

ERA25MA171

## **OPERATIONS**

Group Chair's Factual Report - ATTACHMENT 3

WEIGHT & BALANCE CHARTS

May 19, 2025

| Meridian Helicopters, LLC                      |                 |                 |                 |                   |                 |
|------------------------------------------------|-----------------|-----------------|-----------------|-------------------|-----------------|
| Model 206L-4 Actual Weight Record              |                 |                 |                 |                   |                 |
| <b>DATE WEIGHED:</b>                           | <b>10/17/19</b> | <b>REG. NO.</b> | <b>N216MH</b>   | <b>SERIAL NO.</b> | <b>52296</b>    |
| Weighing Results                               |                 |                 |                 |                   |                 |
| Cell Location                                  | Scale           | Tare            | Net             |                   |                 |
| Forward Jackpoint ( F.S. 55.16 , B.L. -16.82 ) | 694.0           | 0.0             | 694.0           |                   |                 |
| Forward Jackpoint ( F.S. 55.16 , B.L. +16.82 ) | 720.0           | 0.0             | 720.0           |                   |                 |
| Aft Jackpoint ( F.S. 204.92, B.L. 0.0)         | 1391.0          | 0.0             | 1391.0          |                   |                 |
| <b>TOTAL</b>                                   | <b>2805.0</b>   | <b>0.0</b>      | <b>2805.0</b>   |                   |                 |
| <b>Longitudinal C.G., As Weighed</b>           |                 |                 |                 |                   |                 |
| C.G. =                                         | 55.2            | 1414.0          | 204.9           | 1391.0            | 363040.0        |
| <b>Total Weight</b>                            |                 |                 |                 |                   | 2805.0          |
|                                                |                 |                 |                 |                   | <b>129.4</b>    |
| <b>Lateral C.G., As Weighed</b>                |                 |                 |                 |                   |                 |
| C.G. =                                         | -16.8           | 694.0           | 16.8            | 720.0             | 437.3           |
| <b>Total Weight</b>                            |                 |                 |                 |                   | 2805.0          |
|                                                |                 |                 |                 |                   | <b>0.2</b>      |
|                                                | Longitudinal    |                 |                 | Lateral           |                 |
| Weight Empty Derivation                        | Weight (lb)     | Arms (lbs)      | Moment (lb.ins) | Arm (ins)         | Moment (lb.ins) |
| A/c had 28Lbs at 13.0 and 9lb                  |                 |                 |                 |                   |                 |
| A/C as Weighed                                 | 2805.0          | 129.4           | 363040.0        | 0.2               | 437.3           |
| Remove:                                        |                 |                 |                 |                   |                 |
| Plumb bob                                      | -0.3            | 117.7           | -35.3           | -11.0             | 3.3             |
| Engine Oil                                     | -13.0           | 204.9           | -2663.7         | 0.0               | 0.0             |
| Add:                                           |                 |                 |                 |                   |                 |
| Unuseable Fuel                                 | 0.0             | 94.0            | 0.0             | 0.0               | 0.0             |
| Ballast                                        | 0.0             | 13.0            | 0.0             | -2.5              | 0.0             |
| Ballast                                        | 9.0             | 16.4            | 147.6           | 4.6               | 0.0             |
| Ballast                                        | 0.0             | 21.5            | 0.0             |                   |                 |
| <b>WEIGHT EMPTY</b>                            | <b>2800.7</b>   | <b>128.7</b>    | <b>360488.6</b> | <b>0.2</b>        | <b>440.6</b>    |
| Most Forward C.G.                              |                 |                 |                 |                   |                 |
| Weight Empty                                   | 2800.7          | 128.7           | 360488.6        | 0.2               | 440.6           |
| Add:                                           |                 |                 |                 |                   |                 |
| Pilot                                          | 170.0           | 65.0            | 11050.0         | 14.0              | 2380.0          |
| Passenger, Fwd.                                | 170.0           | 65.0            | 11050.0         | -11.0             | -1870.0         |
| Passenger, Mid (2)                             | 340.0           | 91.0            | 30940.0         | 0.0               | 0.0             |
| Oil, Engine                                    | 13.0            | 204.9           | 2663.7          | 0.0               | 0.0             |
| Passenger, Aft (2)                             | 340.0           | 129.0           | 43860.0         | 0.0               | 0.0             |
| Fuel (59.9 Gal)                                | 407.3           | 117.6           | 47898.5         | 0.0               | 0.0             |
| <b>Total - Most Forward</b>                    | <b>4241.0</b>   | <b>119.8</b>    | <b>507950.7</b> | <b>0.2</b>        | <b>950.6</b>    |
| Most Aft C.G.                                  |                 |                 |                 |                   |                 |
| Weight Empty                                   | 2800.7          | 128.7           | 360488.6        | 0.2               | 440.6           |
| Add:                                           |                 |                 |                 |                   |                 |
| Pilot                                          | 170.0           | 65.0            | 11050.0         | 14.0              | 2380.0          |
| Fuel (110.7 Gal)-JP-5                          | 752.8           | 131.7           | 99143.8         | 0.0               | 0.0             |
| Oil, Engine                                    | 13.0            | 204.9           | 2663.7          | 0.0               | 0.0             |
| Passenger, Aft (2)                             | 340.0           | 129.0           | 43860.0         | 0.0               | 0.0             |
| <b>Total - Most Aft</b>                        | <b>4076.5</b>   | <b>126.9</b>    | <b>517206.0</b> | <b>0.7</b>        | <b>2820.6</b>   |

Signature: \_\_\_\_\_ Cert # \_\_\_\_\_

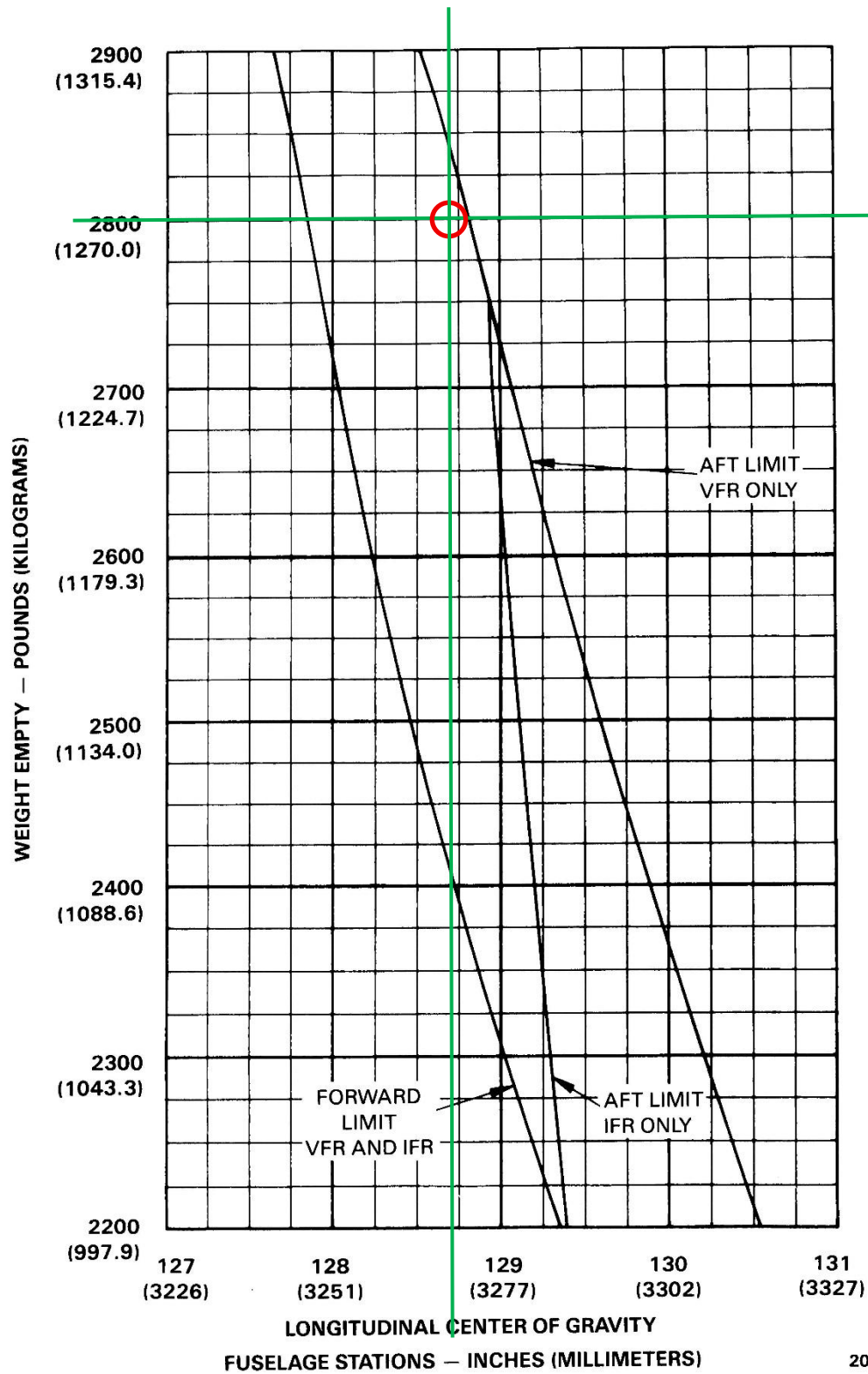


Figure 8-3. Weight empty vs center of gravity.

206L4-M-8-3

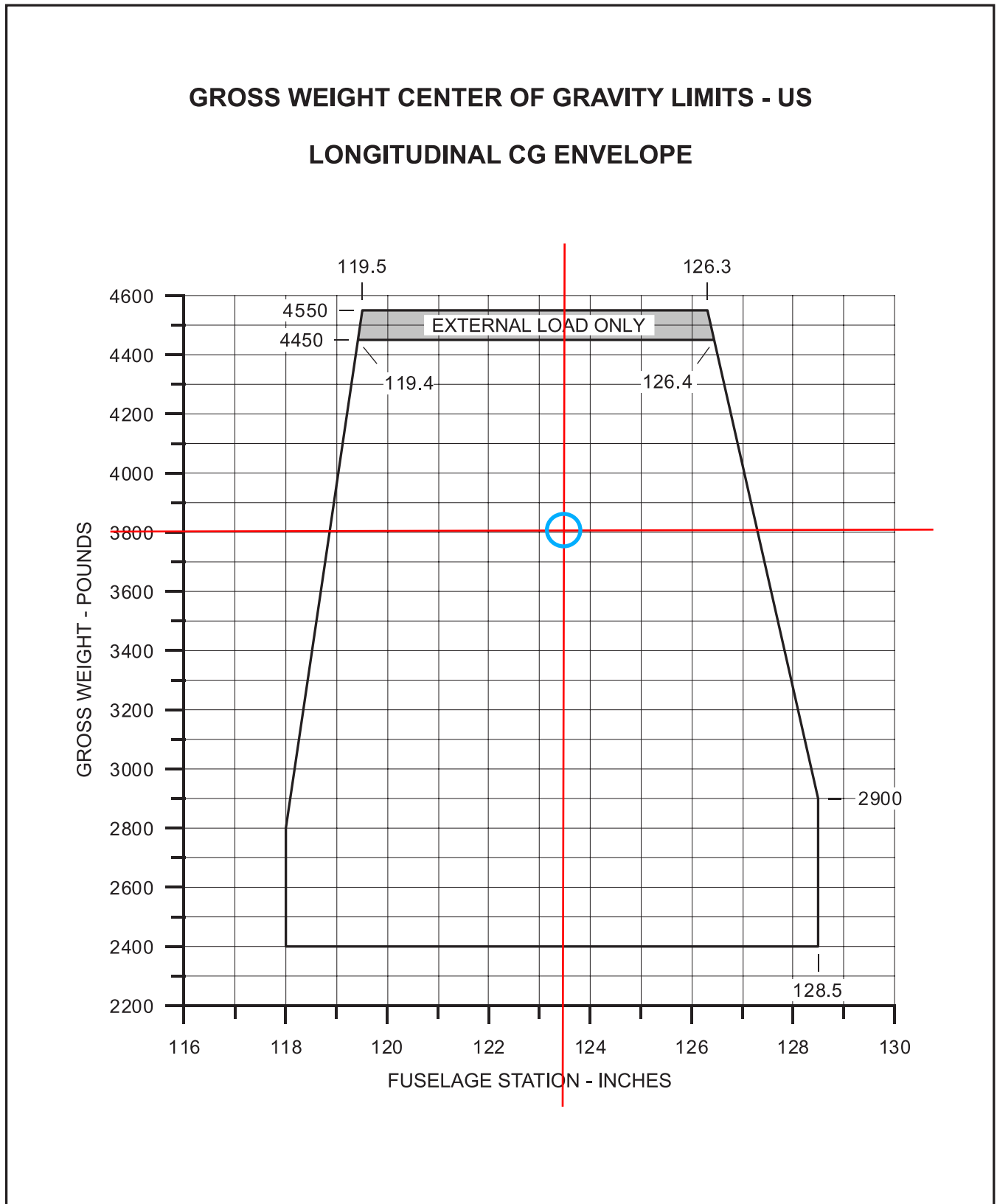


Figure 1-1. Gross Weight Longitudinal Center of Gravity Limits — U.S. (Sheet 1 of 2)

## BASIC WEIGHT AND BALANCE WITH EQUIPMENT RECORD

(CONTINUOUS HISTORY OF CHANGES IN STRUCTURE OR EQUIPMENT AFFECTING WEIGHT AND BALANCE)

[illegible]

END