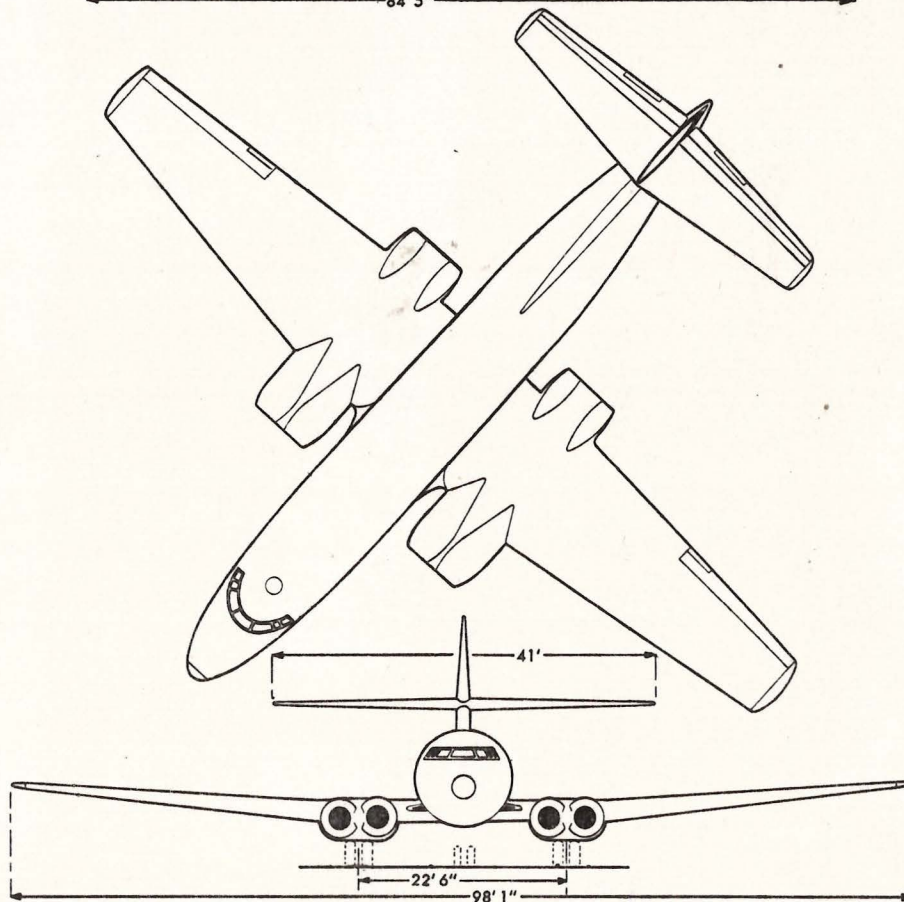
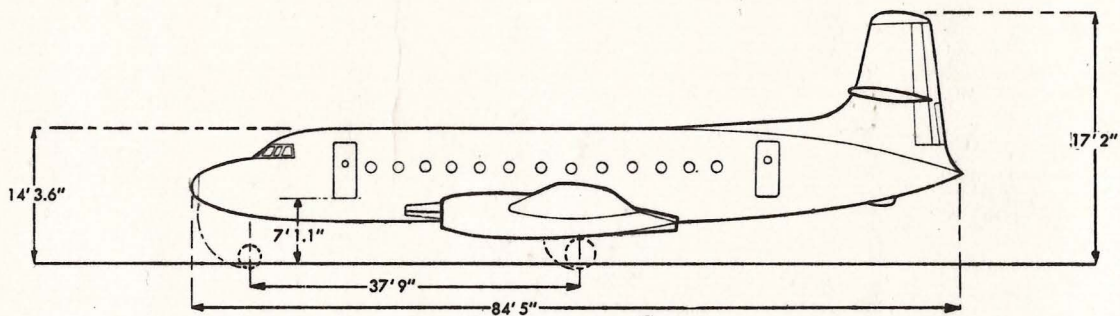




AVRO *Getliner*

AVRO *Getliner* BRIEF MODEL SPECIFICATION



GENERAL ARRANGEMENT



6054

RL. 891-MISC

— AVRO *Getliner* BRIEF MODEL SPECIFICATION —

DIMENSIONS

Wing Area.....	Gr: 1157 sq. ft.
.....	Net: 1097 sq. ft.
Wing Span	98' 1"
Aspect Ratio.....	8.31
Aerofoil.....	NACA 23016.5
T/C Ratio at Root.....	16.5%
T/C Ratio at Tip	12%
Geometric Mean Chord.....	11.798'
Incidence of Datum Plane.....	2 $\frac{1}{2}$ °
Dihedral on Datum Plane	6°
Fuselage Length Overall.....	84' 5"
Fuselage Diameter	10'
Wheel Track (Mean).....	22' 6"

CONTROL AREAS

Aileron.....	51.6 sq. ft.
Tailplane	251.2 sq. ft.
Elevator (total)	56 sq. ft.
Fin & Dorsal	Net: 122.6 sq. ft.
Rudder (total)	Net: 38.6 sq. ft.
Total Dorsal, Fin and Rudder.....	161.2 sq. ft.



AVRO *Getliner*— AVRO *Getliner* BRIEF MODEL SPECIFICATION —

LEADING PARTICULARS

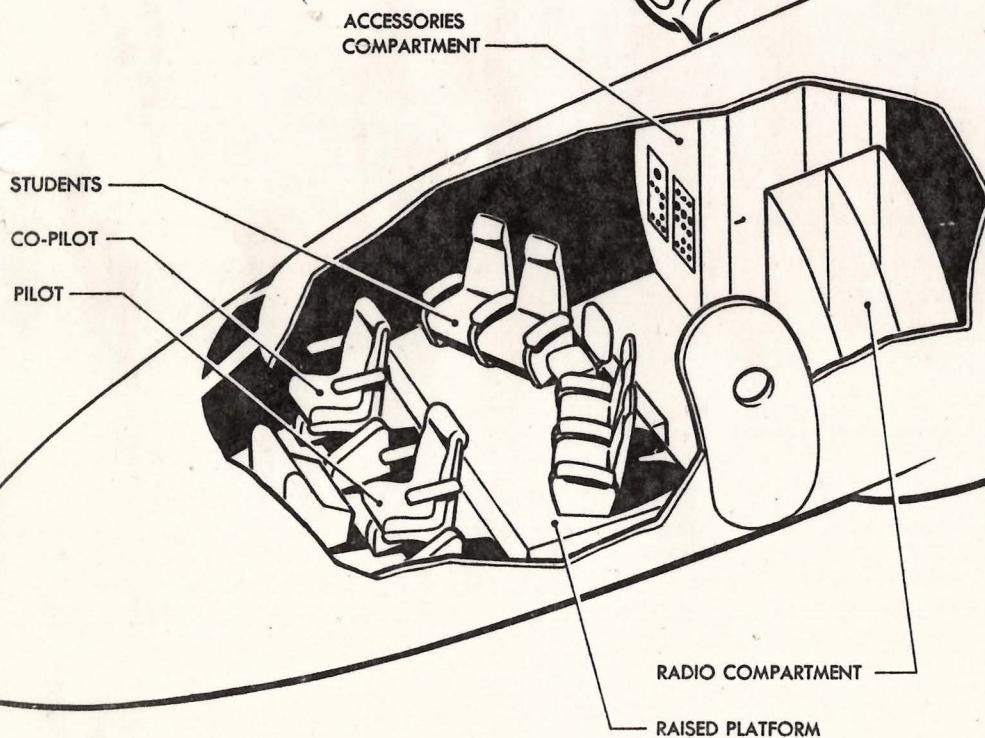
Aircraft Type.....	Low-Wing Monoplane
Take-Off Wt.....	70,000 lb.
Landing Wt.....	60,000 lb.
Power Plants.....	Four Allison J.33 engines
Undercarriage.....	Tricycle type
Main Wheel.....	Twin wheels, H.P. Hydraulic Brakes
Tires -	38" x 11.75"
Nose Wheel.....	Twin wheel, steerable
Tires -	26" x 7.75"
Elevator.....	Semi-span, double surface, unbalanced type, Span - 207 in. Rear - manual assisted; 12½% of chord Auxiliary - power operated; 12½% of chord
Rudder.....	Double surface type; Length - 159.38 in. Rear - manual operation; 14% of Chord Auxiliary - power operated; 18% of chord
Aileron.....	Semi-span, unbalanced, power assisted type. Span - 213 in. 16% of chord
Landing Flaps.....	Split type Centre Wing - Split type.
De-Icing Equipment.....	Electro-Thermal
Cabin Pressure Differential.....	8.25 lb./sq. in. maximum
Fuel Tanks.....	Integral in outer wing 3500 gals. Bag type in centre section wing 1100 gals.





A.V.R.O. *Getliner*

AVRO *Getliner* BRIEF MODEL SPECIFICATION



CUTAWAY OF FLIGHT DECK







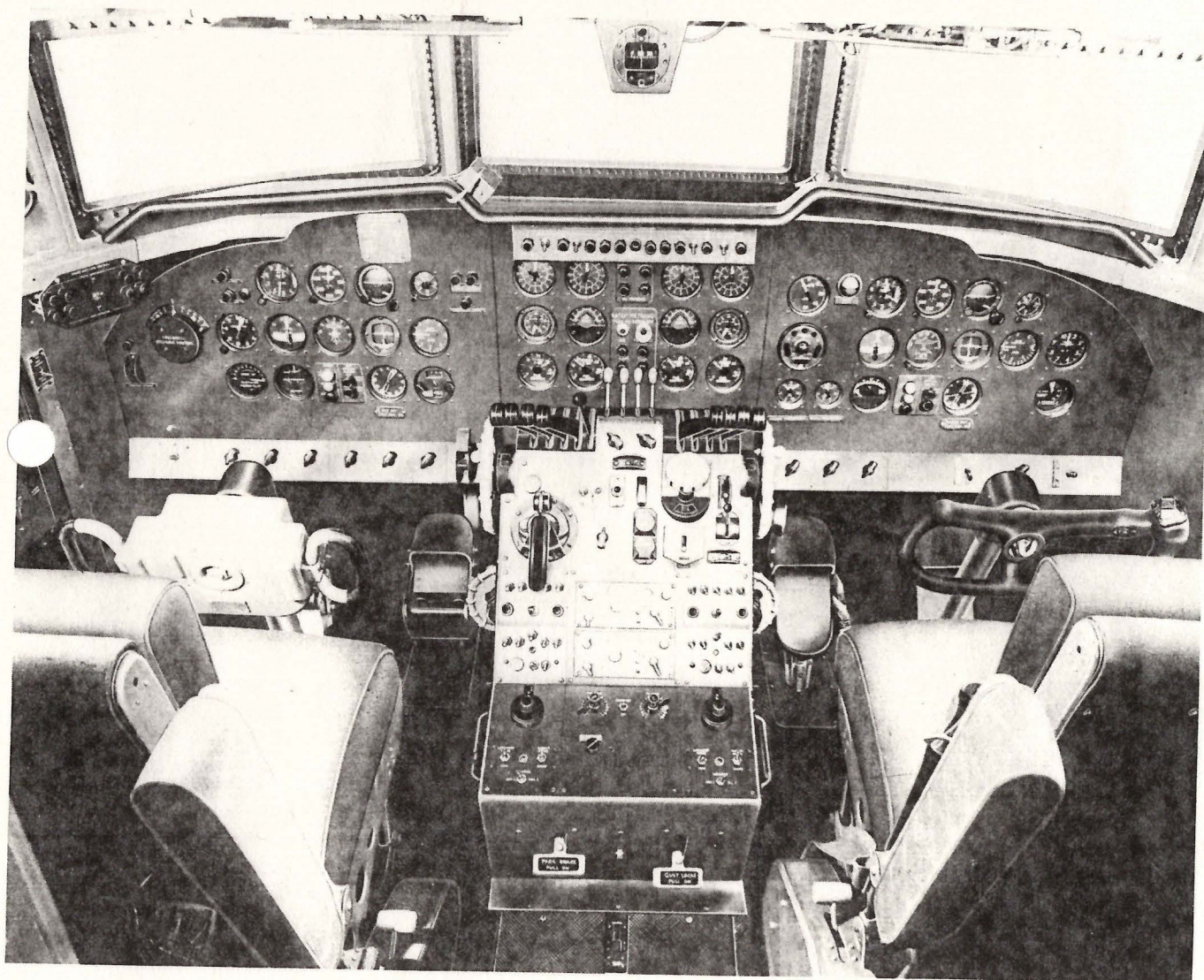
AVRO *Jetliner*

C-102 JETLINER





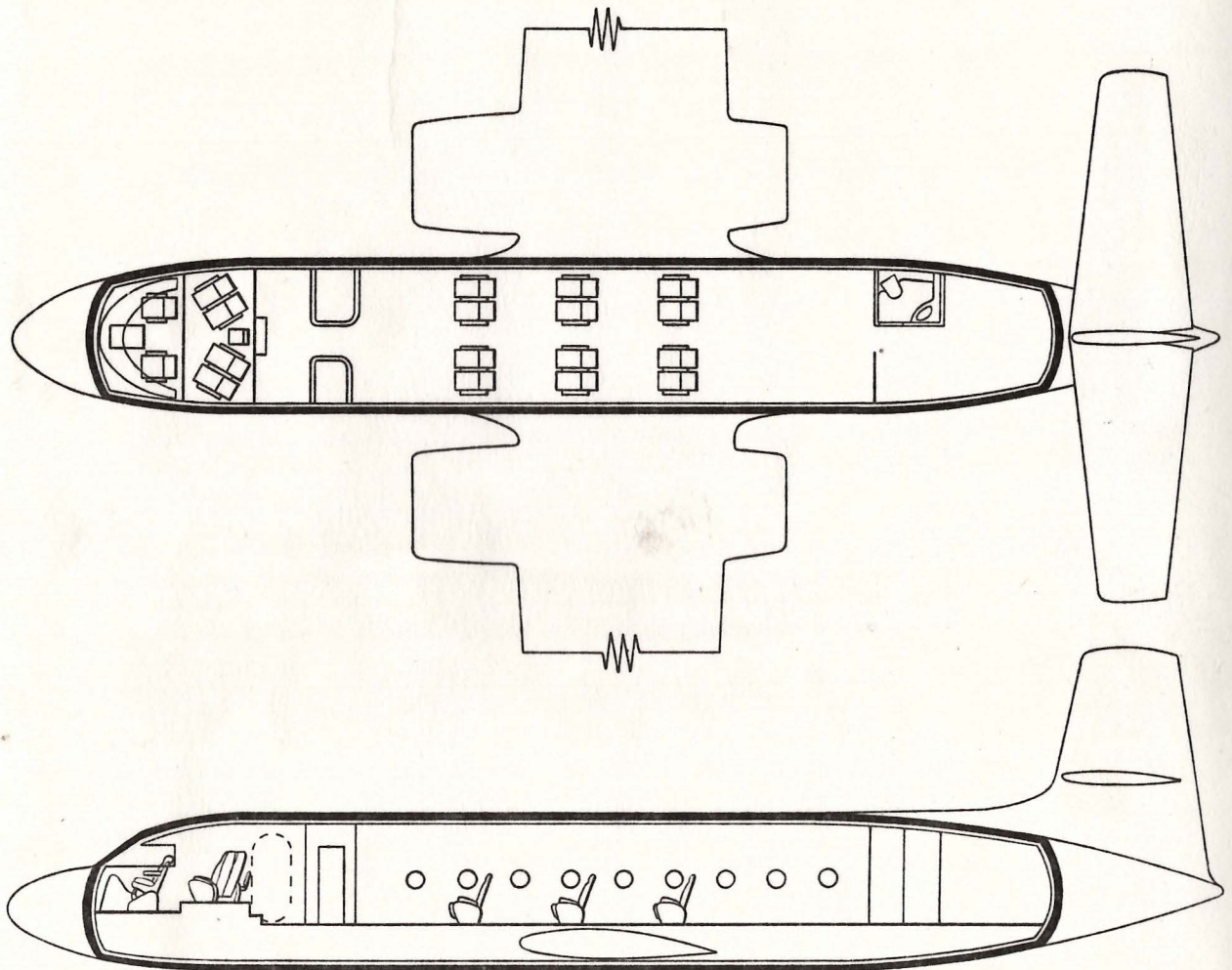
— AVRO *Getliner* BRIEF MODEL SPECIFICATION —

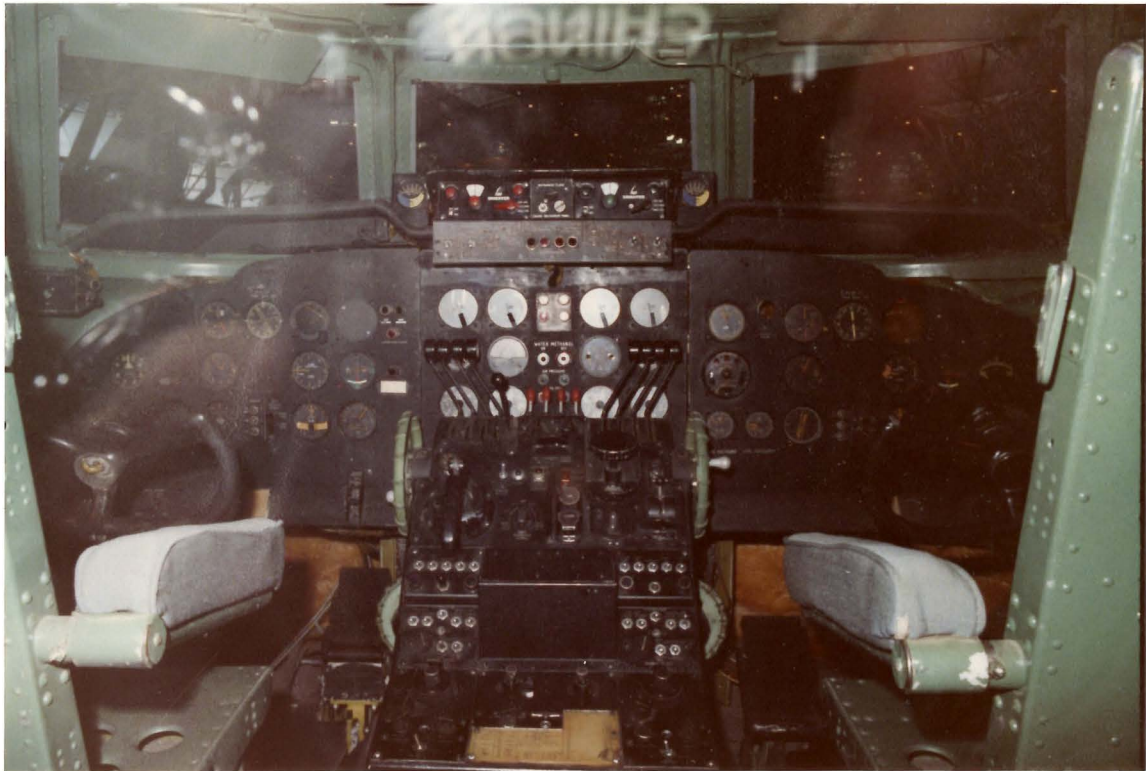


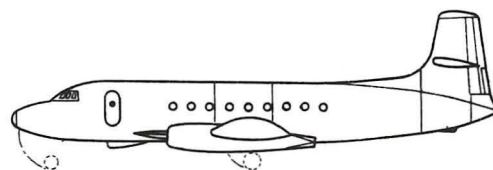
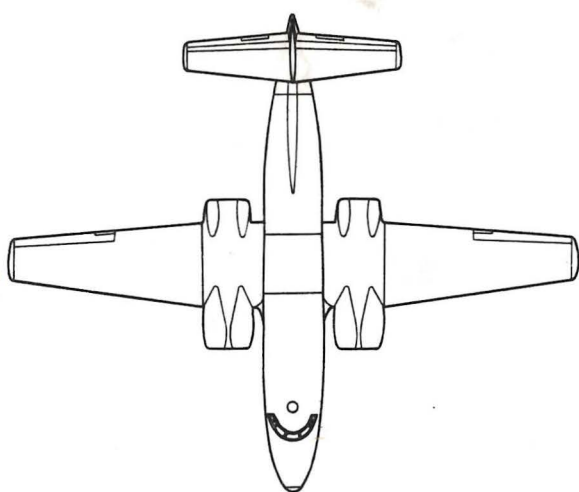
COCKPIT LAYOUT



AVRO *Getliner* BRIEF MODEL SPECIFICATION

**PLAN AND PROFILE**





TECHNICAL DEPARTMENT (AIRFRAME).

REPORT No. C102Der/Aero/40C

SHEET No. 1

DATE December, 1948.

PREPARED D.C. Whittley.
BY

AIRCRAFT C.102Der

COMPONENT

A.U.W.

C.102 DATA

Wing

Area	1157 sq.ft.
Span	98.2ft.
S.M.C.	11.78 ft.
Location of S.M.C.	LE 391.3" aft of nose. 34.3" below C.L. of Fuselage.
Root Chord Incidence	2.1/2°
Root Chord Section	23016.5
Tip Section	23012
Aspect Ratio	8.3
Distance from wing root spar to L.E. of S.M.G.	7.645'

Flap

Type	Split
Span	I/B: 46.75" O/B: 174"
Area	104.8 sq.ft.
Chord % Wing	I/B Flap: 20% O/B Flap: 20% 25.6%

Horizontal Tail

Dist. from C.G. to Fwd. Elevator Hinge.	459.9in.
Dist. from C.G. to aft Elevator Hinge.	470.7in.
Airfoil Section	0012.8 modified
Area	251.2 sq.ft.
Span	41 ft
Aspect Ratio	6.7
Stabilizer Area	180.9sq.ft.
Stabilizer Setting	0° to wing root chord
Area of fwd. elevator	35.3sq.ft.
Area of aft elevator	35.0sq.ft.
Percent Aerodynamic Balance	none
Elevator Chord - RMS - Fwd.	1.05ft
Aft.	1.05ft
Elevator Tab	
Type	combination servo and trim
Mean Chord	5.95"
Span	5' 6.5"
Area	2.74 sq.ft.
Aerodynamic Balance	none
Dist. from Tailplane Rear Spar to Wing Rear Spar	34.1ft

TECHNICAL DEPARTMENT (AIRFRAME)

REPORT NO. C102Der/Aero/40C

SHEET NO. 2

AIRCRAFT C.102Der

COMPONENT

DATE December, 1948

A.U.W.

C102 DATA

PREPARED BY D.C. Whittley

I N D E X (Cont)

PAGE NO.

Distance from T.P. Rear Spar to Tailplane $1/4$ Chord.
Distance from $1/4$ chord to L.E. of S.M.C.

2.195'
39.56'

Vertical Tail

Airfoil Section
Percent Rudder Chord, fwd.
Percent Rudder Chord, aft.
Aerodynamic Balance
Rudder Area, fwd.
aft.

0012.8 mod.
18%
14%
none
22.55 sq.ft.
17.52 sq.ft.

Rudder Chord (mean), fwd.
aft.

1.72ft
1.3/ft

Tail Length from C.G. to H.L. of Fwd. Rudder

466.36in.

Tail Length from C.G. to H.L. of aft Rudder

485.36in.

Rudder Tab

Type

combination servo
and trim

Span

54.2in.

Area

2.63sq.ft.

Aft Rudder H.L. to Tab H.L.

13.78

Tab C.L. to Rudder C.L.

52.75in.

Aerodynamic Balance

none

Fuselage

Length

80' 7"

Section

circular

Frontal Area

78.5sq.ft.

Side Area

519sq.ft.

Location of Root Chord

LE 483in. aft

of nose

LE 42.9 below

C.L. of Fuselage

433.6in. aft of nose

20.8in. below

Fuselage C.L.

C.G. Location (CORNELL W/T MODEL)

AVRO *Getliner*ROOT RIBNACA 23016.5 $t = 16.5\%$

STATION	UPPER ORDINATE	LOWER ORDINATE
0	-	-
1.25	+ 3.71	- 1.68
2.5	+ 4.86	- 2.48
5.0	+ 6.40	- 3.42
7.5	+ 7.45	- 4.10
10	+ 8.23	- 4.65
15	+ 9.19	- 5.51
20	+ 9.64	- 6.13
25	+ 9.82	- 6.52
30	+ 9.80	- 6.71
40	+ 9.31	- 6.64
50	+ 8.39	- 6.15
60	+ 7.18	- 5.37
70	+ 5.71	- 4.36
80	+ 4.06	- 3.15
90	+ 2.21	- 1.76
95	+ 1.22	- 0.99
100	+ 0.17020	- 0.17020

JOSE RAD 2.99%