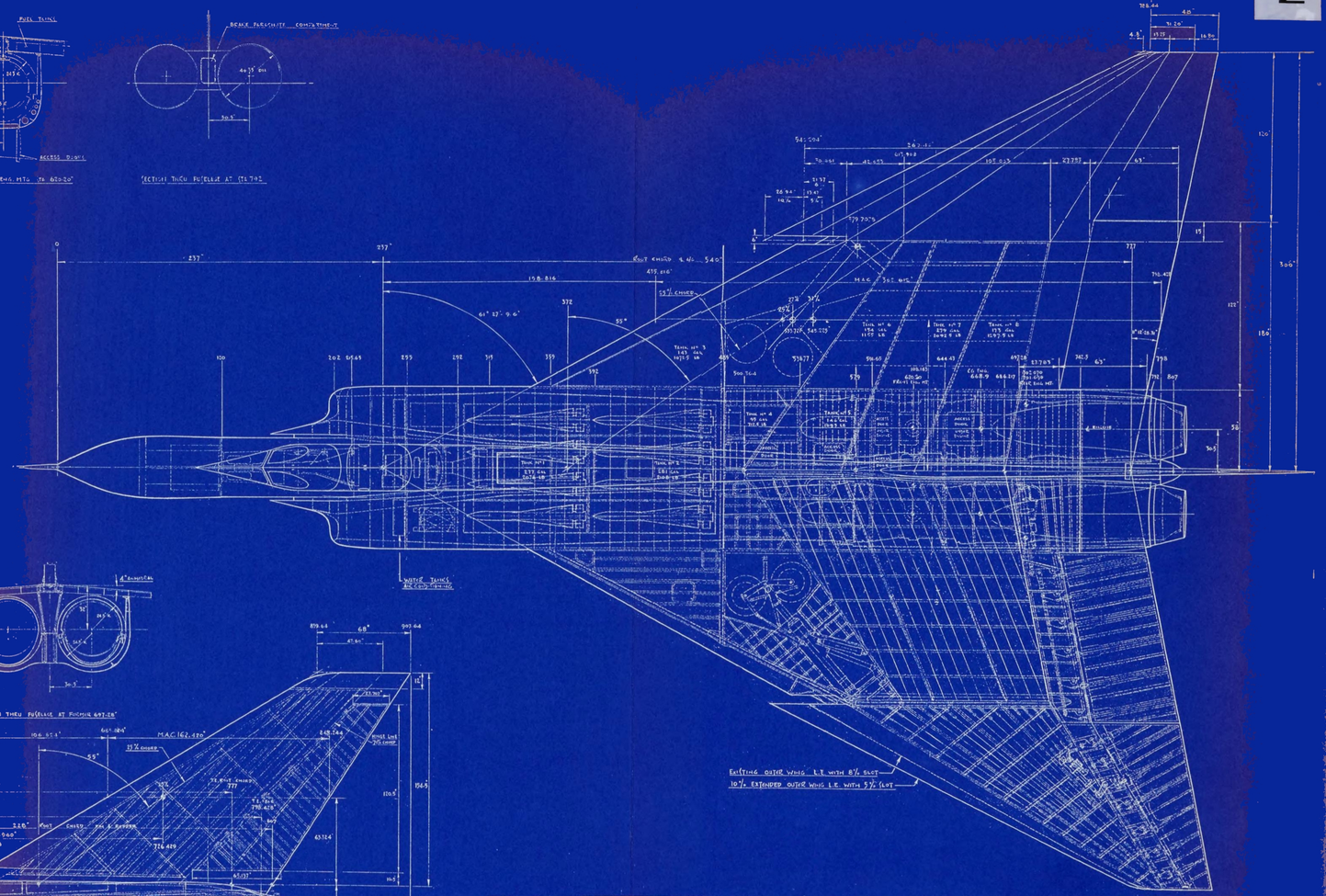
12. 3-VIEW DRAWING OF THE ARROW Mk3.

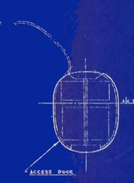


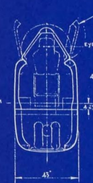
C-105 WING JUNE 1954.

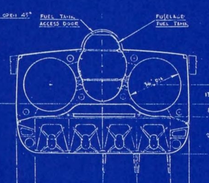


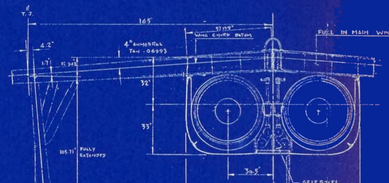


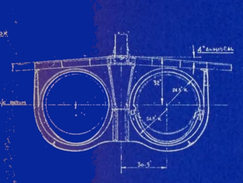


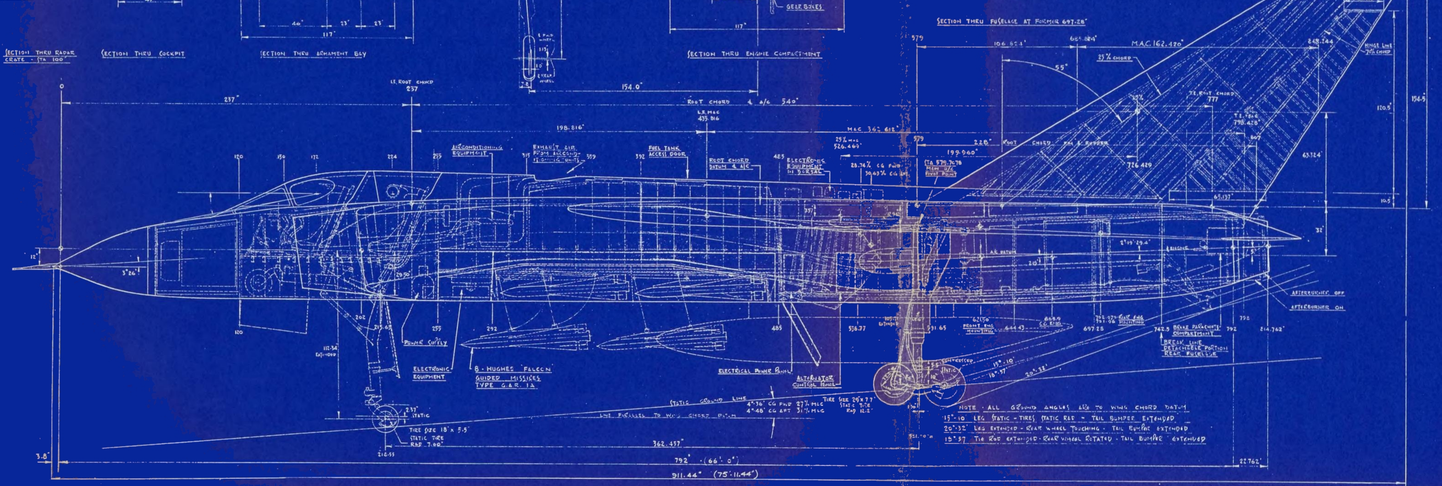












WING		AERODYNAMIC DATA FOR (RUDDER	
TOTAL AREA - PROJECTED - BASIC WING	1838 ft²	TOTAL AREA (CUT OUTBOARD OF WING ROOT CHORD)	158.75 ft²
ASPECT RATIO	2.0408	TOTAL AREA RUDDER (ABFT OF HINGE ℄)	38.847 ft²
TAPER RATIO	.0884	ASPECT RATIO	1.044
THICKNESS RATIO - PARALLEL TO ℄ A/C DATUM	55 CHORD NACA 0003-8-6-33 MOD 0003-8-6-33 MOD	TAPER RATIO	.154
AERODYNAMIC CHORD PLANE INCIDENCE TO A/C DATUM	CHORD NACA 0003-8-6-33 MOD 0003-8-6-33 MOD	THICKNESS RATIO (PARALLEL TO ℄ A/C DATUM)	4%
	0°	AEROFOIL THICKNESS	NACA 0004-6-33 MOD
TOTAL AREA OF ELEVATORS (AFT OF HINGE ℄) PROPORTION	108.76 ft²	ANGULAR MOVEMENT OF RUDDER ⊥ TO HINGE ℄	± 30°
ANGULAR MOVEMENT OF ELEVATORS ⊥ TO HINGE ℄	UP 30° DOWN 20°		
TOTAL AREA OF AILERONS (AFT OF HINGE ℄) PROPORTION	64.5 ft²		
ANGULAR MOVEMENT OF AILERONS ⊥ TO HINGE ℄	UP 19° DOWN 19°		

FUEL TANK CAPACITY - USABLE (7.5 LB) PER GAL			
TANK NO.	GALS	LBS	C.G.
INT 1	277	2078	
INT 2	281	2108	
TOTAL INT	558	4186	
WING 1	186	1395	
WING 2	186	1395	
WING 3	158	1185	
WING 4	158	1185	
WING 5	158	1185	
TOTAL WING	846	6345	
TOTAL A/C	1404	10531	
TOTAL INTERNAL	2958	19076	
EXTERNAL TANK	500	3750	

INITIAL PROJECT DRAWING

—A.V. ROE CANADA LTD— PRELIMINARY

MALTON ONTARIO

K.B. JAMES NOV 15 - 54

AERODYNAMIC THREE VIEW — OUTLINE — SCALE 1/2 12' — C-105 TYPE

2 - C.W. J67 ENGINES — DRAWING NO. 7-0100-6

AVRO C-105

AW430-1046-1
TIE PLATE ASSY.

AW430-1058-1
SHOCK PLATE (L.H.)

AW430-1052-1
ASSY. FWD DUCT SECT.

AW430-1081-1
FWD CANOPY
USE AW430-1109-1 FILLER BLOCK WHEN CANOPY IS OFF

5/16 DIA X 2 LG SOC. HD. STRIPPER BOLT REQ 2.

AW430-1058-2
SHOCK PLATE (R.H.)

AW430-1052-3
FILLER BLOCK-ATTATCH WITH #4-40 X 1/2 LG SOC. HD CAP SCREW REQ 3

AW430-1057
NOSE

AW430-1089-1
CANOPY EXTENSION

AW430-1052-5
COVER PLATE
ATTATCH WITH #4-40 X 3/8 LG FLT HD SOC CAP SCREW REQ 2

#8-32 X 3/4 LG SOC. HD CAP SCREW (REQ 4)

#8-32 X 1" LG SOC. HD. CAP SCREW REQ 2

#4-40 X 3/8 LG FLT HD SOC CAP SCREW REQ 2

#8-32 X 1 1/2 LG SOC HD. CAP SCREW REQ 16

#4-40 X 1/2 LG SOC. HD CAP SCREW REQ 2

#4-40 X 7/16 FL PT SET SCREW
NOTE - ANGLE OF ATTACK INR. MUST BOTTOM IN MTR BLOCK BEFORE TIGHTENING SET SCREW

AW430-1047-1
CENTER FUSELAGE SHELL

AW430-1047-2
AFT FUSELAGE

AW430-1097-2
AFT FUSELAGE

AW430-1080-1
MOUNTING BLOCK

AW421-3375-1 FWD SHIELD ATTACH WITH #3-48 1/16 SOC HD CAP SCREWS REQ 4

AW421-3375-3 AFT SHIELD ATTACH WITH #2-56 X 5/16 LG. FLT HD MACH SCREWS REQ 12

#4-40 X 3/16 LG FLT HD SOC CAP SCREW REQ 4

AW421-3310-1 ASSEMBLY CAL G-1-1H1 BALANCE

AW430-1074 STING 'G' BALANCE

AIRCRAFT DATUM LINE

AW430-1039-1R BASIC L.E.
AW430-1039-2R EXTENDED L.E. (USED WHEN -1R BASIC L.E. IS OFF

AW430-1101-1R-8 3/4 NOTCH L.E. (RIGHT HAND)
AW430-1101-4R-8 3/4 NOTCH L.E. (RIGHT HAND) USED WHEN 5 3/4 NOTCH L.E. IS OFF

AW430-1101-2R T/T COVER (TOP) & AW430-3RT/T COVER (BOTTOM)

AW430-1101-1L-5 3/4 NOTCH L.E. (LEFT HAND)
AW430-1101-4L-5 3/4 NOTCH L.E. (LEFT HAND) USED WHEN 5 3/4 NOTCH L.E. IS OFF

AW430-1039-1L BASIC L.E.
AW430-1039-2L EXTENDED L.E. (USED WHEN -1L BASIC L.E. EDGE IS OFF)

R.H. AILERON
AW430-1088-1 0° -2 +5° -3 -5° -6 -10° -5 -15° -6 -20°

ANSOTC-A402-4 REQ 14

AW430-1117-11 +10° -12 0° -13 -5° -14 -10° -15 -20° -16 -30° TABS (R.H.)

AW430-1117-2 (R.H.) ELEVATOR

#4-40 X 3/4 LG. FLT HD. SOC. CAP SCREW REQ 10 (5 FOR EACH SIDE)

AW430-1080-2
LOWER CONE (L.H. SIDE) ATTACH WITH #4-90 X 1/2 LG. FLT HD SOC CAP SCREWS REQ 3

AW430-1080-3
UPPER SECTION CONE ATTACH WITH #4-90 1/16 FLT HD SOC CAP SCREWS (REQ 1)

AW430-1080-1
LOWER CONE (R.H. SIDE) ATTACH WITH #4-90 X 1/2 LG. FLT HD SOC CAP SCREWS REQ. 3

#4-40 X 1/2 LG. FLT HD. SOC. CAP SCREWS REQ 16 (8 FOR EACH SIDE)

AW430-1117-1 ELEVATOR (L.H.)

AW430-1117-5 +10° -6 0° -7 -5° -8 -10° -9 -20° -10 -30° (TABS L.H.)

AN 507C-4-10P-4 REQ 9

AW430-1117-3 HINGE-OUT BOARD L.H. WING

AW430-1117-4 HINGE-OUT BOARD R.H. WING

AW430-1117-3 HINGE-INBOARD (LEFT HAND WING)

AW430-1117-4 HINGE-INBOARD (RIGHT HAND WING)

AW430-1132-1 VERT. TAIL ASSY.

AW430-1132-2 FILLER BLOCK ASSY. (USED WHEN VERT. TAIL IS OFF)

AW430-1021-1 WING ASSEMBLY

AW430-1107-1L COVER PLATE ATTACH WITH #2-56 X 1/4 LG FLT HD MACH SCREW REQ 3

AW430-1107-1R COVER PLATE-ATTACH WITH #2-56 X 1/8 LG. FLT. HEXAGON HD. SCREW REQ 3

(REF) AW430-1032-1 VERT. TAIL ASSY.

(REF) AW430-1021-1 WING ASSY.

AW430-1113-2 COVER PLATE

AW430-1101-2L-7/8 COVER (TOP) & 3L-7/8 COVER (BOTTOM)

#0-80 NF3 X 1/16 FLAT HD PHIL SCREWS REQ 2

MODEL ASSEMBLY -1

-2 MODEL ASSEMBLY SAME AS -1 EXCEPT AS SHOWN

-3 MODEL ASSEMBLY SAME AS -2 EXCEPT AS INDICATED

ON -3 ASSEMBLY USE AW430-1133 CENTER FUSELAGE (MODIFIED) IN PLACE OF AW430-1047-1 & AW430-1134 AFT FUSELAGE (MODIFIED) IN PLACE OF AW430-1047-2 - USE AW430-1046-3 TIE PLATE IN PLACE OF AW430-1046-1 USE AW430-1052-7 FWD DUCT IN PLACE OF AW430-1052-2 & USE AW430-1135 TOP AFT FUSE SET IN PLACE OF AW430-1080-3 UPPER TAIL CONE SECT.

REWORK 5/16 DIA X 2" LG SOC HD STRIPPER BOLT TO DIM AS SHOWN - 2 REQ - USE FOR MOUNTING AW430-1109-1 FILLER BLOCK WHEN FWD CANOPY IS OFF

AW430-1040 STING 'E' BALANCE

AW421-3304-1 CAL E-1-1 BAL ASSY.

AW430-1031-1 MOUNTING BLOCK

AW430-1031-2 KEY

1/2-20 X 1" LG SOC HD CAP SCREW - REQ 1
1/8 ID X 1/2 ID X 1/64 OD PLAIN STEEL WASHER

1/4-28 X 1 1/4 LG SOC HD CAP SCREWS REQ 2

1/4-28 X 1 1/2 LG SOC HD CAP SCREW REQ 6

1/4-20 NC 3 THD

AIRCRAFT DATUM

E BALANCE

E DRAG

FOR ANGLE OF ATTACK VANE FOR INSTALLATION SEE 'A'

1160-1080 ANGLE OF ATTACK VANE & MTR BLOCK AW430-1117-2 & -4 #4-40 SOC HD CAP SCREWS REQ

3/8 DIA X 1/32 ID X 1/16 OD STEEL WASHER - TEFLON BOTTOM TO CLEAR HEXAGON BOX IN ASSY

#3/8-24 X 3/4 LG SOC HD CAP SCREW - TIGHTEN TO 200 IN. LBS

+ ANGLES ARE TRAILING EDGE LEFT MEASURED NORMAL TO HINGE LINE

AW430-1048 RUDDER
-1 = 0°
-2 = -5°
-3 = +5°
-4 = +10°
-5 = +20°
-6 = +30°

NOTE:
1. BALANCES ON BOTH -1 & -2 ASSEMBLIES ARE TO BE INSULATED AS PER RESPECTIVE CALIBRATION ASSEMBLIES WHEN ASSEMBLED WITH MODEL REF. E-1-1-1 AW430-1038-1 AW430-1037-1

AW430-1022

CORNELL AERONAUTICAL LABORATORY
BUFFALO, N.Y.

SUMMARY OF USABLE FUEL VOLUMES, WEIGHTS & C.G's

TANK NUMBER	CAPACITY GALS	WEIGHT LBS	C.G. ± Yf	C.G. ± Zf	C.G. ± Xf
1	277	2·61	354·35	24·13	7·34
2	28	2·92	433·99	23·07	6·36
3 × 2	302	2355	4-6·14	24·22	79·00
4 × 2	[illegible]	[illegible]44	502·47	26·72	32·71
5 × 2	292	2278	545·5	26·61	28·73
6 × 2	308	2402	589·11	22·40	101·07
7 × 2	558	4352	627·57	23·81	82·72
8 × 2	346	2699	675·52	24·92	76·74
EX TANK	500	3900			
TOTAL	3044	23745			

AERODYNAMIC DATA

WING	
TOTAL AREA - PROJECTED · BASIC WING	1225 □'
ASPECT RATIO.	2·0408
TAPER RATIO	·0889
THICKNESS RATIO - PARALLEL TO ℄ A/C.	3·5 & 3·8.
AIRFOIL SECTION NACA -0003.5-6-3.7MOD. CAMBER 0075 MOD / NACA -0003.8-6-3.7 MOD CAMBER 0075 MOD	
ANHEDRAL OF CHORD PLANE	4°
INCIDENCE TO A/C DATUM.	0°
TOTAL AREA OF ELEVATORS (AFT OF HINGE ℄) PROJECTED	106·9013 □'
ANGULAR MOVEMENT OF ELEVATORS ⊥ TO HINGE ℄.	UP 30° DOWN 20°
TOTAL AREA OF AILERONS (AFT OF HINGE ℄) PROJECTED.	66·5531 □'
ANGULAR MOVEMENT OF AILERONS ⊥ TO HINGE ℄.	UP 19° DOWN 19°.

FIN & RUDDER	
TOTAL AREA (ROOT CHORD ON WING ROOT CHORD).	158·7917 □'
ASPECT RATIO	1·0439
TAPER RATIO	·2982
THICKNESS RATIO (PARALLEL TO A/C DATUM)	4%.
AERFOIL SECTION. NACA 0004-6-3.7 MOD.	
TOTAL AREA RUDDER (AFT OF HINGE ℄)	38·1679 □'
ANGULAR MOVEMENT OF RUDDER ⊥ TO HINGE ℄	+30° -30°

ISSUE No												
MOD No												
E.R.N. No.												
DRAWN BY												
DATE												
CHECKED												
STRENGTH APP.												
DESIGN APP.												
CONTRACT APP.												

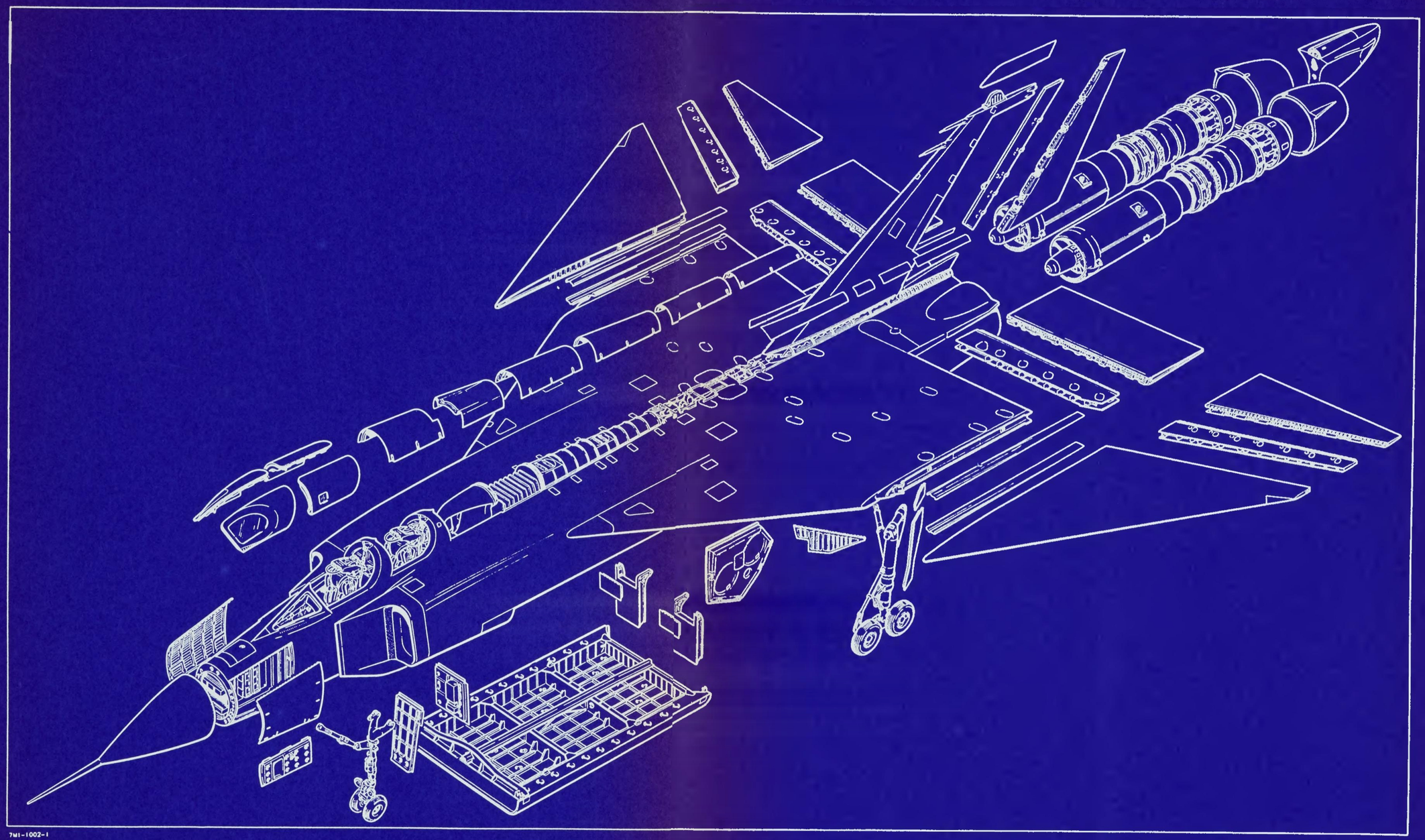
REFERENCE DRAWINGS

DWG. NO.	DESCRIPTION

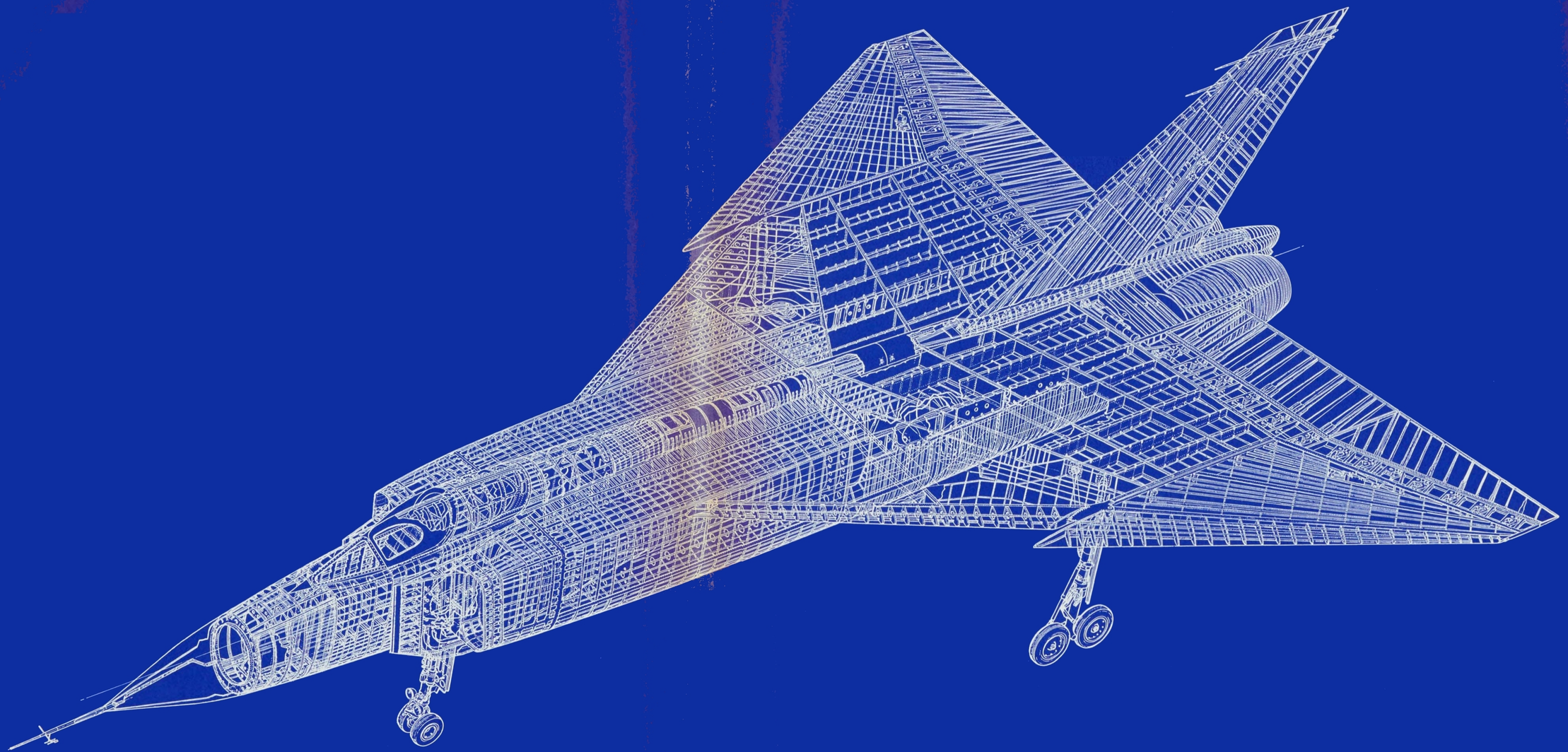
AVRO AIRCRAFT LIMITED
MALTON ONTARIO

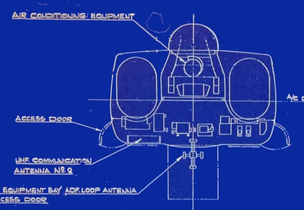
CLASS	MISCELLANEOUS REF. DRAWING
DESCRIPTION	AERODYNAMIC THREE VIEW - A/C C105.
GROUP	AVRO CF-105
COMPONENT	

SCALE 1/24 & NOTED
FINISH TO DWG.
LIMITS UNLESS NOTED
TYPE
NEXT ASSEMBLY
DRAWING NO.

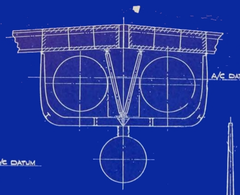


7M1-1002-1

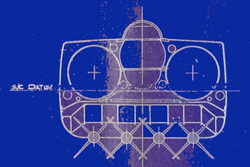




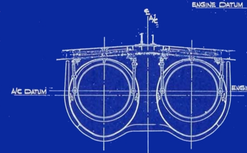
SECTION THRU' FUSELAGE BETWEEN STATIONS 255 TO 322 SHOWING ELECTRONIC EQUIPMENT



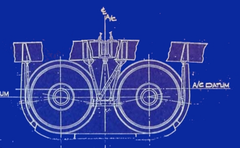
SECTION AT 558.77 VIEW LOOKING FWD.



SECTION THRU' ARMAMENT BAY VIEW LOOKING AFT

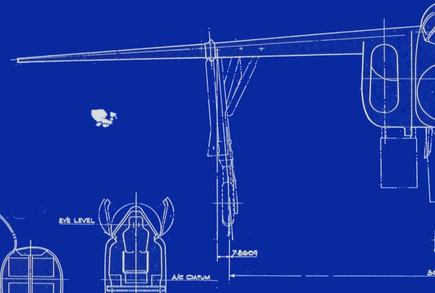


SECTION AT REAR ENGINE MTGS. VIEW LOOKING FWD



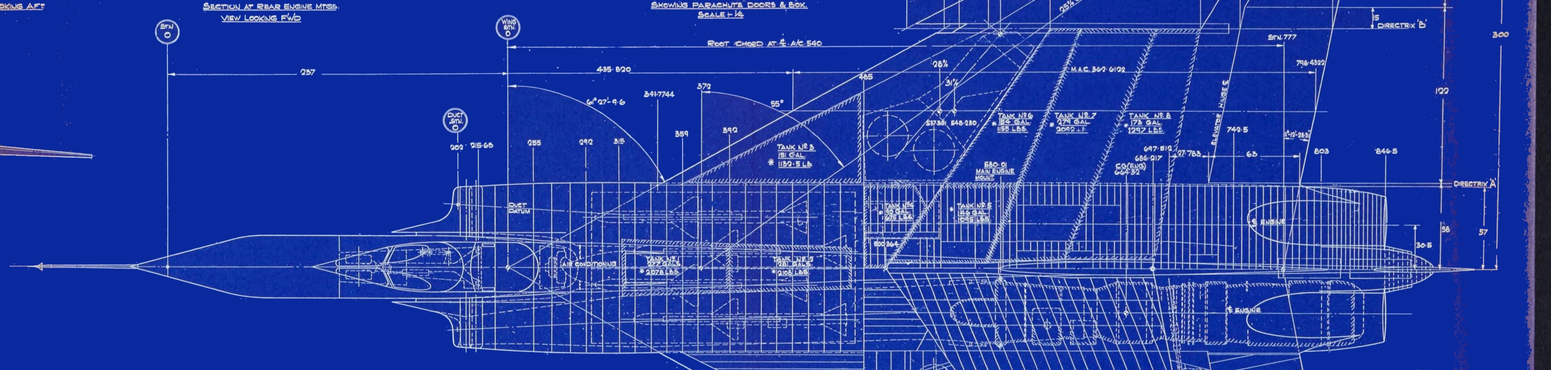
SECTION THRU' FWD ENGINE MTGS. VIEW LOOKING AFT

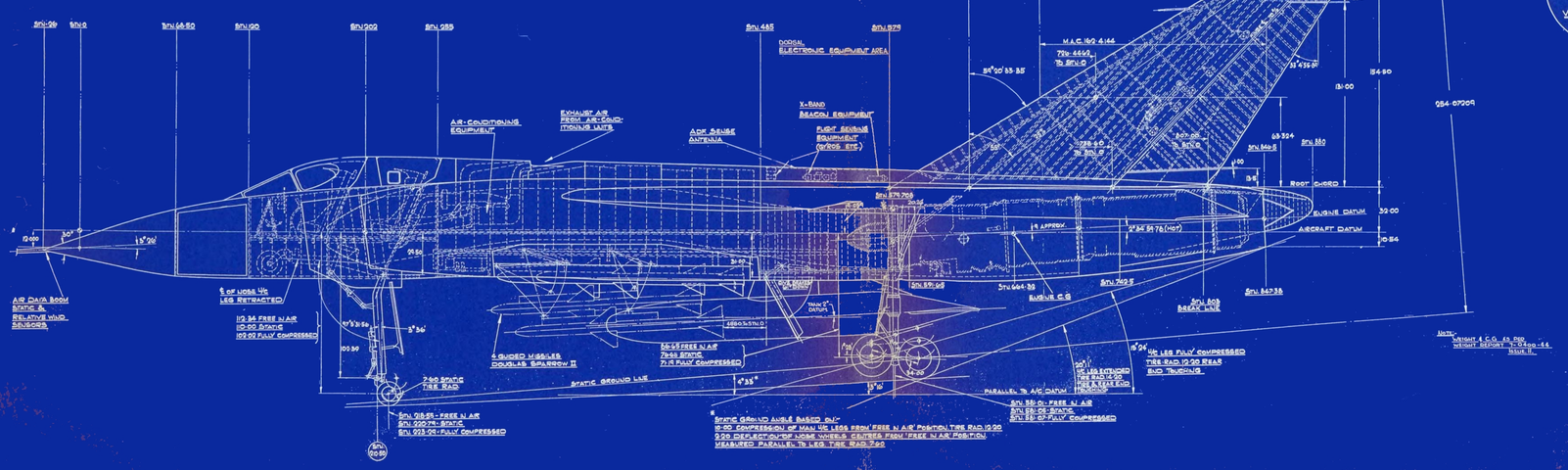
VIEW LOOKING AFT SHOWING PARACHUTE DOORS & BOX. SCALE - ½



SECTION THRU' RADAR NOSE STA - 100

SECTION THRU' COCKPIT





PROTECTED VIEW 'A/C SYSTEM'

AERODYNAMIC DATA:- C.G. RANGE 28% M.A.C. (337.36) TO 31½ M.A.C. (648.230)					
CONDITION	A.U.W. (LB)	C.G. +Y	C.G. +Z	½ M.A.C.
MAX. LITERAL FUEL	68,664	545.58 FWD	+10.12 TOP	28-72
		545.02 AFT	+9.76 LOWER	30-11
AIRCRAFT EMPTY	48,821	545.50 FWD	+7.16 TOP	30-25
		543.50 AFT	+9.84 LOWER	30-11

SUMMARY OF USABLE FUEL VOLUMES, WEIGHTS & C.G.'S

TANK NUMBER	CAPACITY GALS.	WEIGHT 7.8 LB/GAL	C.G. +Y	C.G. +Z	C.G. ± Xr
1	677	5161	354.36	24.13	7.34
2	681	5192	438.00	23.07	6.36
3 x 2	508	3255	466.16	24.92	7.00
4 x 2	180	1404	502.47	26.72	32.71
5 x 2	269	2078	548.87	26.61	28.78
6 x 2	308	2402	586.11	23.60	101.07
7 x 2	556	4352	627.87	23.81	80.70
8 x 2	349	2691	678.82	24.02	76.76
SUMP TANK					
Total	2544	19849			

AERODYNAMIC DATA

WING

TOTAL AREA - PROTECTED - BASIC WING	1925 ft²
ASPECT RATIO	5.0468
TAPER RATIO	0.0881
THICKNESS RATIO - PARALLEL TO ℄ A/C	3.5 & 3.5
AIRFOIL SECTION	NACA - 0005.8-6-37 MOD. CAMBER 0078 MOD.
	NACA - 0005.8-6-37 MOD. CAMBER 0079 MOD.
ANHEDRAL OF CHORD PLANE	4°
INCIDENCE TO A/C DATUM	0°
TOTAL AREA OF ELEVATORS (AFT OF HINGE ℄) PROTECTED	106.9 ft²
ANGULAR MOVEMENT OF ELEVATORS ⊥ TO HINGE ℄	UP 30° DOWN 20°
TOTAL AREA OF AILERONS (AFT OF HINGE ℄) PROTECTED	86.52 ft²
ANGULAR MOVEMENT OF AILERONS ⊥ TO HINGE ℄	UP 19° DOWN 15°

FIN & RUDDER

TOTAL AREA (ROOT CHORD ON WING ROOT CHORD)	183.7917 ft²
ASPECT RATIO	0.434
TAPER RATIO	2662
THICKNESS RATIO (PARALLEL TO A/C DATUM)	4%
AIRFOIL SECTION	NACA 0004-6-3.7 MOD.
TOTAL AREA RUDDER (AFT OF HINGE ℄)	36.1078 ft²
ANGULAR MOVEMENT OF RUDDER ⊥ TO HINGE ℄	+30° - 30°

* NOTE:- WEIGHTS OF FUEL QUOTED ON PROTECTED VIEW ARE BASED ON 7.8 LB/GAL FOR DESIGN PURPOSE ONLY

ISSUE NO.	DATE	DESCRIPTION
MOD. NO.	7-4300-2	DATA BASIC GEOM. ORIGIN
SERIAL NO.	7-4300-3	DATA DRG. DATA CONV.
MSTMU	FORMERLY DRAWN BY	7-4300-11	G.A. A/C COMPLETE
INITIALS	DATE	
	CHECKED	
	STRESS APP.	
A. BAILEY	A. BAILEY	DESIGN APP.	
	CONTRACT APP.	
	MEMO NO.	
	PROJ. ENG. APP.	

REFERENCE DRAWINGS

INTERIM A/C

AVRO AIRCRAFT LIMITED MALTON ONTARIO

CLASS	MISCELLANEOUS REF. DRAWING
DESCRIPTION	AERODYNAMIC THREE VIEW - A/C 025
GROUP	AVRO ARROW Mk 1
COMPONENT	
SCALE & UNITS NOTED	¼
TYPE	LINE ONLY
DRAWING NO.	7-43001-10

DATA DRAWINGS

WING DATA		FUSELAGE DATA	
INNER WING		RADAR NOSE	7-4351-1
MAIN TORQUE BOX	7-4362-2	FRONT FUSELAGE	7-4352-1
FORWARD PORTION	7-4362-4	CENTRE FUSELAGE	7-4354-1
LEADING EDGE	7-4362-4	DUCT BAY	7-4356-1
INNER TRAILING EDGE	7-4362-5	ENGINE BAY	7-4358-1
OUTER TRAILING EDGE	7-4362-1	REAR FUSELAGE	7-4359-1
ELEVATOR	7-4382-1	INTAKE	7-4355-1
CENTRE BOX	7-4362-3	DUCT	7-4354-1
OUTER WING		WINDSCREEN	7-4352-5
OUTER WING	7-4364-1	PILOTS CANOPY	7-4353-1
LEADING EDGE	7-4365-1	NAVIGATORS CANOPY	7-4353-2
TRAILING EDGE	7-4364-2	DIVE BRAKE	7-4372-1
AILERON	7-4374-1	NOSE UNDERCARRIAGE	7-4391-1
FIN DATA		MAIN UNDERCARRIAGE	7-4392-1
FIN	7-4383-1		
FIN T.E.	7-4383-2		
RUDDER	7-4384-1	COMPLETE AIRCRAFT	7-4300-3

STA. 120

STA. 255

STA. 485 & AUXILIARY SPAR

STA. 591.65

STA. 742.5

STA. 803

STA. 848.1

DIRECTRIX 'A'

DIRECTRIX 'B'

DIRECTRIX 'C'

NOTE:
ALL MEASUREMENTS TAKEN FROM ZERO POINT ON SCALES

POINTS OF ORIGIN

A1 FUSELAGE	A7 ELEVATOR
A2 WING	A8 AILERON
A3 FIN	A9 RUDDER
A4 MAIN U.C.	A10 NACELLE DUCT
A5 NOSE U.C.	A11 OUTER WING
A6 DIVE BRAKE	A12 RADOME

INTAKE AND RAMP

EXHAUST CONE

DORSAL FAIRING RINGS SHOWN IN PROFILE ONLY

OUTER WING

INNER WING

AILERON

ELEVATOR

FIN

RUDDER

DIVE BRAKE

TOP R/H

BOTTOM R/H

DUCT

ENGINE

AIRCRAFT

FOCUS

DIRECTRIX 'C' 300.733 INCHES TO ℄ A/C

DIRECTRIX 'B' 165.403 INCHES TO ℄ A/C

DIRECTRIX 'A' 57.139 INCHES TO ℄ A/C

STINGER FORMERS IN PROFILE ONLY

STINGER FORMERS ONLY AFT OF 803 SEE DETAIL FOR FORMERS OF CONE

RADAR NOSE

FRONT FUSELAGE

CENTRE FUSELAGE

DUCT BAY

ENGINE BAY

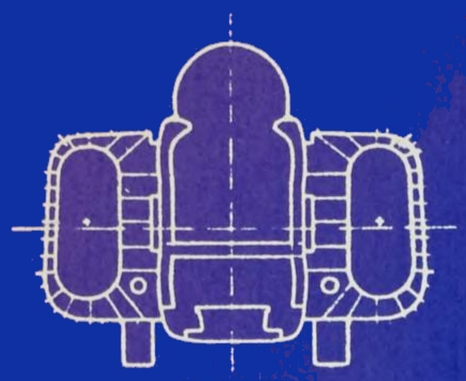
REAR FUSELAGE

FUSELAGE DATUM SCALE (INCHES)

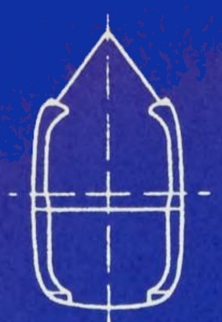
WING DATUM SCALE (INCHES)

INCHES

1180-105-1



STA 214 45C
7-1052-57
7-1055-413/414

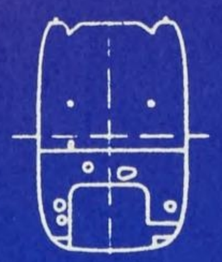


STA 157.33
7-1052-31

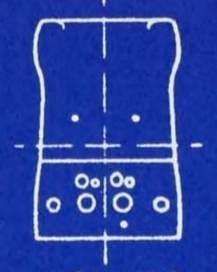
STA 68.5
7-0151-13

STA 120
7-1052-21/22

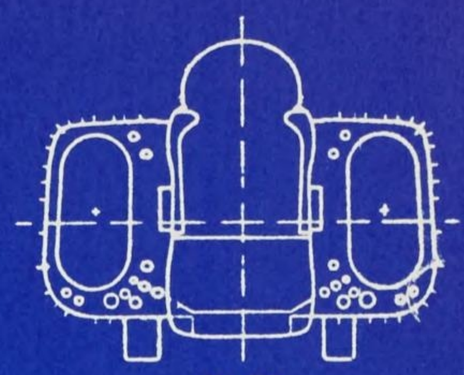
STA. 176.30
7-1052-41



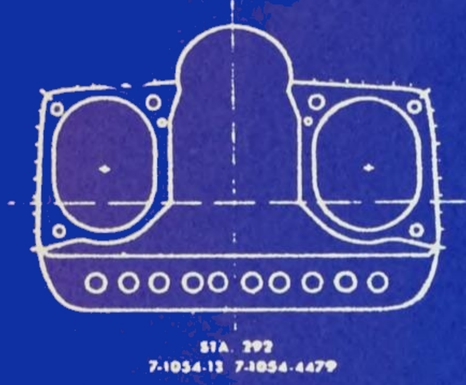
PILOT'S BULKHEAD
7-1052-15/16 & 37/38



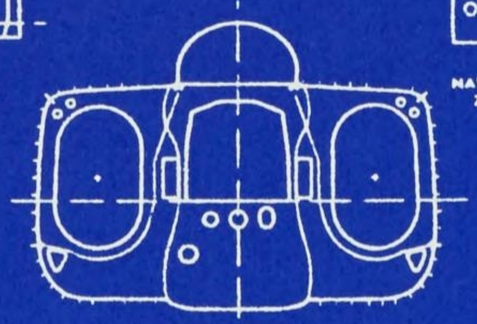
NAV'S BULKHEAD
7-1052-63/64



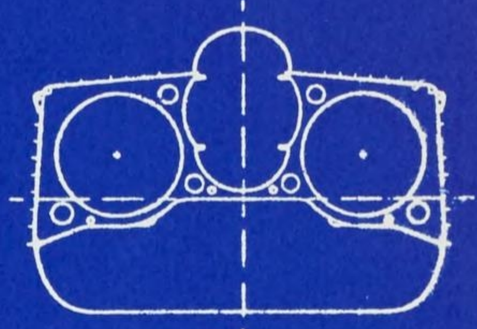
STA. 228
7-1052-67/68 7-1052-9
7-1055-413/416



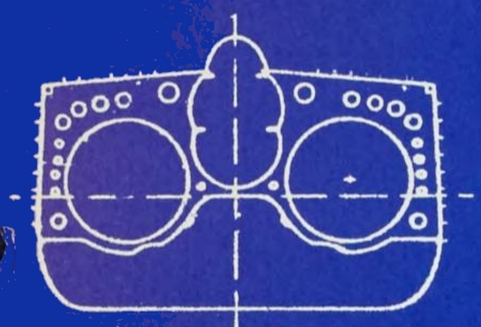
STA. 292
7-1054-13 7-1054-4479



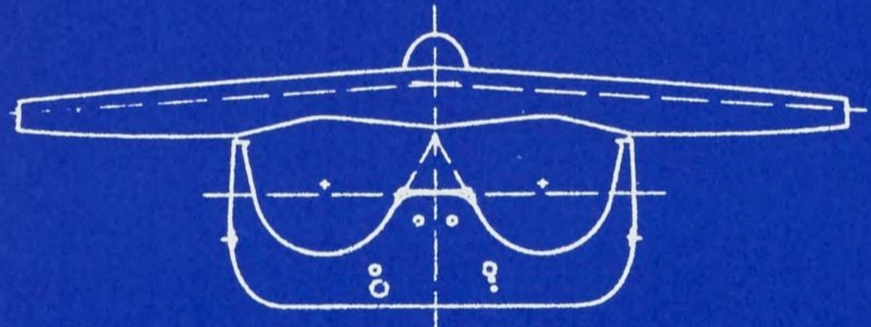
STA. 256
7-1052-77/78



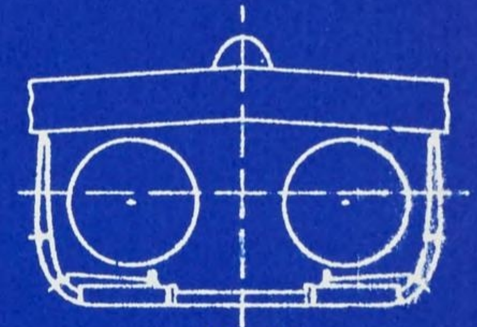
STA 359
7-1054-19



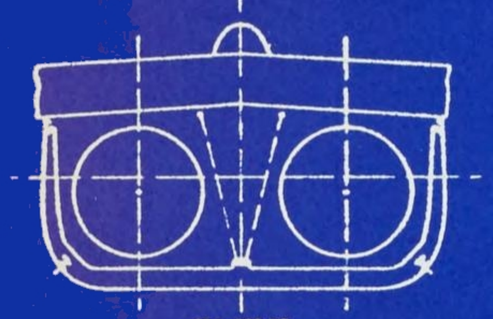
STA. 469
7-1054-31



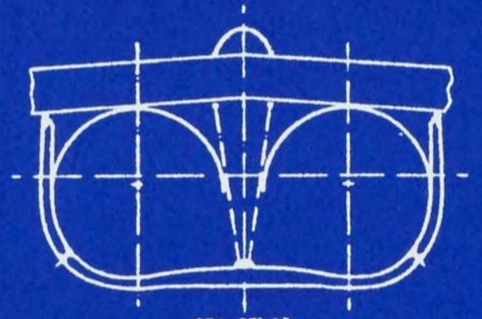
STA. 485 AUXILIARY SPAR
7-1054-33 7-1062-175/176



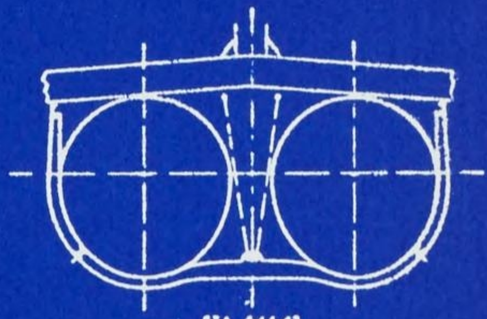
STA. 519.30
7-1056-201/202



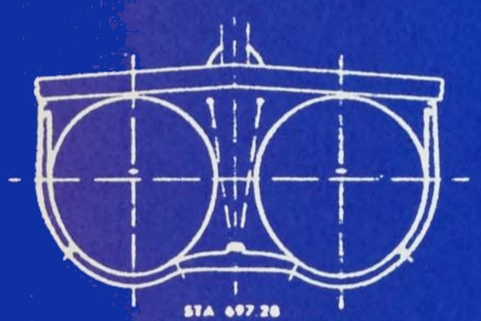
STA. 538.77
7-1056-223 7-1056-857/858



STA. 591.65
7-1058-397/398

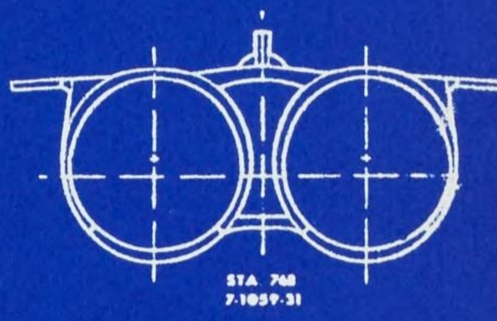


STA. 644.43
7-1058-443/444/445



STA 697.28
7-1058-1051/1052/1053

STA. 742.8
7-1058-23/24



STA. 768
7-1059-31

STA 819.75
7-0159-97

STA. 848.1
7-0157-13

STA. 883
7-0159-163

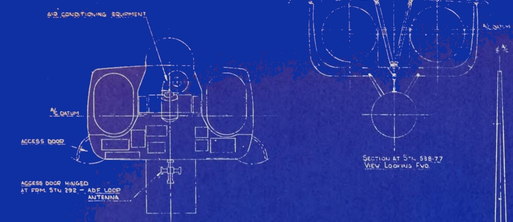
STA 879.5
7-0159-153

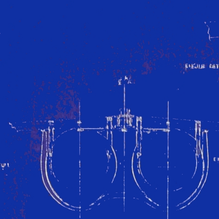
STA. 834.75
7-0159-103

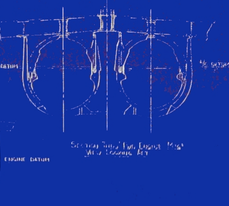
1831-105-1

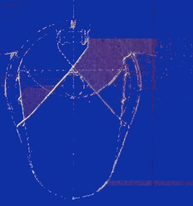
CF-105 FUSELAGE FORMERS J-75 ENGINE

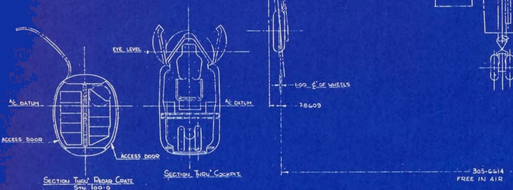
10

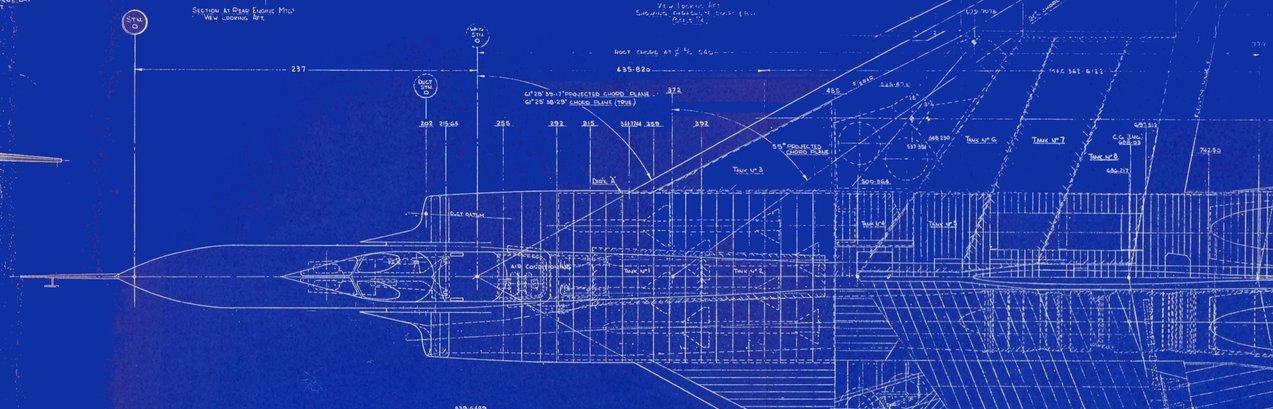


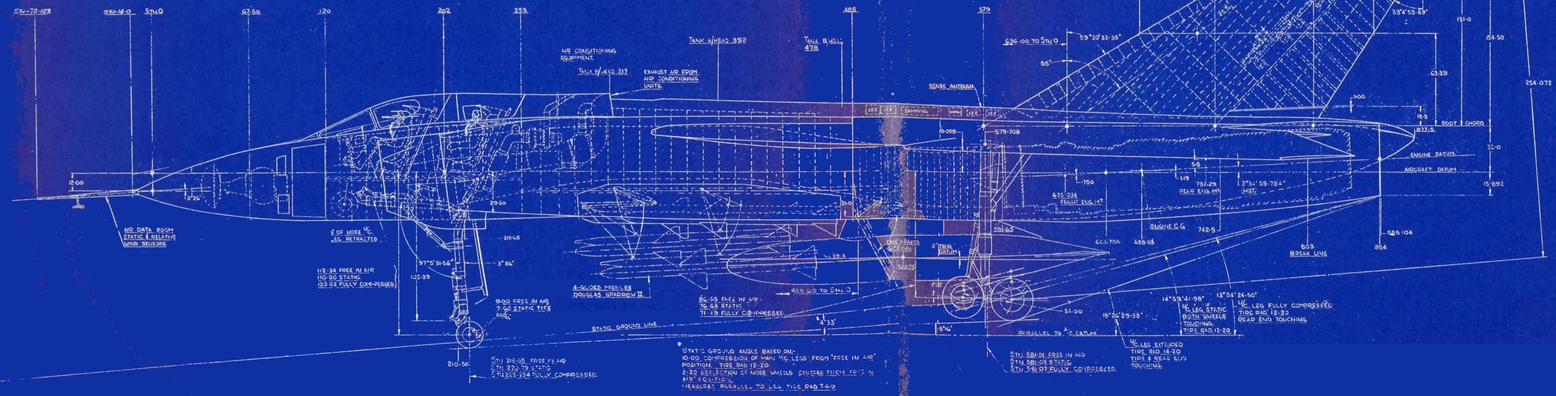












Aerodynamic Data C.G. Range 25 %M.A.C. (537-339) to 31 %M.A.C. (548-236)				
Condition	AUW (lbs)	C.G. + % M.A.C.	C.G. + % M.A.C.	
Max. Internal Fuel + 4 Missiles (less Eye Tank)	66,695	538-69	27.77	½° up
		539-05	28.19	½° down
Max. Internal & External Fuel + 4 Missiles (Ferry Configuration)	71,159	536-92	27.61	½° up
		539-13	28.21	½° down
Aircraft Empty Less Missiles & Ballast	46,450	540-11	28.76	½° up
		542-56	29.36	½° down

Note: Weight & C.G. as per Weight Report C.S.A.O.O.-34 dated 13th Sept. 1956

Ordinary or Usable Fuel Volumes, Weights & C.G.'s					
Tank No.	Capacity (Gals)	Weight (lbs)	C.G.'s Y	C.G.'s Z	C.G.'s X
1	252	1906	351-74	82-47	7-97
2	254	1921	434-42	23-33	6-93
3 x 2	302	2355	446-14	24-22	79-00
4 x 2	180	1404	502-47	26-72	82-71
5 x 2	292	2278	548-87	26-61	28-73
6 x 2	308	2402	593-11	23-40	101-07
7 x 2	558	4352	627-57	23-81	82-72
8 x 2	346	2699	675-53	24-92	74-74
Ext Tank	500	3900			
Total	2982	23337			

Aerodynamic Data		
Wing		
Total Area - Projected (Aircraft System) Basic Wing		1225 ft²
Aspect Ratio		5·0408
Taper Ratio		·0839
Thickness Ratio - Parallel to ℄ ⅛		3·5 & 3·9
Airfoil Section	NACA - 0003-9-6-3·7 Mod. Cambered 0075 Mod. NACA - 0003·9-6-3·7 Mod. Cambered 0075 Mod.	
Anhedral of Chord Plane.		4°
Incidence to ℄s Datum		0°
Total Area of Elevators (aft of Hinge ℄) Projected (Chord) Plane		105·1163 ft²
Angular Movement of Elevators ⊥ to Hinge ℄		up 30° down 20°
Total Area of Ailerons (aft of Hinge ℄) Projected (Chord) Plane		66·1651 ft²
Angular Movement of Ailerons ⊥ to Hinge ℄		up 19° down 19°
Fin & Rudder		
Total Area (Root Chord on Wing Root Chord)		158·7917 ft²
Aspect Ratio		1·0439
Taper Ratio		·2982
Thickness Ratio (Parallel to ⅛ Datum		4%
Airfoil Section	NACA 0004-6-6-3·7 Mod.	
Total Area Rudder (aft of Hinge ℄)		38·1279 ft²
Angular Movement of Rudder ⊥ to Hinge ℄		30° - 30°

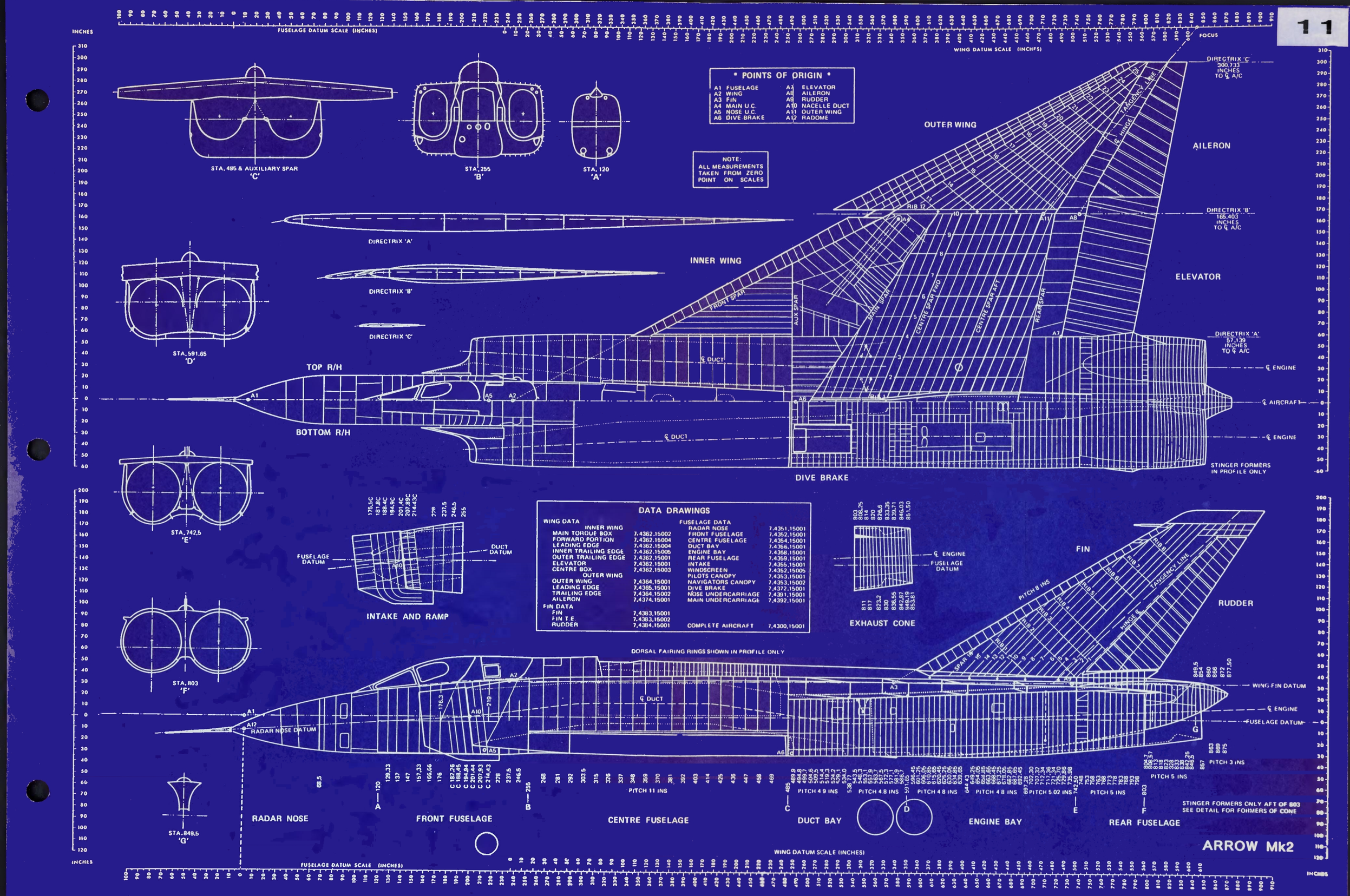
Issue No.	①	②	③	④
Mod. No.	374-0660	374-0660	374-0660	0660
E.R.N. No.	11-66	80	80	66
Drawn By	C.Cowell	C.Cowell	D.C. Cowell	
Date	14 Jan/57	4th/57	21st Oct/58	
Checked				
Strength Apr.				
Design Apr.	N.D.			
Contract Apr.				

Reference Drawings	
Dwg. No.	Description
C.A.R.C. 15-100	Data Basic Design Criteria
C.A.R.C. 15-101	Data Fin Breakdown
C.A.R.C. 15-104	C.G. & Aircraft Conformity

AVRO AIRCRAFT LIMITED
HALTON ONTARIO

Class	Miscellaneous Key Drawing
Description	Aerodynamic Three View - Mc C.R.I.O.S. Mk2
Group	AVRO ARROW Mk2
Component	

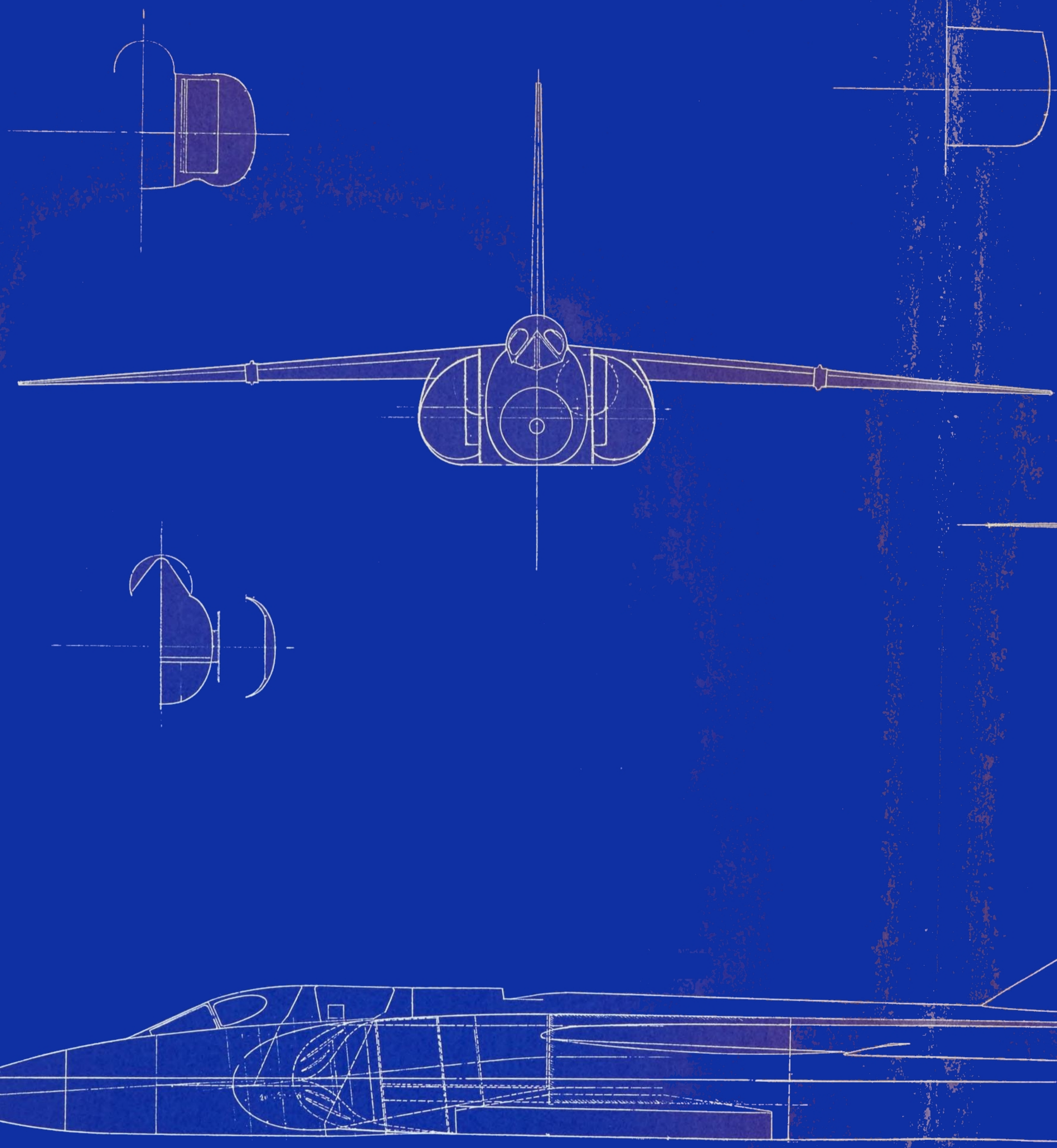
Scale 1/4 ℄ Layout
Type
Drawing No. 7-4300-15010

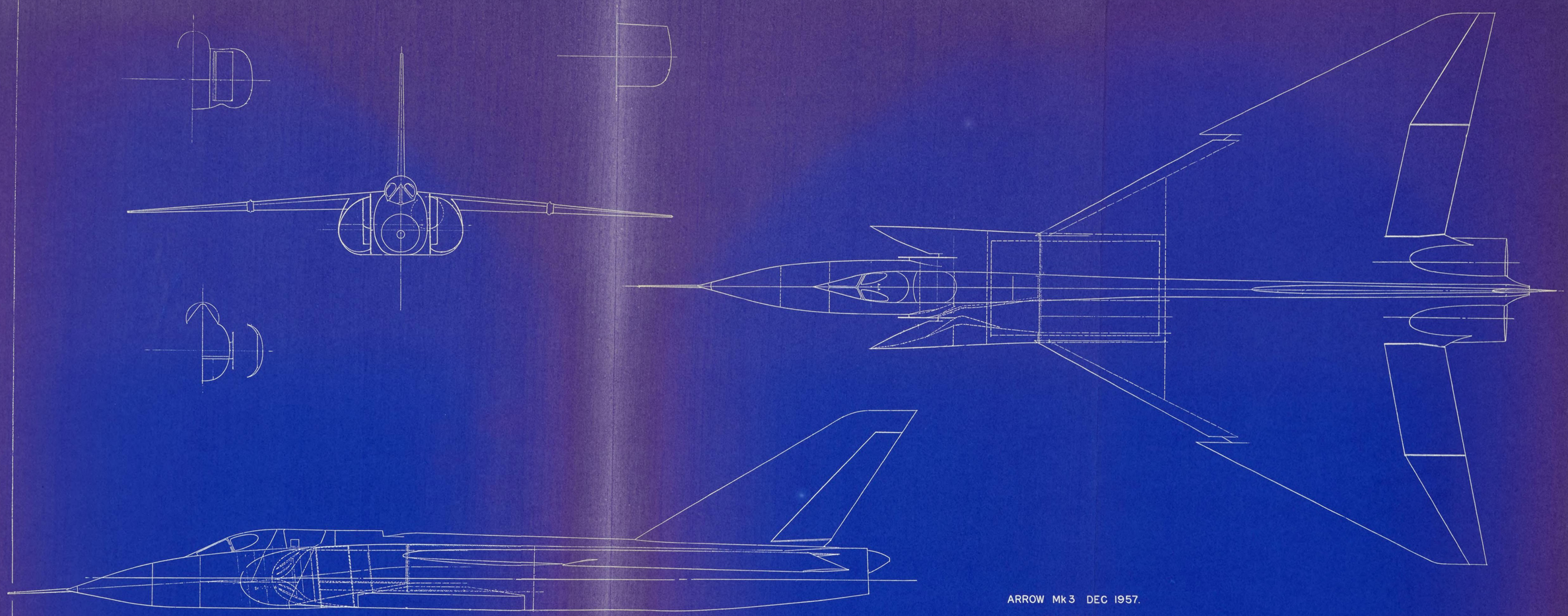


DATA DRAWINGS

WING DATA		FUSELAGE DATA	
INNER WING		RADAR NOSE	7.4351.15001
MAIN TORQUE BOX	7.4362.15002	FRONT FUSELAGE	7.4352.15001
FORWARD PORTION	7.4362.15004	CENTRE FUSELAGE	7.4354.15001
LEADING EDGE	7.4362.15004	DUCT BAY	7.4356.15001
INNER TRAILING EDGE	7.4362.15005	ENGINE BAY	7.4358.15001
OUTER TRAILING EDGE	7.4362.15001	REAR FUSELAGE	7.4359.15001
ELEVATOR	7.4362.15001	INTAKE	7.4355.15001
CENTRE BOX	7.4362.15003	WINDSCREEN	7.4352.15005
OUTER WING		PILOTS CANOPY	7.4353.15001
OUTER WING	7.4364.15001	NAVIGATORS CANOPY	7.4353.15002
LEADING EDGE	7.4365.15001	DIVE BRAKE	7.4372.15001
TRAILING EDGE	7.4364.15002	NOSE UNDERCARRIAGE	7.4391.15001
AILERON	7.4374.15001	MAIN UNDERCARRIAGE	7.4392.15001
FIN DATA			
FIN	7.4383.15001		
FIN T.E.	7.4383.15002		
RUDDER	7.4384.15001	COMPLETE AIRCRAFT	7.4300.15001

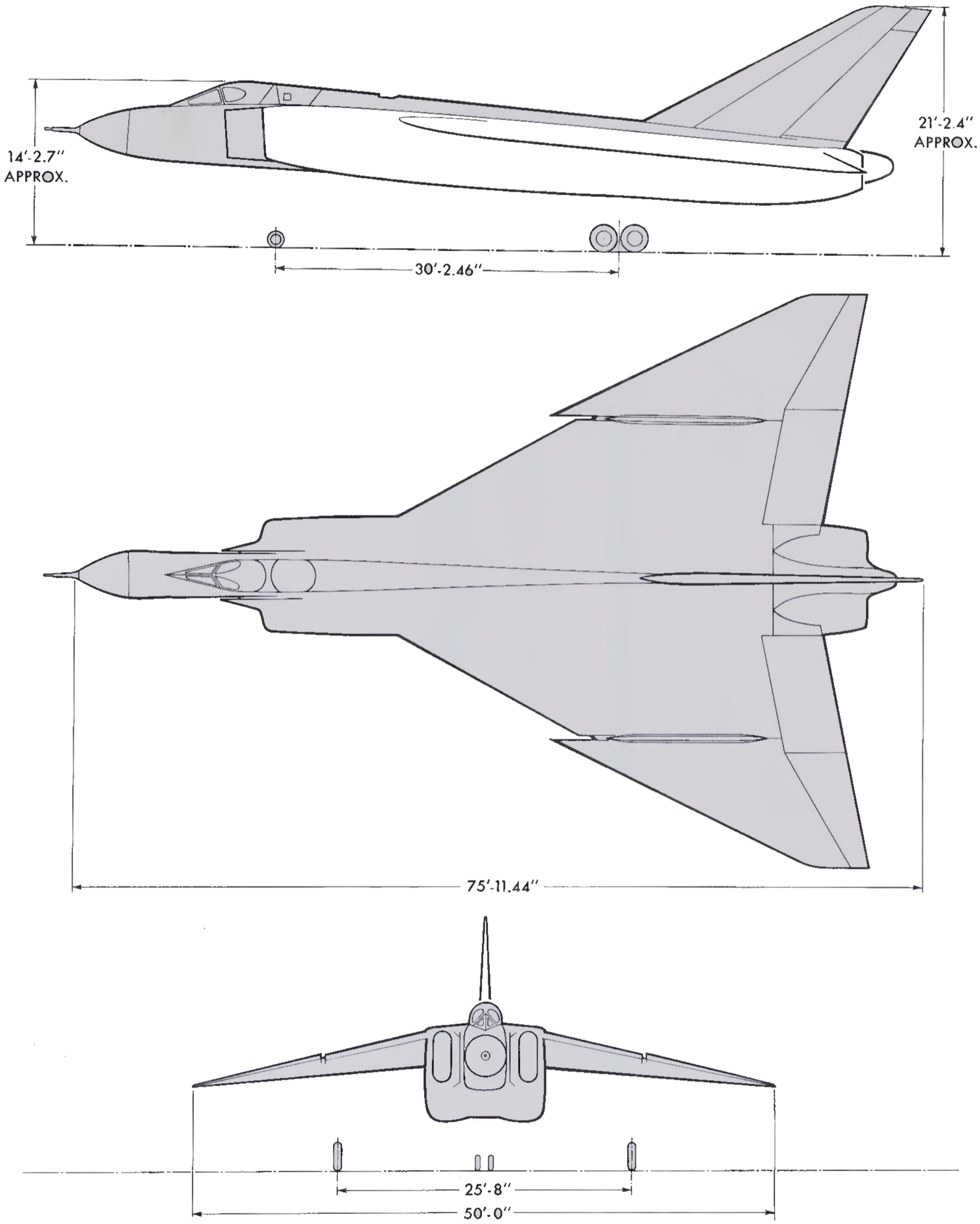
ARROW Mk2





ARROW Mk 3 DEC 1957.

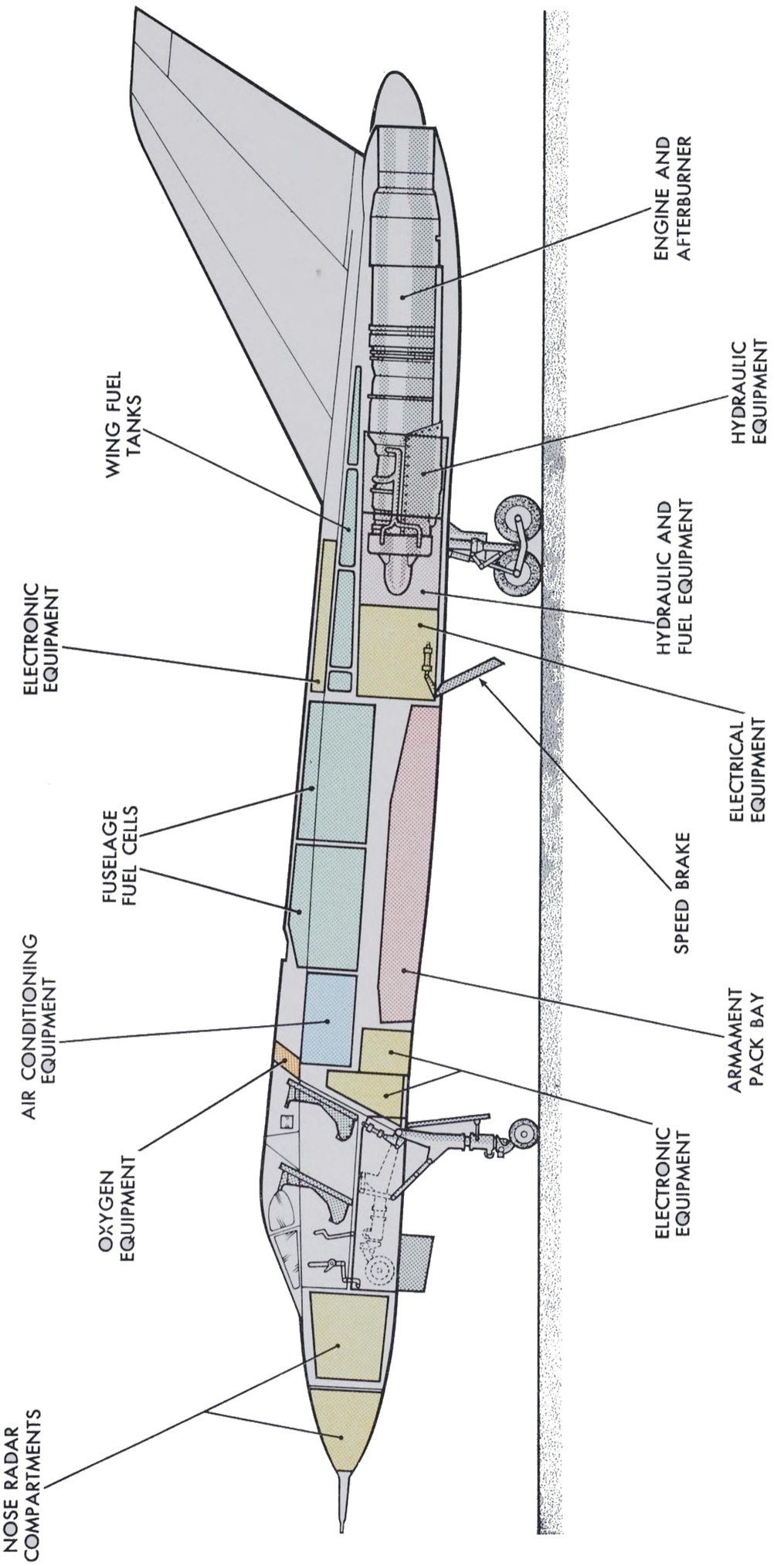
SK 21855



839-105-1

FIG. 1

UNCLASSIFIED
SECRET



840-105-1

FIG. 2

UNCLASSIFIED
SECRET

DUOTANG
52253
MADE IN U.S.A.