

CUB PROSPECTOR CF-EQU

WEIGHT AND BALANCE REPORT

Aircraft was weighed in the hanger of Transvision-Television (Canada) Limited at Hamilton, Ontario on June 8, 1949.

The aircraft was placed with the front axle jig on the main scale and the tail was elevated to flight position and the tail wheel placed on a scale. Levelling was checked by the horizontal position of the top longeron between the seats.

The gas tank was empty and there was one gallon of oil in the engine. Standard equipment includes, fire extinguisher, cushions and auxiliary gas tank installation.

C. G. calculations are as follows:

CONDITION A Weight Empty

	<u>Wgt.</u>	<u>Arm</u>	<u>Moment</u>
Front Scale	+685	+ 3	+ 2055
Rear Scale	+ 55	+197	+10835
Oil	- 9 lbs.	- 29	+ 261
	<u>731 lbs.</u>	<u>17.9</u>	<u>13151</u>

CONDITION B All up weight

Condition A	+731	+17.9	+13151
Oil	+ 9	- 29	- 261
Gas (Main)	+ 72	- 18	- 1296
Gas (Auxiliary)	+ 50	+ 70	+ 3500
Pilot (Front)	+170	+ 9	+ 1530
Passenger (Rear)	+170	+ 36	+ 6120
Baggage	+ 18	+ 49	- 882
	<u>1220</u>	<u>19.3</u>	<u>23626</u>

CONDITION C Most rearward position of C.G.

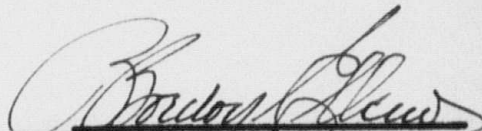
Condition A	731	17.9	13151
Oil	9	-29	- 261
Gas (Auxiliary)	+ 50	+70	+ 3500
Pilot (Front)	+170	+ 9	+ 1530
Baggage	+ 50	+49	+ 2450
	<u>1010</u>	<u>20.1</u>	<u>20370</u>

CONDITION D Most forward position of C.G.

Condition A	731	17.9	13151
Oil	9	-29	- 261
Gas (Main)	72	-18	- 1296
Pilot (Front)	170	+ 9	+ 1530
	<u>982</u>	<u>13.3</u>	<u>13131</u>

Manufacturers limits are ~~+8.7~~^{+10.6} to ~~+20.3~~^{+22.7} as landplane. WDM

*Satisfactory
as landplane
WDM
28 June 49*


B. Gordon Eikin