

QC
Avro
C-105
R-7-0400-34
Iss. 7

QCX
Avro
CF105
R-7-0400-34
Iss-7

FILE IN VAULT

C-105 MK 2 Report # 7-0400-34
Production A/C Iss. 7

WEIGHT SUMMARY & C.G. POSITION

R.C.A.F.

UNCLASSIFIED

May 1/57

15



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TO
A

DATE

JAN 07 1993

Report no.: QCX - AVRO - CF105 - R-7-0400-34 - Iss. 7

has been

☐

downgraded to: _____

☒

de-classified

by (Name): Michel W. Drapeau

(Dept.): A/DND Coordinator, Access to Information

Date: Dec. 7, 1992

R. Auger
Signature

confirmed as
Classification ~~cancelled~~ / changed to: UNCLASSIFIED

By authority of: DRDA 7/DARFT 5-8/DAS Eng 6-4-5

Date: 5 Nov 1992

Signature:

B. Aubrey
Unit / Rank / Appointment: DSIS 3, Secretary CRAD HQ DRP

Date: May 1st, 1957
Aircraft: C-105 MK 2
Production A/C

UNCLASSIFIED



Report # 7-0400-34 Iss 7
Sheet # 1-1
Prepared By: K. Griffin
Checked By: E. Burnett

INTRODUCTION

The following is a Weight & C.G. Summary of the C-105 MK 2 Production Aircraft. Of necessity some of the figures quoted herein are only of a preliminary nature, especially some systems. e.g. Air Conditioning and Fuel System which have been extensively redesigned but new weight estimates are not yet available.

Weight estimates have been based on the MK 1 Aircraft with relevant changes made to MK 2 Aircraft scheme drawings or to verbally received information. Where no details are available, allowances have been retained as in the MK 1 Aircraft.

GENERAL:

- a) Orenda PS 13 Engines comprise the Power Plant (4,500 lb each).
- b) A package containing 4 "semi-submerged" Sparrow II Missiles (432 lb each) is currently carried.
- c) The R.C.A. Radar Astra I System is installed - Weight & C.G. location being to the latest breakdown received from them, dated January 11th, 1957. However, the Sparrow III Auxiliaries and the Infra-red Tracker System included in the above breakdown have been deleted and some Avro installed antennae added (Total Weight = 2,614.5 lb).
- d) A considerable number of MK 1 parts and assemblies have now been weighed. There have only been very insignificant weight deviations between calculated and actual weights of Structural items, however, bought-out equipment has been fairly consistently in the order of 11% above the manufacturer's estimates or Avro Specification weight requirements. Where these weights apply to the MK 2 Aircraft, they have been incorporated into the MK 2 Aircraft weight records.
On the I.B.M. sheets, in this report, immediately preceeding the item title, will be found a number varying from 0 to 100. This is the percentage actual weight recorded in that particular report.

N.B. It should be noted that the first MK 2 Aircraft will probably not be as this summary designates, but will be a Flight Test version with Instrumentation replacing the Missile Package etc.

1. STRUCTURE

WEIGHT (lb)

I/W - Alterations to skins, etc. and new items for redesign front centre Engine mounting (this includes 16 lb transferred from Engine group)	+	71
I/W Ribs - Actual weights etc. based on MK 1 ribs, some redesign for MK 2 A/C and further reductions are expected.	-	14
I/W Spars - Main Spars - modifications to MK 2 schemes	-	5
C/F/Spar - production drawing estimates, web gauge decrease etc.	-	11
O/Wing - MK 1 O/Wing less Leading Edge & Aileron control Box was weighed - this checked with the calculated weight and is applicable to MK 2 Aircraft.		
Weight Change Increase	+	41
Ref. 2-1		

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46577

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SECRET

Date: May 1st, 1957
Aircraft: C-105 MK 2
Production A/C

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Sheet # 1-2
Prepared By: K. Griffin
Checked By: E. Burnett

INTRODUCTION

1. STRUCTURE

WEIGHT (lb)

(b) Fin & Rudder

No Weight Change

(c) Fuselage Fwd. Sta. 255"

Miscellaneous production drawing changes to MK 1 A/C Longerons,
Shear Panel, Nose U/C Structure etc. incl. some actual weights

+ 13
Weight Change Increase + 13
<u>Ref. 2-2</u>

(d) Centre Fuselage Sta. 255"-485"

No Weight Change

(e) Duct Bay Sta. 485"-591"

Minor Changes based on MK 1 , mostly actual weights of Dive
Brakes, Beams etc.

+ 3
Weight Change Increase + 3
<u>Ref. 2-2</u>

The Floating Duct is being extensively redesigned with an articulated adaptor between floating duct & engine, to include gills. No drawings are yet released and it is felt that the weight currently recorded for the duct, together with the Adaptor ring (see Engine Group) will be adequate. An estimate will be made at the earliest opportunity.

(f) Engine Bay Sta. 591.65-742.5"

No Weight Change

(g) Rear Fuselage Aft. Sta. 742.5"

No Weight Change

There is no definite scheme yet for the Tailcones and Stinger structure. The weight currently recorded is as for MK 1 in Titanium, allowances having been made for the increased length of the tailcone, but no other account taken of lines changing or design alterations.

(h) Fuselage Joints

No Weight Change

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TOTAL STRUCTURAL INCREASE

+ 57

Date: May 1st, 1957
Aircraft: C-105 MK 2
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Prepared By: K. Griffin
Checked By: E. Burnett

INTRODUCTION

2. LANDING GEAR

WEIGHT (lb)

Main U/C Doors & Fairings - door & mechanism estimates revised

- 3

Ref. 2-2

TOTAL LANDING GEAR DECREASE

- 3

3. POWER PLANT & SERVICES

Engine Mounts - some items now in Wing Group

- 16

Ref. 2-2

TOTAL POWER PLANT & SERVICES DECREASE

- 16

4. FLYING CONTROLS

No Weight Change

5. EQUIPMENT GROUP

Cockpit Insulation - first drawings available

+ 2

Ref. 2-

TOTAL EQUIPMENT GROUP - INCREASE

+ 2

6. OPERATIONAL LOAD

No Weight Change

SUMMARY

Weight Change - Aircraft Basic Weight

Structure	+	57
Landing Gear	-	3
Power Plant	-	16
Equipment	+	2
		<u>40</u>

Weight Change - Operational Weight Empty (A/C less Fuel)

Issue 6

Issue 7

44,125

44,165

+ 40 lb

Date: May 1st, 1957
Aircraft: C-105 MK 2
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Checked By: E. Burnett

WEIGHT CHANGES TO I.B.M. TABULATED
DETAILS OF APRIL 1st, 1957

WEIGHT CHANGES

WEIGHT (lb)

Wing:

+ 12.42	I/W Skins - skin thickening etc. around forward centre Engine Mounting	
- 15.20	I/W Centre Line Joints - allowance for centre forward Engine Mounting deleted (see Fus. pick-ups)	- 16.60
	Rear Centre Engine Strut pick-up added	+ 1.40
		- 15.20
+ 91.95	Fuselage Strut Pick-ups - redesign of structure for forward centre Engine Mounting (includes 9.97 lb for outer sleeve deleted from Engine mounts - see Engine Group)	
- 16.10	Structure Aft R/Spar - introduction of honeycomb panels and redesign of engine mounting requirements (includes 6.49 lb deleted from Engine Mounts see Engine Group)	
- 18.66	I/W Spars - Production drawing estimates of Centre Spar Fwd., web .072 was .102 in MK 1 A/C etc.	- 11.19
	Modifications to Main Spar	- 4.67
	Mods to C/aft Spar for centre forward Engine Mounting	- 2.80
		- 18.66
- 13.92	I/W Ribs# 1 to 9 - changes due to actual weights etc. in accordance with MK 1 drawings. The ribs are mostly being re-designed for MK 2 A/C and a further reduction is expected, this should be recorded for June 1st, 1957.	
+ 0.21	O/W Skins - Access panel added R.H. only	+ 1.43
	Actual weight bottom main panel	+ 3.34
	Actual weight top aft panel	+ 0.15
	Design changes hardware skin to spar Joints etc.	- 4.71
		+ 0.21

N. B. A complete Outer Wing less Leading Edge and Aileron Control Box was weighed for MK 1 A/C. After adjustments had been made for wiring already installed there, the structural weight was identical with that calculated. This also applies to MK 2 A/C.

+ 40.70

Date: May 1st, 1957
Aircraft: G-105 MK 2
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Checked By: E. Burnett

WEIGHT CHANGES TO I.B.M. TABULATED
DETAILS OF APRIL 1st, 1957

WEIGHT CHANGES

WEIGHT (lb)

Fuselage Fwd. Sta. 255"

+	0.30	Lower Shear Panel - minor MK 1 Production drawing changes		
+	5.52	Miscellaneous Items F.F.E.,-- Installations of various brackets, internal assy. hardware etc. as MK 1		
+	4.75	Nose U/C Support Structure - some re-estimates, re-design and actual weights as MK 1.		
+	2.14	Top Longerons - Actual weights of welded assys., end fittings, some pressings etc.	-	1.03
		Re-estimate of Mg. packing etc.	+	2.85
		Addition of bracketry	+	0.32
			+	<u>2.14</u>
+	<u>12.71</u>			

Duct Bay Sta. 485"-591.65"

+	2.28	Dive Brakes - Actual weights of brakes	+	0.88
		Re-estimate of Marry-up hardware	+	1.40
			+	<u>2.28</u>
+	0.14	Frame Sta. 538.77" - Actual Weights of all machinings		
+	2.28	Longitudinal Beams - Actual weights of I/B & O/B D/B Beams		
-	1.89	Top Longerons - some joint items at Sta. 485" duplicated		
+	<u>2.81</u>			

Landing Gear Group

-	2.56	Main U/C Doors & Fairings - addition of bumper pads	+	3.64
		Miscellaneous redesign on door	+	2.83
		Re-estimate of springs, housings etc. earlier allowances too high	-	9.03
			-	<u>2.56</u>
-	<u>2.56</u>			

Power Plant & Services

-	16.46	Engine Mounts - Outer sleeve forward centre Engine Mounting now with Fuselage pick-ups (see Wing Group)	-	9.97
		some rear Engine Mounting items now with Structure Aft R/Spar (Wing)	-	6.49
			-	<u>16.46</u>
-	<u>16.46</u>			

Date: May 1st, 1957
Aircraft: C-105 MK 2
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Prepared By: K. Griffin
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WEIGHT CHANGES TO I.B.M. TABULATED
DETAILS OF APRIL 1st, 1957

WEIGHT CHANGES

WEIGHT (lb)

Equipment Fixed & Removable

+ 2.40 Cockpit Insulation - first information available

+ 2.40

+ 39.60 TOTAL WEIGHT CHANGES

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Date: May 1st, 1957
Aircraft: C-105 MK 2
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Prepared By: K. Griffin

WEIGHT & C.G. SUMMARY

<u>Description</u>	<u>WEIGHT</u> <u>lb.</u>	<u>H. ARM</u> <u>ins.</u>	<u>V. ARM</u> <u>ins.</u>
STRUCTURE	18,327.19	564.51	137.60
Wing	9,970.65	642.88	142.17
Fin & Rudder	1,020.70	754.06	209.27
Fuselage: fwd. Sta. 255"	2,466.44	186.67	128.71
Sta. 255"-485"	1,681.78	379.07	129.47
Sta. 485"-591.65	952.35	533.07	103.64
Sta. 591.65"-742.5"	1,490.70	661.10	109.12
Sta. 742.5 Aft.	691.99	795.69	128.15
"Marry Up"	52.58	468.91	103.89
UNDERCARRIAGE - Retracted	2,551.77	487.22	134.79
Main Undercarriage	1,901.62	539.31	141.00
Main U/C Doors & Fairings	291.80	537.10	138.40
Nose Undercarriage	333.81	170.80	99.70
Nose U/C Door & Fairing	24.54	162.24	88.23
POWER PLANT & SERVICES	10,757.88	673.94	121.47
Engines & Accessories PS13	9,090.12	690.98	121.17
Gear Box & Drives on Fuselage	281.84	601.70	102.49
Engine Controls	32.43	375.76	118.61
Gear Box, Starter & Drives on Engine	315.45	609.12	105.24
Engine Nose Bullet	70.00	587.17	116.00
Fire Extinguisher System	70.46	702.44	134.83
Engine Mountings	140.07	665.17	135.82
Fuel System	757.51	543.10	135.69
FLYING CONTROLS GROUP	1,793.94	686.84	140.05
Mechanical Flying Controls	942.92	688.24	148.66
Hydraulic Flying Controls	851.02	685.29	130.52
EQUIPMENT FIXED & REMOVABLE	7,897.85	326.73	111.79
Instruments	46.07	163.68	138.70
Probe	18.50	40.00	108.00
Cockpit Pressure Sealing	5.00	186.00	130.00
Oxygen System	43.44	227.71	142.18
Air Conditioning System	897.00	331.77	133.38
Hydraulic Main System	597.49	498.76	116.66
Cabin Insulation	14.31	187.48	132.00
Brake Parachute	62.38	769.41	143.24
Electrical System	1,224.03	428.64	112.65
Low Pressure Pneumatics	49.30	444.29	125.94
Surface Finish	100.00	591.52	140.20
Intake De-icing Boots	51.84	197.02	118.00
Radome Anti-icing	8.88	51.49	125.00
Canopy Actuation	62.05	222.11	154.47
Cabin Consoles	17.45	174.76	124.34
Radar Door Actuation	10.00	268.00	95.00
Ejector Seats	186.00	201.10	136.25
Radio & Radar Removable	1,850.50	178.50	104.46
Radio & Radar Fixed	621.00	234.04	116.15

continued

DATE: May 1st, 1957
Aircraft: C-105 MK 2
Production Aircraft

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Sheet # 3-2
Prepared By K. Griffin

WEIGHT & C.G. SUMMARY

<u>Description</u>	<u>WEIGHT</u> <u>lb.</u>	<u>H. ARM</u> <u>ins.</u>	<u>V. ARM</u> <u>ins.</u>	<u>M.A.C.</u> <u>%</u>
<u>Equipment (Fixed & Removable)(Cont'd)</u>				
Sparrow Pack Structure	850.00	390.84	96.00	
Sparrow Pack Mechanisms	625.32	376.67	99.22	
Sparrow Pack Hydraulics	350.19	368.83	99.00	
Sparrow Pack Electronics	143.00	332.00	100.00	
Sparrow Pack Electrics	64.10	362.29	95.00	
AIRCRAFT BASIC WEIGHT	41,328.63	548.09	128.40	
USEFUL LOAD (Normal Combat)	18,635.76	516.40	136.67	
Crew	430.00	194.00	136.50	
Oil	138.97	636.92	110.57	
Alcohol	22.00	93.00	138.00	
Engine Fire Extinguisher Fluid	25.00	730.00	129.00	
Residual Fuel	218.40	553.98	134.04	
Missiles	1,728.00	389.29	88.30	
Oxygen Charge	13.39	259.69	159.91	
Water for Air Conditioning	260.00	268.00	132.00	
Fuel For Combat Mission	15,800.00	542.05	142.30	
Normal Combat Mission U/C Up	59,964.40	538.25	130.97	28.25
U/C Down		539.85	128.33	28.69
Half Combat Mission Fuel (1,013 gals. @ 7.8 lb/gal.)	7,900.00	543.20	139.55	
Combat Weight (Half Combat Mission Fuel) U/C Up	52,064.40	537.85	128.84	28.14
U/C Down		539.68	125.80	28.64
Operational Weight Empty U/C Up	44,164.40	536.89	126.92	27.87
U/C Down		539.06	123.34	28.47
Operational Weight Empty Less Missiles U/C Up	42,436.40	542.90	128.49	29.53
U/C Down		545.15	124.76	30.15
Max. Internal Fuel (2,492 gals. @ 7.8 lb/gal.)	19,438.00	541.85	144.16	
U/C Up		538.41	132.19	28.29
A.U.W. Max. Internal Fuel U/C Down	63,602.40	539.91	129.70	28.71
Max. External Fuel (500 gal. @ 7.8 lb/gal + Drop Tank)	4,226.00	522.34	60.64	
U/C Up		537.41	127.73	28.02
A.U.W. Max. Internal and External Fuel U/C Down	67,828.40	538.82	125.40	28.41

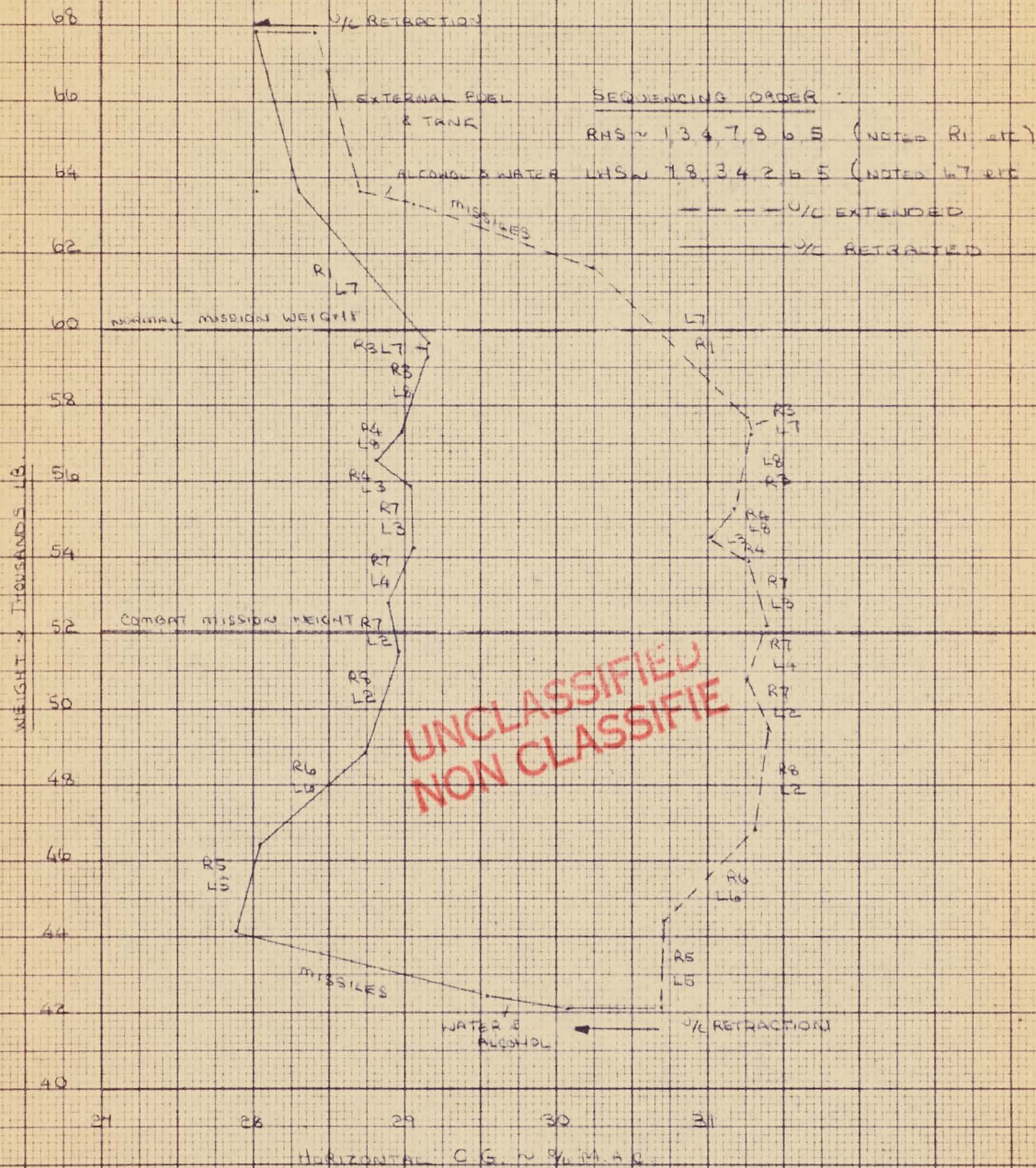
N.B. 1) Aircraft Datum = 120" above arbitrarily chosen ground line.

2) Revised Fuel Tank capacities in Centre Fuselage tanks for MK 2 A/C are incorporated.

34 - Kottaram Equities
DATE: May 1st 1954
SHEET 4-1

TO MINNEAPOLIS HOWEVER (MAY ALSO STOP 4503)

ALTERNATE SEQUENCING UNTIL NECESSITY OF DROPPING SYSTEM PROVEN



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REPORT NO. T-0400-24-7

BY: Kathleen Gifford

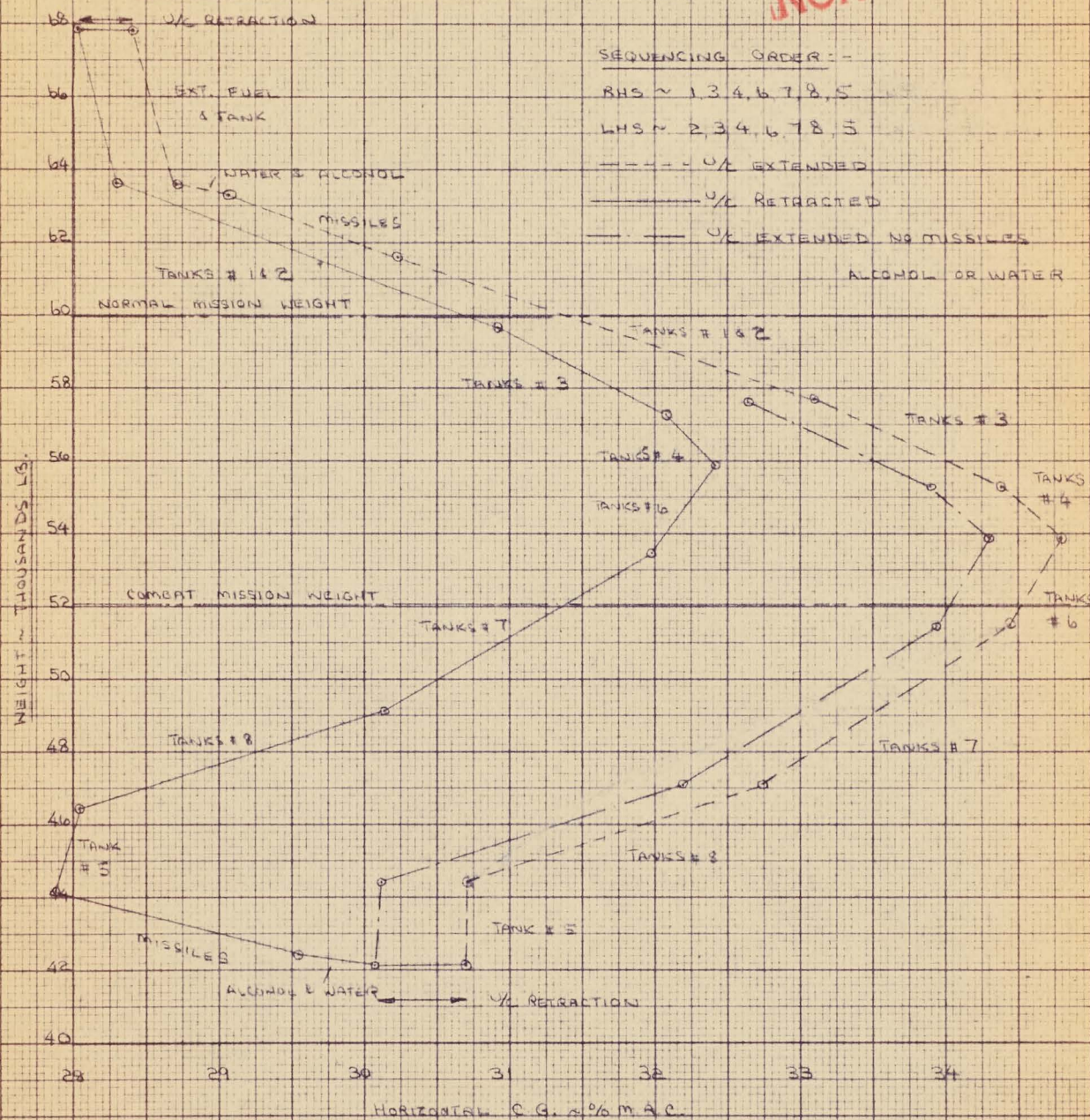
DATE: May 15, 1957

SHEET: 4-2

C105 MK2 PRODUCTION AIRCRAFT
HORIZONTAL G.G. ENVELOPE FOR
AT FLIGHT CONDITIONS
USING ALTERNATE FUEL SEQUENCING

AS SUPPLIED TO MINNEAPOLIS HONEYWELL (W/ AIRC SPICE503)
 TO ACHIEVE REQUIRED 34% M.A.C. AT COMBAT

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AVRO AIRCRAFT LTD.

MALTON, ONT.

WEIGHT AND C. OF G BY FUNCTIONAL COMPONENT

PROJECT C-105 MK 2

DESCRIPTION		REFERENCE NO.	COMP. NO.	WEIGHT
TOTAL WING GROUP		1000000		
OUTER WING		1010000		
100	OUTER WING SKINS	1010001	64	929.107
100	POSTS AND INTERCOSTALS	1010002	64	243.67
100	OUTER WING SPARS	1010003	64	392.587
100	OUTER WING RIBS	1010004	64	134.56
18	AILERON CONTROL BOX	1010006	64	379.207
100	RIB 12	1010007	64	7.26
100	O W AILERON JACK FITTING	1010009	64	10.467
AILERON JOINTS AND FAIRING		1010010		329.37
				1979.45
AILERON		1020000		
100	AILERON STRUCTURE	1020001	74	336.007
				336.00
ELEVATOR MARRY UP		1030000		1597.77
97	ELEVATOR	1030000	82	449.007
				464.97
INNER WING		1040000		
55	MAIN U C STRUCTURE	1040001	62	338.235
27	FRONT SPAR I W	1040002	62	111.104
27	MAIN SPAR I W	1040003	62	14.395
27	FWD CENTRE SPAR I W	1040004	62	42.45
27	AFT CENTRE SPAR I W	1040005	62	33.86
27	REAR SPAR	1040006	62	7.677
21	I W STRUCTURE F S TO M S	1040007	62	1041.854
I W STRUCTURE M S TO R S		1040008	62	149.79
STRUCTURE AFT OF REAR SPAR		1040009	62	303.747
11	ELEVATOR CONTROL BOX I W	1040010	62	427.177
TRANSPORT JOINT MARRY UP		1040011		70.65
CENTRE LINE JOINTS		1040012	62	590.36
INNER WING SKINS		1040013	62	2197.92
STRUT PICK UP FITTINGS		1040014	62	14.17
31	RIBS 1 TO 9 INNER WING	1040016	62	512.04
DORSAL FAIRING		1040017	62	95.4
100	RIB 10	1040018	62	108.00
FUSELAGE HINGE JOINT I W		1040019	62	138.12
TRANSPORT JOINT		1040020	62	131.00
FUSELAGE HINGE JOINT		1040021		37.405
DORSAL FAIRINGS I W		1040023		5.295
				6660.15

HEIGHT AND C. OF G BY FUNCTIONAL GROUP COMPONENT

REPORT NO. 7-0400-34 Iss 7

SHEET 5-1

	REFERENCE NO.	COMP. NO.	WEIGHT	H. ARM	V. ARM	H. MOMENT	V. MOMENT
	1000000						
						UNCLASSIFIED	
						NON CLASSIFIED	
	1010000						
	1010001	64	92910	70646	13597	65637199	12632973
	1010002	64	24367	32071	13410	1783323	326668
	1010003	64	39258	70118	13636	27526924	5353221
	1010004	64	13456	95061	13650	9352727	1836744
	1010006	64	37920	77409	13508	29353493	5122234
	1010007	64	7266	48731	13832	4947215	1054828
NG	1010009	64	10467	27911	13670	761394	142988
RING	1010010		32937	87261	13224	2592447	435466
			197945			141954722	26905122
	1020000						
	1020001	74	33600	79213	13556	26615568	4554816
			33600			26615568	4554816
	1030000		15977	38101	14260	1178746	227732
	1030000	82	44900	75523	14260	33909827	6402740
			46497			35088573	6630472
	1040000						
	1040001	62	33823	57782	13984	19543606	4729808
	1040002	62	11110	48428	14260	5380351	1584286
	1040003	62	14339	56570	14280	8281282	2090449
	1040004	62	42456	04171	14317	2564702	607757
	1040005	62	33866	54941	14446	2217627	489142
	1040006	62	7667	70374	14420	5395575	1105581
S	1040007	62	10418	54985	14395	51942474	14997431
S	1040008	62	14979	60964	14572	9131798	2182740
SPAR	1040009	62	30374	72148	14906	21914234	4527548
	1040010	62	42717	72500	14327	30969825	6120065
UP	1040011		70656	36211	13876	4494824	980339
	1040012	62	59036	60411	15018	38987965	8866026
	1040013	62	21979	26246	14465	137299667	31792913
	1040014	62	14617	61865	14597	9042807	2133643
	1040016	62	51204	61287	14499	31381395	7424068
	1040017	62	9548	28016	150	45866	15343
	1040018	62	10800	63683	13835	877764	1494180
W	1040019	62	13812	21041	13790	8577804	1904675
	1040020	62	13100	63071	13710	8262301	1796010
	1040021		37405	27961	14309	1974570	535157
	1040023		5295	72491	16026	3222546	902104
			666015			407508983	96279265

AVRO AIRCRAFT LTD.

MALTON, ONT.

WEIGHT AND C. OF G BY FUNCTIONAL
COMPON

PROJECT C-105 MK 2

	DESCRIPTION	REFERENCE NO.	COMP. NO.	WEIGHT
	TOTAL FUSELAGE GROUP	3000000		
	FUSELAGE BASIC STRUCTURE	3010000		
	RADOME	3010001	51	9840
	RADAR NOSE STRUCTURE	3010003	51	18000
	SKIN F F	3010004	52	80941
	SKIN C F	3010005	54	210483
	SKIN D B	3010006	56	58805
	SKIN E B	3010007	58	16489
4	FORMERS F F	3010011	52	105311
	FORMERS C F	3010012	54	277863
	FORMER D B	3010013	56	74575
	LIGHT FORMERS E B	3010014	58	10370
	HEAVY FORMERS E B	3010015	58	18558
	LOWER LONGERONS F F	3010016	52	68461
	INNER LONGERON E B	3010017	58	7184
	LONGERON E B	3010018	58	6905
	TOP LONGERONS E B	3010019	58	38
	LOWER SHEAR PANEL	3010020	52	29882
	TOP WING LONGERONS D B	3010021	56	4985
	LONGERONS C F	3010022	52	532
	LONGERONS C F	3010023	54	138134
	LONGERONS D B	3010025	56	105695
	ELECTRONICS BAY STRUCTURE	3010026	54	45232
59	LONGITUDINAL BEAMS D B	3010027	56	65705
	RADAR ACCESS DOOR C F	3010028	54	21082
72	MAIN FRAME AT STN 538 77	3010029	56	59805
	DIVE BRAKE ACCOM STRUCTURE	3010030	56	3345
20	TOP LONGERONS F F	3010031	52	181961
100	DUCT C F	3010032	54	332863
	DUCT D B	3010033	56	255005
	CANOPY ARCHES	3010034	52	85352
4	ACCESS PANEL STIFFENERS	3010036	56	38655
6	NOSE U C SUPPORT STRUCTURE	3010037	52	33432
3	CREW BULKHEADS	3010038	52	122722
	EQUIPMENT BAY STRUCTURE	3010039	54	71112
60	WINDSCREEN	3010041	52	127541
	SERV ACCESS DOORS AND PNLS	3010042	58	6087
	DORSAL FAIRING AIR OUTLET	3010044	54	20612
	INTERMEDIATE FORMERS E B	3010045	58	48737
	ENGINE ACCESS DOORS E B	3010046	58	11900
	SEALING MISSILE BAY	3010047	54	973
	MISCELLANEOUS ITEMS C F	3010048	54	3923
	ARMAMENT BAY ROOF	3010049	54	132163
	BULKHEAD AT STA 120	3010050	52	30601
	BULKHEAD AT STA 255	3010051	52	104292
	BULKHEAD STA 485	3010052	54	123514
	ENG TUNNEL E B	3010054	58	55031
	INTEGRAL FUS FUEL TANK	3010055	54	203593
	COCKPIT FLOOR	3010056	52	57431
	DORSAL OVER FUEL TANK	3010061	54	50974

PROJECT C-105 MK 2

WEIGHT AND C. OF G BY FUNCTIONAL COMPONENT

[illegible]

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SHEET 5-8

UNCLASSIFIED
NON CLASSIFIED

AVRO AIRCRAFT LTD.
MALTON, ONT.

WEIGHT AND C. OF G BY FUNCTIONAL
COMPON

PROJECT C-105 MK 2

DESCRIPTION		REFERENCE NO.	COMP. NO.	WEIGHT
ELECTRICAL SYSTEM		7090000		
ELECTRICAL WIRING		7091400		
ELECTRICAL WIRING R N		709140151		129
ELECTRICAL WIRING F F		709140252		29661
ELECTRICAL WIRING C F		709140354		23543
ELECTRICAL WIRING A I		709140455		12742
ELECTRICAL WIRING D B		709140556		90155
ELECTRICAL WIRING E B		709140658		645
ELECTRICAL WIRING I W		709140862		89095
ELECTRICAL WIRING FIN		709140983		3527
ELECTRICAL WIRING N U C		709141091		3301
60	ELECTRICAL WIRING ENG	7091411		2002
	ELECTRICAL WIRING C A	7091412		137463
				41141
30	ELECTRICS F F	709150052		152481
				15248
26	ELECTRICS C F	709160054		73594
				7359
85	ELECTRICS E R	709170058		70
	ELECTRICS ENG	7091701		134325
85	ELECTRICS C A	7091702		718
				14820
ELECTRICS FIN		709180083		838
				83
ELECTRICS I W		709190062		23366
ELECTRICS C A		7091901		112
ELECTRICS M U C		709190292		745
				2522
ELECTRICS A I		709200055		50902
				5090
ELECTRICS D B		709210056		317895
				31789
WINDSCREEN DEMISTING		709220052		25512
				2551

HEIGHT AND C. OF G BY FUNCTIONAL GROUP COMPONENT

REPORT NO. 7-0400-34 Iss 7

SHEET 5-15

	REFERENCE NO.	COMP. NO.	WEIGHT	H. ARM	V. ARM	H. MOMENT	V. MOMENT
	90000000						
						UNCLASSIFIED NON CLASSIFIED	
	90100000	52	430.00	194.00	136.50	83420.00	58695.00
			430.00			83420.00	58695.00
	90200000						
	90200001		92.90	52.25	113.90	6059.403	10581.31
	90200002		17.73	36.76	116.40	1128.975	2063.77
	90200003	56	19.25	58.08	95.55	1118.117	1839.34
	90200004	58	9.09	59.92	97.04	544.746	882.09
			138.97			8851.241	15366.51
	90300000	54	1728.00	389.29	88.30	672693.12	152582.40
			1728.00			672693.12	152582.40
	90400000						
	90400001	52	72.20	49.31	132.00	147.55	95.04
	90400002	54	12.67	26.28	161.50	332.968	2046.21
			13.39			347.723	2141.25
CING	90500000	51	22.00	93.00	138.00	2046.00	3036.00
			22.00			2046.00	3036.00
	90600000		25.00	73.00	129.00	1825.000	3225.00
			25.00			1825.000	3225.00
	90700000						
	90700001	54	4.80	39.42	123.00	1845.043	5756.40
	90700002	62	171.60	59.75	137.05	10253.958	23517.78
			218.40			12099.001	29274.18
VING	91000000	54	260.00	268.00	132.00	69680.00	34320.00
			260.00			69680.00	34320.00

