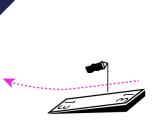
A day of fair-weather flying, tailwinds, and an on-airport restaurant with the tastiest barbeque in the county: What could be better? The after-lunch departure, however, leaves you deciding between departing uphill and upwind, downhill and downwind. Trees off one runway end complicate matters further. Don't wait too long; this fair weather won't last.



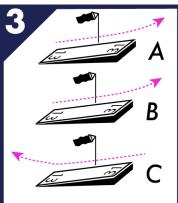
**Scenario Choices:** 



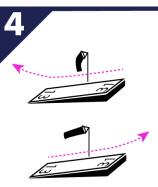




Be a rugged individualist and depart Runway 31 downwind, but downhill and unobstructed.

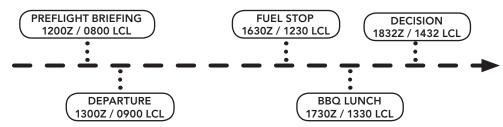


Depart Runway 13 without passengers and evaluate. If OK, return and depart Runway 13. If not, try Runway 31.



Wait for the winds to die down and depart Runway 31–or pick up a lot and depart Runway 13.

### Timeline



# Flight Plan (from fuel stop to BQ1)

| Aircraft ID             | Flight<br>Rules  |                    |                 | Type of<br>Aircraft |               | Proposed<br>Dept Time | Departure<br>Airport | Destination<br>Airport |
|-------------------------|------------------|--------------------|-----------------|---------------------|---------------|-----------------------|----------------------|------------------------|
| N9609T                  | VFR              | GenAv              |                 | BE35                |               | 1700                  | KUDG                 | BQ1                    |
| Route of Flig           | Jht              |                    |                 |                     |               |                       |                      | Altitude               |
| Direct                  |                  |                    |                 |                     |               |                       |                      | 4500                   |
| Cruise<br>Speed         |                  |                    | Fuel c<br>(hh:m | on Board<br>m)      | Remarks       |                       |                      |                        |
| 160                     | 00:20            |                    | 05:00           | )                   | lf unable to  | land at BQ1           | , will continu       | e to KIGX              |
| Alternate<br>Airport(s) | Number<br>Aboard | Color o<br>Aircraf |                 | Pilot's Name        | and Contact I | Info                  |                      |                        |
| KIGX                    | 3                | BL/W               |                 | Pilot N. Command    |               |                       |                      |                        |

# Preflight Weather (after lunch update)

### **METARs**

KUDG 201756Z AUTO VRB04KT 10SM CLR 27/18 A3023

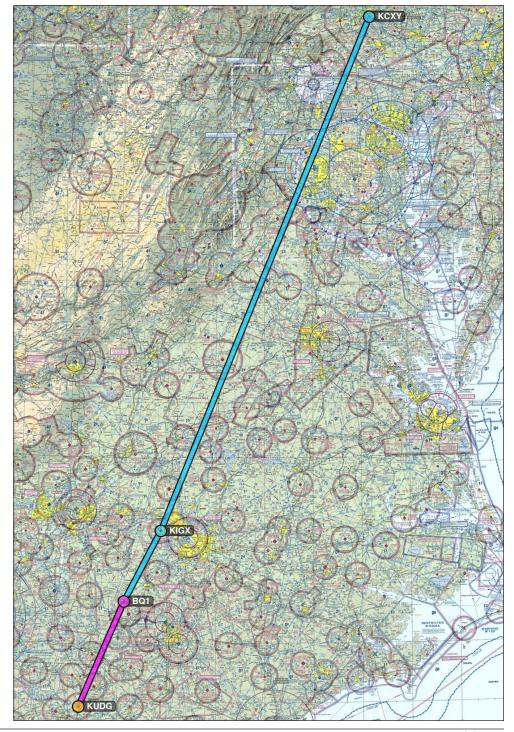
KSOP 201756Z AUTO 14007KT 10SM SCT030 27/19 A3000

KCXY 201756Z 27006KT 10SM CLR 22/16 A2995

### TAF

KMDT 201750Z 2018/2118 27005KT P6SM SKC FM202100 26008G13KT P6SM SCT250 FM210100 26008G16KT P6SM VCSH SCT250 OVC035

## Whole Route

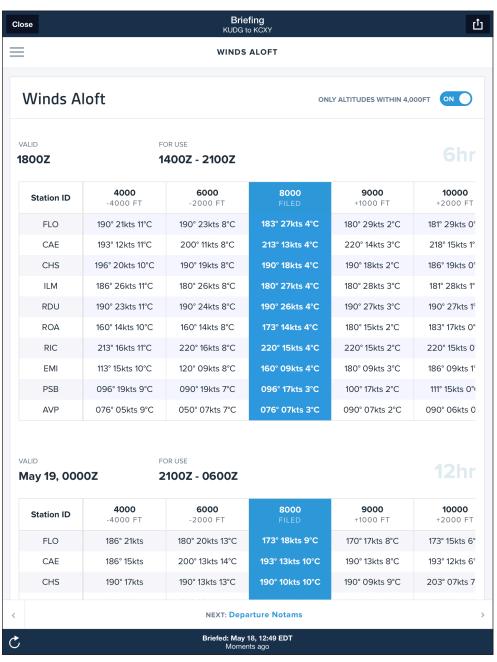




# Weight and Balance

| W&B Profiles             | 35                        | ث                        |  |
|--------------------------|---------------------------|--------------------------|--|
| Aircraft load            | is within limits          |                          |  |
| RONT SEATS               | GRAPH                     |                          |  |
| Pilot 220 lb             | o takeoff<br>landing      | zero fuel                |  |
| Co-pilot 185 lb          |                           |                          |  |
| ACK FWD-FACING SEATS     |                           |                          |  |
| Passenger 150 lb         |                           |                          |  |
| Passenger 0 lb           | ц.                        |                          |  |
| BAGGAGE AREA / THIRD ROW | Weight                    |                          |  |
| 98 B                     |                           |                          |  |
| UEL TANKS                |                           |                          |  |
| <b>2</b> 67 gal 100LL    | /                         | ۵                        |  |
|                          | Ramp Weight<br>Ramp Fuel  | 3,351 lb<br>67 gal 100LL |  |
|                          | Ramp Fuel 67 gal          |                          |  |
|                          | TAKEOFF (MAX 3,400 LB)    |                          |  |
|                          | Takeoff Weight            | 3,351 lb                 |  |
|                          | CG (81.6 to 84.6)         | 82.4 in                  |  |
|                          | Takeoff Fuel 67 gal 100LL |                          |  |
|                          | LANDING (MAX 3,400 LB)    |                          |  |
|                          | Landing Weight 3,351 lk   |                          |  |
|                          | CG (81.6 to 84.6)         | 82.4 in                  |  |
|                          | Fuel Remaining            | 67 gal 100LL             |  |
|                          | ZERO FUEL                 |                          |  |
| Edit Load Setup          | Zero Fuel Weight          | 2,949 lb                 |  |
|                          |                           |                          |  |

# Winds Aloft





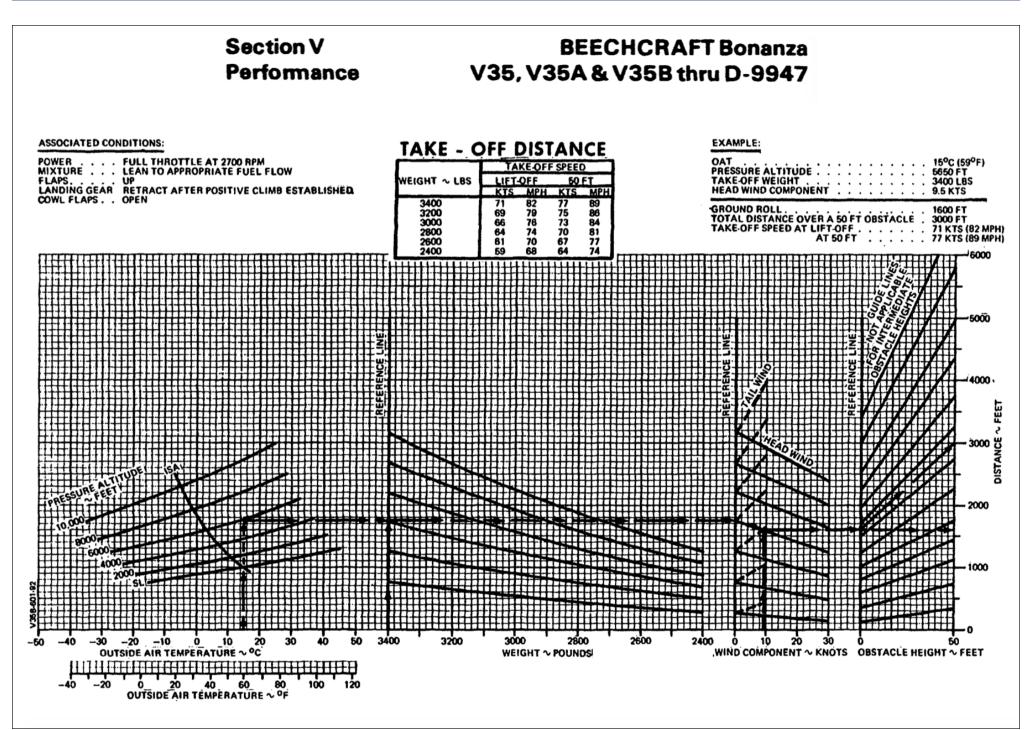
# Section V Performance

# BEECHCRAFT Bonanza V35, V35A & V35B thru D-9947

# LANDING DISTANCE

#### ASSOCIATED CONDITIONS: EXAMPLE: SPEED AT 50 FT WEIGHT ~ LBS RETARDED TO MAINTAIN 900 FT/MIN ON FINAL APPROACH KTS MPH 25°C (77°F) DAT POWER . PRESSURE ALTITUDE . 3965 FT 3242 LBS 3400 3200 3000 2800 2600 WEIGHT . . . . . FLAPS DOWN 70 68 66 63 61 81 LANDING GEAR HEADWIND COMPONENT 79 76 73 71 9 KTS DOWN PAVED, LEVEL, DRY SURFACE RUNWAY . . . . . . . GROUND ROLL. 763 F T APPROACH SPEED . . . . 1324 FT 69 KTS (80 MPH) MAXIMUM BRAKING . . . . . . . . 2400 68 59 2500 FEET 500 DISTANCE ~ 000 500 2400 50 0 20 0 -20 -10 0 20 30 40 3400 3200 3000 2800 2600 10 30 -30 10 50 OUTSIDE AIR TEMPERATURE ~ °C WIND COMPONENT ~ KNOTS WEIGHT ~ POUNDS -20 20 40 60 100 120 OUTSIDE AIR TEMPERATURE ~ OF





**PILOT** WORKSHOPS

### **Chart Supplements**

| CARTHAGE                               |             |                   |                                   |                        |
|--|-------------|-------------------|-----------------------------------|------------------------|
| GILLIAM – MC CONNELL AIRFIELD (BQ      | 1) 1 SW     | UTC-5(-4DT)       | N35º20.50' W79º26.22'             | CHARLOTTE              |
| 445 NOTAM FILE RDU Not insp.           |             |                   |                                   |                        |
| RWY 13-31: H2538X36 (ASPH)             |             |                   |                                   |                        |
| RWY 31: Thid dsplcd 300'. Tree.        |             |                   |                                   |                        |
| SERVICE: FUEL 100LL                    |             |                   |                                   |                        |
| AIRPORT REMARKS: Attended 1400Z‡-SS. D | ay phone 9  | 10-695-5216.75    | 5' trees north, south, east and w | est of arpt. Turf area |
| marked with yellow cones. Turf area m  | narked with | yellow cones. Rwy | 31 dsplcd thld marked with 4      | wide white stripe.     |
| AIRPORT MANAGER: 910-695-5216          |             |                   |                                   |                        |
| COMMUNICATIONS: CTAF 122.9             |             |                   |                                   |                        |

## Aerial Photo of BQ1



### **Cirrus Takeoff Chart (for runway slope correction)**

| Section 5<br>Performance Data | Cirrus Design<br>SR22 |  |  |
|-------------------------------|-----------------------|--|--|
| Takeoff Distance              |                       |  |  |
| Conditions:                   |                       |  |  |
| Winds                         | Zero                  |  |  |
| Runway                        | Dry, Level, Paved     |  |  |
| Flaps                         | 50%                   |  |  |
| Power                         | Full Throttle         |  |  |
| Mixture                       | Set per Placard       |  |  |

#### Note

The following factors are to be applied to the computed takeoff distance for the noted condition:

- Headwind Subtract 10% from computed distance for each 12 knots headwind.
- Tailwind Add 10% for each 2 knots tailwind up to 10 knots.
- Grass Runway, Dry Add 20% to ground roll distance.
- Grass Runway, Wet Add 30% to ground roll distance.
- Sloped Runway Increase table distances by 22% of the ground roll distance at Sea Level, 30% of the ground roll distance at 5000 ft, 43% of the ground roll distance at 10,000 ft for each 1% of upslope. Decrease table distances by 7% of the ground roll distance at Sea Level. 10% of the ground roll distance at 5000 ft. and 14% of the ground roll distance at 10,000 ft for each 1% of downslope.

#### Note

The above corrections for runway slope are required to be included herein. These corrections should be used with caution since published runway slope data is usually the net slope from one end of the runway to the other. Many runways will have portions of their length at greater or lesser slopes than the published slope, lengthening (or shortening) takeoff ground roll estimated from the table.

- If brakes are not held while applying power, distances apply from point where full throttle and mixture setting is complete.
- · For operation in outside air temperatures colder than this table provides, use coldest data shown.
- · For operation in outside air temperatures warmer than this table provides, use extreme caution.
- · Aircraft with optional Air Conditioning System Add 100 feet to ground roll and 150 feet to distance over 50 foot obstacle.



