## **Takeoff Performance Analysis**

| Date/Time          | Takeoff     | Ground | Dist to    | Flaps | Weight   | Winds        | OAT        | Runway    | Runway  | Density  | Altimeter | Takeoff | Takeoff | Takeoff | Notes |
|--------------------|-------------|--------|------------|-------|----------|--------------|------------|-----------|---------|----------|-----------|---------|---------|---------|-------|
|                    | Туре        | Roll   | Clear      |       | (Pounds) |              | <b>(F)</b> | Elevation | Heading | Altitude | ("Hg)     | IAS     | TAS     | GS      |       |
|                    |             | (Feet) | 50' (Feet) |       |          |              |            | (Feet)    |         | (Feet)   |           | (MPH)   | (MPH)   | (MPH)   |       |
| 7/16/19 08:17      | Short Field | 1,164  | 1,713      | 15    | 895      |              | 68         | 375       | 244     | 865      | 30.08     | 72      | 73      | 73      |       |
| 6/23/19 19:42      | Short Field | 1,198  | 1,894      |       | 905      |              | 73         | 373       | 241     | 1,435    | 29.88     | 73      | 74      | 76      |       |
| 8/24/19 09:11      | Short Field | 1,361  | 1,901      |       | 880      |              | 63         | 371       | 241     | 397      | 30.18     | 71      | 72      | 81      |       |
| 7/13/19 09:29      | Short Field | 1,248  | 2,500      | 15    | 910      | 40° at 5 MPH | 72         | 375       | 239     | 1,233    | 29.96     | 69      | 68      | 74      |       |
| Average            |             | 1,243  | 2,002      |       | 898      |              | 69         | 374       |         | 983      | 30.02     | 71      | 72      | 76      |       |
| Minimum            |             | 1,164  | 1,713      |       | 880      |              | 63         | 371       |         | 397      | 29.88     | 69      | 68      | 73      |       |
| Maximum            |             | 1,361  | 2,500      |       | 910      |              | 73         | 375       |         | 1,435    | 30.18     | 73      | 74      | 81      |       |
| Standard Deviation |             | 74.460 | 297.30     |       | 11.456   |              | 4          | 1.6583    |         | 395.01   | 0.1143    | 1.4790  | 2.2776  | 3.0822  | (1)   |

## Notes

(1) From Wikipedia (https://en.wikipedia.org/wiki/Standard\_deviation): In statistics, the standard deviation is a measure that is used to quantify the amount of variation or dispersion of a set of data values. A low standard deviation indicates that the data points tend to be close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the data points are spread out over a wider range of values.