



## **National Transportation Safety Board**

Office of Aviation Safety  
Washington, D.C. 20594

### **Group Chairman's Factual Report**

## **OPERATIONAL FACTORS**

### **ATTACHMENT**

**Weight and Balance Information as Provided by Delta Private Jets**

WPR19FA230

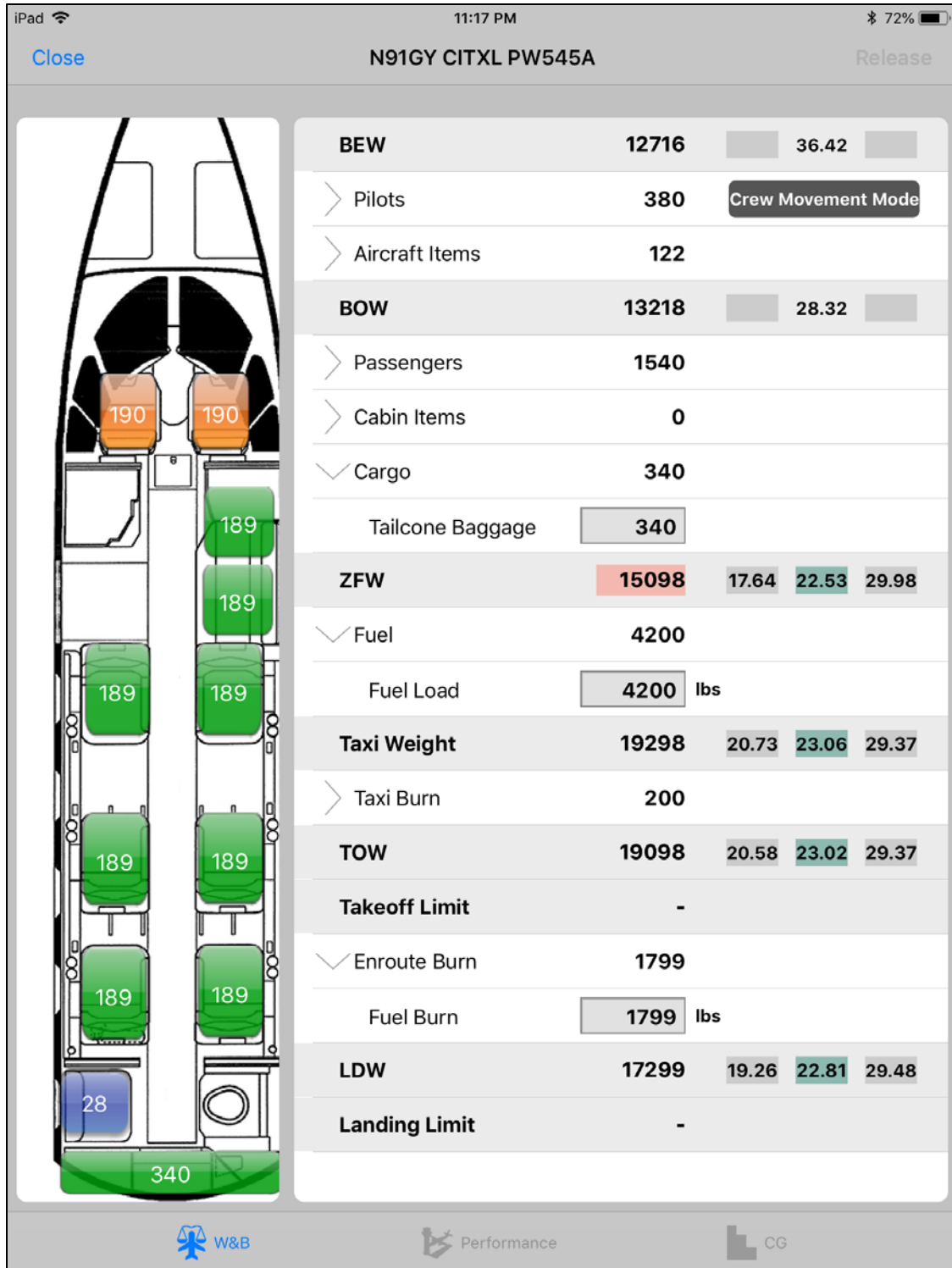


Figure 1 iPreflight (Standard Weights Recreation)

direct.arinc.net

**Include with FPL:**

☒ Wt & Bal/Perf
 ☐ CDR Calculations
 ☐ STD WX Brief
 ☐ U.S. Synopsis WX
 ☐ Airport Info
 ☐ Cost Calculation
 ☐ FlightRisk Summary
 ☐ FlightRisk Detailed

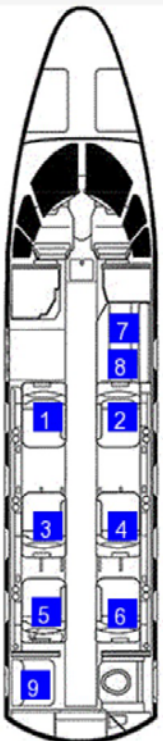
[Close open W&B sections](#)

▼ Weight and Balance/Performance 1 Error

▼ Weight and Balance

N91GY

**ZFW is 75 lbs greater than Maximum ZFW**



| Item                    | Weight lbs     | CG %MAC | CG In |
|-------------------------|----------------|---------|-------|
| <b>Empty Weight</b>     | 12693          |         |       |
| ▶ Pilots                | 380            |         |       |
| ▶ Aircraft Items        | 122            |         |       |
| ▶ Cabin Crew            | 0              |         |       |
| <b>BOW</b>              | 13195          |         |       |
| ▼ Passengers            | 1512           |         |       |
| Passenger 1             | 189            |         |       |
| Passenger 2             | 189            |         |       |
| Passenger 3             | 189            |         |       |
| Passenger 4             | 189            |         |       |
| Passenger 5             | 189            |         |       |
| Passenger 6             | 189            |         |       |
| Passenger 7 (SFS)       | 189            |         |       |
| Passenger 8 (SFS)       | 189            |         |       |
| Passenger 9 (Aft SFS)   | 0              |         |       |
| ▼ Cabin Cargo           | 28             |         |       |
| RH Fwd Closet           | 0              |         |       |
| Aft Closet              | 0              |         |       |
| Seat 9 Cargo            | 28             |         |       |
| ▼ Cargo                 | 340            |         |       |
| Tailcone Baggage        | 340            |         |       |
| <b>Zero Fuel Weight</b> | 15075          |         |       |
| ▶ Fuel (6.7 Lbs/Gal)    | 4200           |         |       |
| <b>Taxi Weight</b>      | 19275          |         |       |
| ▶ Taxi                  | 200            |         |       |
| Takeoff Fuel            | 0              |         |       |
| <b>Takeoff Weight</b>   | 19075          |         |       |
| <b>Takeoff Limit</b>    | Not Calculated |         |       |
| ▶ Enroute               | 1875           |         |       |
| <b>Landing Weight</b>   | 17200          |         |       |
| <b>Landing Limit</b>    | Not Calculated |         |       |

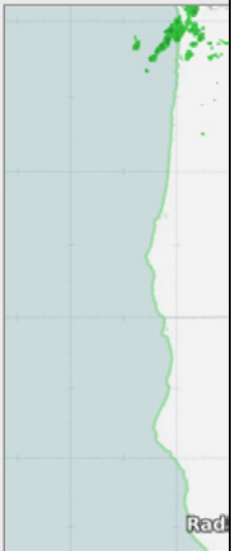
▼ Performance

Departure

ICAO: KOVE

Destination

ICAO: KPDJ



30m Loop Over 3hr

**Currently Mapping: Optima**

Click map to expand view and features

Figure 2: Direct ARINC (Standard Weights Recreation)

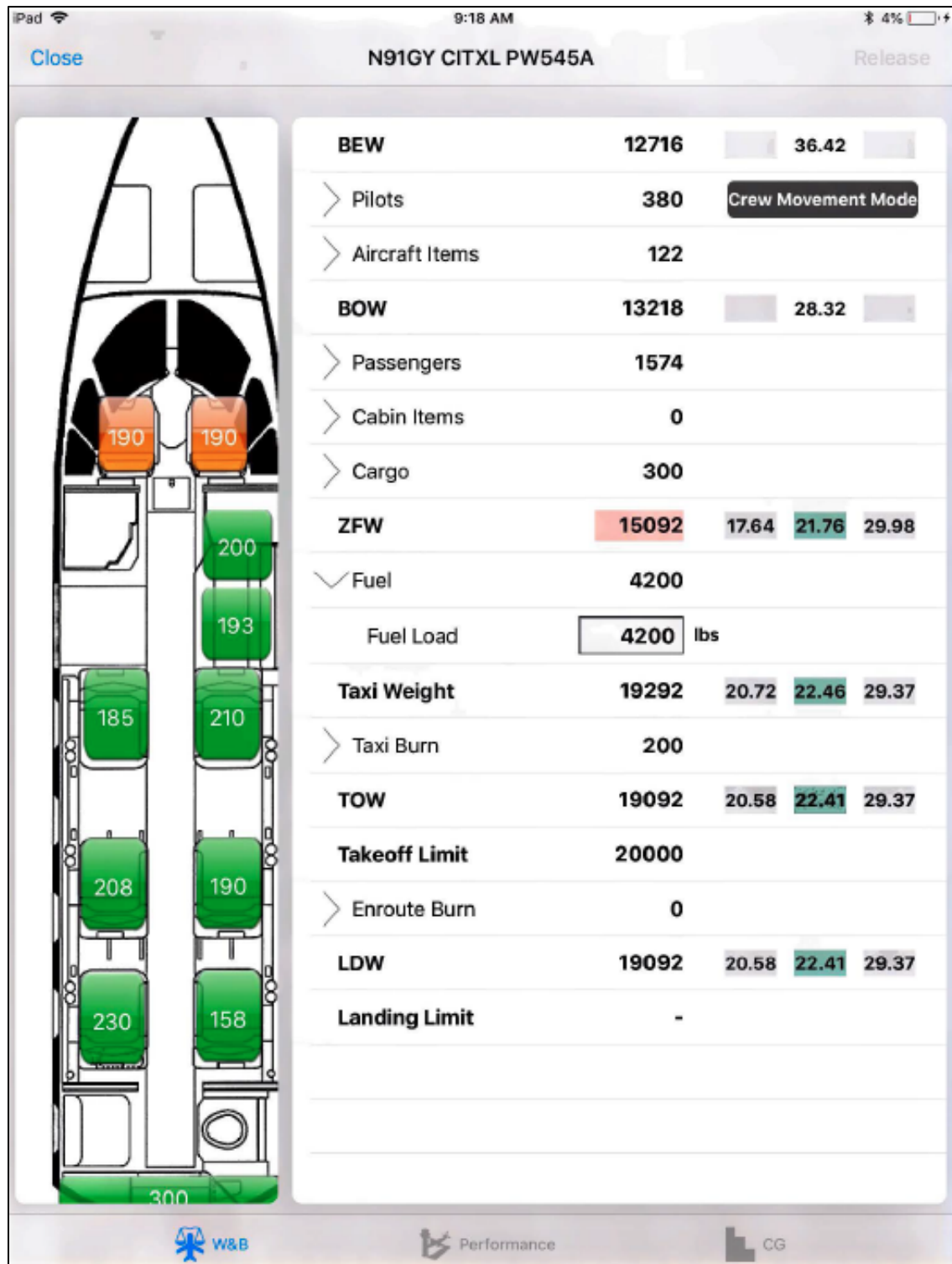


Figure 3: iPreFlight Application (Actual Weights Recreation)

ARINCDirect

8:22 AM

13%

direct.arinc.net

Min Fuel to Alternate: 0 lbs

Taxi Out Fuel: 200 lbs

☒ Wt & Bal/Perf
 ☐ CDR Calculations
 ☐ STD WX Brief
 ☐ U.S. Synopsis WX

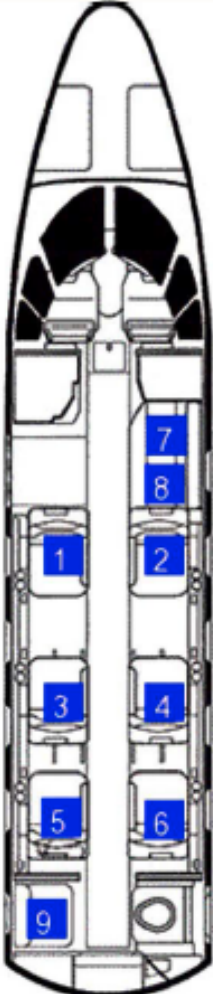
**Include with FPL:**
☐ Airport Info
 ☐ Cost Calculation
 ☐ FlightRisk Summary
 ☐ FlightRisk Detailed

Weight and Balance/Performance

Weight and Balance

N91GY

ZFW is 69 lbs greater than Maximum ZFW



| Item                    | Weight lbs     | CG %MAC | CG In |
|-------------------------|----------------|---------|-------|
| <b>Empty Weight</b>     | 12693          |         |       |
| ▶ Pilots                | 380            |         |       |
| ▶ Aircraft Items        | 122            |         |       |
| ▶ Cabin Crew            | 0              |         |       |
| <b>BOW</b>              | 13195          |         |       |
| ▶ Passengers            | 1574           |         |       |
| ▶ Cabin Cargo           | 0              |         |       |
| ▶ Cargo                 | 300            |         |       |
| <b>Zero Fuel Weight</b> | 15069          |         |       |
| ▶ Fuel (6.7 Lbs/Gal)    | 4200           |         |       |
| <b>Taxi Weight</b>      | 19269          |         |       |
| ▶ Taxi                  | 200            |         |       |
| Takeoff Fuel            | 0              |         |       |
| <b>Takeoff Weight</b>   | 19069          |         |       |
| <b>Takeoff Limit</b>    | Not Calculated |         |       |
| ▶ Enroute               | 1727           |         |       |
| <b>Landing Weight</b>   | 17342          |         |       |
| <b>Landing Limit</b>    | Not Calculated |         |       |

Load Manifest

Clear Entries

Performance

Figure 4: Direct ARINC (Actual Weights Recreation)

| Delta Private Jets, Inc.                                                                                                                                                                                                                       |          |                       |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------|---------------|
| Equipment Change - Weight and Balance                                                                                                                                                                                                          |          |                       |               |
| Registration Number                                                                                                                                                                                                                            | Make     | Model                 | Serial Number |
| N91GY                                                                                                                                                                                                                                          | Cessna   | 560XL                 | 560XL-5314    |
|                                                                                                                                                                                                                                                | Weight   | Arm                   | Moment        |
|                                                                                                                                                                                                                                                | Pounds   | Inches                | Inch/Pounds   |
| Previous Aircraft Empty Weight                                                                                                                                                                                                                 | 12692.80 | 337.01                | 4277637.02    |
| Items:                                                                                                                                                                                                                                         |          |                       |               |
| Installed Items                                                                                                                                                                                                                                |          |                       |               |
| # 1 GTX3000                                                                                                                                                                                                                                    | 6.00     | 68                    | 408           |
| # 2 GTX3000                                                                                                                                                                                                                                    | 6.00     | 84.26                 | 505.56        |
| GDL88                                                                                                                                                                                                                                          | 4.10     | 81.83                 | 335.503       |
| # 1 AMC                                                                                                                                                                                                                                        | 0.90     | 66.9                  | 60.21         |
| # 2 AMC                                                                                                                                                                                                                                        | 0.90     | 67.17                 | 60.453        |
| GA36 GPS ANTENNA                                                                                                                                                                                                                               | 0.47     | 177.57                | 83.4579       |
| UAT ANTENNA                                                                                                                                                                                                                                    | 0.25     | 78.61                 | 19.6525       |
| FLIGHT STREAM 110                                                                                                                                                                                                                              | 0.27     | 177.68                | 47.9736       |
| RT300 RADALT                                                                                                                                                                                                                                   | 4.60     | 81.89                 | 376.694       |
| Removed Items                                                                                                                                                                                                                                  |          |                       |               |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
|                                                                                                                                                                                                                                                |          |                       | 0.00          |
| Total                                                                                                                                                                                                                                          | 12716.29 | 336.54                | 4279534.52    |
| New Empty Weight                                                                                                                                                                                                                               |          | 12716.29 Pounds       |               |
| New Empty Weight Center of Gravity                                                                                                                                                                                                             |          | 336.54 Inches         |               |
| New Empty Weight Moment                                                                                                                                                                                                                        |          | 4279534.5 Inch/Pounds |               |
| This new weight and balance information supersedes all previous weight and balance data. For aircraft loading, see instructions in the Weight and Balance Section of the Aircraft Flight Manual or Weight and Balance Manual where applicable. |          |                       |               |
| Sign: <span style="background-color: black; color: black;">[REDACTED]</span> Date: 11-Apr-19<br>By: Rodger Sizemore For Delta Private Jets, Inc (CRS # <span style="background-color: black; color: black;">[REDACTED]</span> )                |          |                       |               |

Figure 5: DPJ Accident Airplane Basic Empty Weight Data Sheet

Begin forwarded message:

**From:** FlightControl [REDACTED]  
**Date:** August 28, 2019 at 12:54:56 PM EDT  
**To:** "Coulter, Don" [REDACTED], "Carroll, Mark"  
[REDACTED]  
**Cc:** EmergencyResponse [REDACTED] FlightControl  
[REDACTED]  
**Subject:** N91GY Requested W&B preflight data

**8/20**

SBA-SNA – EMPTY REPO

**Weight and Balance**

|               |       |        |       |
|---------------|-------|--------|-------|
| CG:           | 28.25 | MATOW: | 20000 |
| CG Limit Fwd: | 19.14 | GTOW:  | 17138 |
| CG Limit Aft: | 29.52 | GLNDW: | 15938 |

SNA-VIS – 8 PAX

WEIGHTS #170 / 200 / 180 / 147 / 165 / 190 / 155 / 178

**Weight and Balance**

|               |       |        |       |
|---------------|-------|--------|-------|
| CG:           | 23.91 | MATOW: | 20000 |
| CG Limit Fwd: | 20.52 | GTOW:  | 19013 |
| CG Limit Aft: | 29.37 | GLNDW: | 17617 |

VIS-OVE – 8 PAX

WEIGHTS #170 / 200 / 180 / 147 / 165 / 190 / 155 / 178

Figure 6: DPJ Flight Operation System W&B Data Memo

**Weight and Balance**

|               |       |        |       |
|---------------|-------|--------|-------|
| CG:           | 23.75 | MATOW: | 20000 |
| CG Limit Fwd: | 20.51 | GTOW:  | 18998 |
| CG Limit Aft: | 29.37 | GLNDW: | 17739 |

**8/21**

OVE-PDK – 8 PAX

WEIGHTS #170 / 200 / 180 / 147 / 165 / 190 / 155 / 178

**Weight and Balance**

|               |       |        |       |
|---------------|-------|--------|-------|
| CG:           | 23.75 | MATOW: | 20000 |
| CG Limit Fwd: | 20.51 | GTOW:  | 18998 |
| CG Limit Aft: | 29.37 | GLNDW: | 17739 |

Angela Kovaleski

[REDACTED]



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Figure 7: DPJ Flight Operation System W&B Data Memo