Type Certificate Data Sheet

Number:	A-93
Issue No.:	3
Approval Date:	October 22, 1968
Issue Date:	April 21, 1997

This Data Sheet which is part of Type Certificate No. A-93 Issue 3 prescribes the conditions and limitations under which the product(s) for which the Type Certificate was granted meet(s) the standards of airworthiness required by the Canadian Aviation Regulations.

Type Certificate Holder:
Aviation Traders Ltd.
Bld. 105
Bournemouth International Airport
Christchurch, Dorset BH23 6NW
England

Models

Aviation Traders Ltd.
ATL.98 Carvair

1. <u>Model ATL.98 Carvair (Transport Category)</u>   <u>Approved October 22, 1968.</u>

	A Model ATL.98 Carvair is a Douglas Series C54-DC airplane modified in accordance with the ARB Airworthiness Approval Note No. 6190 by Aviation Traders Ltd.
Engines	4 Pratt & Whitney R-2000-7M2; or, 4 Pratt & Whitney R-2000-9M4; or, 4 Pratt & Whitney Twin Wasp D-5.
Fuel	Specification D. ENG. R.D. 2485 subject to minimum grade being 100/130 octane; maximum lead content 5.50 millilitres TEL per Imperial gallon.
Oil	Specification D. ENG. R.D. 2472 B/O, Aeroshell W. 100, and Aeroshell W. 120.
Engine Limits	(I.S.A., Sea Level) Maximum Take-off: 2700 RPM Maximum Continuous: 2550 RPM
Propeller and Propeller Limits	4 Hamilton Standard Hydromatic Hub 23E50-473 or 23E50-505 Blades (3)- 6507-A or 6507-0 or 6507A-0 Pitch Setting: Low 24° High 93° Constant Speed Range: 24° to 49°

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Airspeed Limits (IAS)	V_{NE}	(Never Exceed)		218 KTS
	V_{NO}	(Normal Operating)		185 KTS
	V_A	(Design Manoeuvring)		
		72,900 lbs.		162 KTS
		58,000 lbs.		147 KTS
		51,200 lbs or less		138 KTS
	V_{FE}	(Flaps Down)		
		Flap Setting:	20°	176 KTS
			30°	137 KTS
			40°	134 KTS
			or more	
	V_{LE}	(Landing Gear Extended)		156 KTS
	V_{MC}	(Minimum Control Speed with the critical engine inoperative, propeller windmilling in low pitch)		82 KTS

Maximum Weight (Sea Level)	Take off	72,900 lbs
	Landing	63,800 lbs
	Zero Fuel	59,000 lbs

C.G. Limits

Weight (lb.)	Fwd. Limit (Sta.)	Aft Limit (Sta.)
up to 64,500	374.8	402.6
72,900	380.7	401.2

Linear variation between points.

Datum

The datum is defined as fuselage reference station zero which is situated 107 inches aft of the tip of the fuselage nose.

Levelling Means

Levelling lugs are installed in the nose landing gear wheel well and levelling fittings in the fuselage under floor area between stations 640 and 661. The master levelling points are rivets circled in red and located on the left hand side of the fuselage at stations 134 and 853.

Mean Aerodynamic Chord

163.6 inches. Leading edge of the MAC is located 355.2 inches aft of the C.G. datum.

Minimum Crew

2: pilot & co-pilot

Maximum Occupants   86.

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Type Certificate Data Sheet

(Continuation Sheet)

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Required Equipment   The basic required equipment as prescribed in the applicable airworthiness Requirements must be installed in the airplane for certification.

In addition the following items of equipment are required:

a)   ARB approved Flight Manual Document Number AT.1.1 including all approved amendments.

NOTE 1   Current Weight and Balance Report, including a list of the equipment included in the certificated empty weight, and loading instructions must be provided for each aircraft at the time of original certification.

NOTE 2   All placards required in the approved Flight Manual must be installed in the appropriate locations.

NOTE 3   The aircraft must be operated in accordance with the ARB approved Flight Manual.

NOTE 4   The maximum number of occupants is limited by the type and number of exits. Each passenger configuration must be approved.

- END -

K. Mansfield
Director, Aircraft Certification
for Minister of Transport

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