

| Weight and Balance Calculation                                                                                                                                                                                                                                                |  |        |          |          |         |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------|----------|----------|---------|--|--|--|--|--|--|
|                                                                                                                                                                                                                                                                               |  |        |          |          |         |  |  |  |  |  |  |
| Description                                                                                                                                                                                                                                                                   |  | Weight | Moment   | Mom Wt   |         |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  | pounds | inches   |          |         |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  |        |          |          |         |  |  |  |  |  |  |
| airplane empty                                                                                                                                                                                                                                                                |  | 2576   | 111.97   | 288438   |         |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  |        |          |          |         |  |  |  |  |  |  |
| front seats, both pilots, per autopsy weights                                                                                                                                                                                                                                 |  |        |          |          |         |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  | 508    | 122      | 61976    |         |  |  |  |  |  |  |
| main fuel (120 Gal)                                                                                                                                                                                                                                                           |  | 120    | 804      | 116      | 93264   |  |  |  |  |  |  |
| aux fuel belly tank                                                                                                                                                                                                                                                           |  | 18     | 120.6    | 116      | 13989.6 |  |  |  |  |  |  |
| Rear pax                                                                                                                                                                                                                                                                      |  |        | 127      | 150      | 19050   |  |  |  |  |  |  |
| Aux fuel baggage tank 20 gal                                                                                                                                                                                                                                                  |  | 20     | 134      | 166      | 22244   |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  |        |          |          |         |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  |        |          |          |         |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  |        |          |          |         |  |  |  |  |  |  |
| Total                                                                                                                                                                                                                                                                         |  | 4269.6 | 116.8638 | 498961.6 |         |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  |        |          |          |         |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                               |  |        |          |          |         |  |  |  |  |  |  |
| per the maintenance records, the aux tank was comprised of a belly tank and a tank in the baggage compartment, the total combined capacity was 38 gallons<br>the belly tank CG moment was not listed in the W&B specs, it was assumed to be the same as the main tanks at 116 |  |        |          |          |         |  |  |  |  |  |  |

Weight and Balance  
N401PT  
Lancair IVPT Propjet

STONEMAN

Datum seat at tip of spinner (forward most point of aircraft)

All units of measure are in pounds

Conditions:

Flight ready

Full fuel

With upholstery

With paint

|                           | Weight      | x | Arm         | = | Moment         |
|---------------------------|-------------|---|-------------|---|----------------|
| Nose Gear                 | 670         | x | 49.0        | = | 32830          |
| Left Main                 | 1366        | x | 128.5       | = | 175531         |
| Right Main                | 1334        | x | 128.5       | = | 171419         |
| Front Seat                | <u>340</u>  | x | 122.0       | = | <u>41480</u>   |
| Rear Seat                 | <u>25</u>   | x | 150.0       | = | <u>4025</u>    |
| Baggage                   | <u>3735</u> | x | 161.0       | = | <u>425,285</u> |
| Total                     | 3370        | x | 113.9       | = | 379780         |
|                           |             |   | C.G.        |   |                |
|                           |             |   | (Full fuel) |   |                |
| Fuel                      | -804        | x | 116.0       | = | -93264         |
| Calculated Empty Wt. 2566 |             | x | 111.6       | = | 286518         |
|                           |             |   | C.G.        |   |                |
|                           |             |   | (Empty)     |   |                |

Acceptable Range

108.37 - 116.3

Maximum Gross Weight

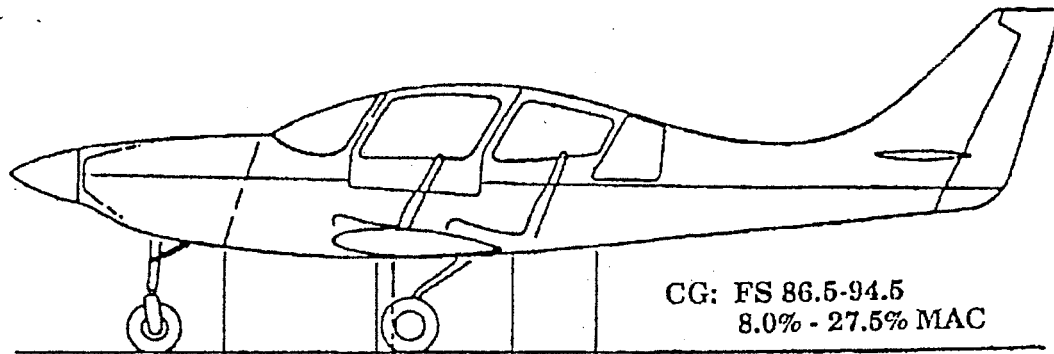
3800 LBS.

5-2-05

AP/IA

# WEIGHT AND BALANCE SHEET

Lancair IV



*Carrying w/3 people  
60 gal Remaining*

N Number:

3 Pass 120 gal fuel

Owned By:

3940

115.2

453.942

|                                           | Weight      | Mom. Arm     | Mom. Wt.<br>(lbs.) | Station        |
|-------------------------------------------|-------------|--------------|--------------------|----------------|
| Less 60 gal                               | -402        | 116          | -46,632            |                |
| Nose Gear                                 |             |              |                    |                |
| Main Gear <del>X</del>                    | <u>3538</u> | <u>115.1</u> |                    | <u>407.310</u> |
| Empty CG                                  |             |              |                    |                |
| Aircraft                                  |             |              |                    |                |
| Pilot                                     | <u>210</u>  | <u>122</u>   | <u>25620</u>       |                |
| Min. Fuel<br>(10 gallons)                 | <u>210</u>  | <u>1</u>     | <u>25620</u>       |                |
| + Copilot                                 | <u>140</u>  | <u>122</u>   | <u>17080</u>       |                |
| 120 Full Fuel<br>( <del>75</del> gallons) | <u>804</u>  | <u>116</u>   | <u>93264</u>       |                |
| + Pass. 3                                 | <u>140</u>  | <u>150</u>   | <u>+21,000</u>     |                |
| Pass. 4                                   |             |              |                    |                |
| + Baggage                                 |             |              |                    |                |
| Fuel 1 Aft Tank<br>20 gal                 | <u>134</u>  | <u>166</u>   | <u>22244</u>       |                |

New TANK to EW  
12.155 x 166

286518  
120

|         |      |        |         |
|---------|------|--------|---------|
| New E/W | 2576 | 111.97 | 288438  |
|         | 3864 | 115.6  | 446,646 |

## Brazy Doug

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**From:** [REDACTED]  
**Sent:** Wednesday, March 2, 2016 3:57 PM  
**To:** Brazy Doug  
**Subject:** info

Doug, as of today I have not received the written statements from either John Cook or his son Quentin Cook, see if you can get those and also send everything you have that has been updated especially the Weight and Balance info. The Pilot Knight weighed 215 lbs., Coalson weighed 280 lbs. and pax Kerfoot was 127 lbs.. Also any info of the lab for the flight videos you sent. Thanks brother.

Michael A. Pupek  
Aviation Safety Inspector  
[REDACTED]