King Air B200 POH

Pilot's Operating Handbook:

This section includes performance data on the King Air B200. Information consists of:

1. Critical Airspeeds
2. Operating NOTAMS
3. Fuel Loading Formula

Checklists:

This section includes checklists for each phase of flight.

1. Pre-Flight
2. Pre-Engine Start
3. Engine Start
4. Pre-Taxi
5. Pre-Takeoff
6. Takeoff
7. Post-Takeoff
8. Climb
9. Cruise
10. Descent
11. Pre-Approach
12. Approach
13. Landing
14. Post-Landing
15. Parking
1. Critical Airspeeds

Taxi:
- Max. 22 Knots on straight taxiways
- Max. 16 Knots in turns
- Max. 12 Knots approaching gates/parking areas

Takeoff:
- \( V_1 \) - Decision Speed = 74 Knots
- \( V_r \) - Rotate Speed = 96 Knots

Climb Rate:
- Climb Rate: Set to 1,800 ft./min. (Higher rates of climb, up to 2,500 ft./min. are permitted.)
  - **Note**: Climb rate is normally dictated by airspeed - that is, you fly a certain airspeed that yields a certain climb rate. This POH specifies a climb rate instead to give you, the pilot in command, a guide to climb performance of this aircraft.

Climb Airspeed:
- Departure Altitude to 10,000 ft. - no greater than 250 KIAS
- Above 10,000 ft. - Fly Mach Number = 0.48 - 0.50
- \( V_{ne/Mo} \) - Never Exceed/Maximum Mach Number = .0.53

Cruise Airspeed:
- 0.46 - 0.49
- \( V_{fe} \) = 200 kts
- \( V_{no} \) =259 kts
- \( V_{ne} \) = 302 kts
- \( M_{mo} \) = 0.53

Descent Information:
- To calculate Top Of Descent point (the point at which you need to begin your descent to reach the desired altitude at the desired time): Use 4.9 miles per minute (at Mach .49 in descent - 250 KIAS below 10,000 ft. MSL) as the basis. This is a "No Wind" calculation. If you have a tailwind, the miles per minute will be greater; if you have a headwind, the miles per minute will be lower.
- Descend with Auto-throttle set to hold Mach .47 to 10,000 ft. MSL - set to 230 KIAS below 10,000 ft. MSL.
- Set descent rate to 1,800 ft./min

Approach Information:
- Approach Airspeed:
  - Initial Phase - 180 KIAS
  - Approach Course Intercept - 150 to 170 KIAS
  - Final Approach (Stab. on ILS or Visual Approach) - Begin to decrease airspeed to landing airspeed of 115 KIAS.
- Flaps: Safe Deployment Airspeed: 195 KIAS
  - Begin to configure the aircraft for the approach with flaps deployment beginning at 160 KIAS. To provide for a stabilized approach, have the aircraft fully configured for landing (gear down, spoiler armed, full flaps) at 5 NM from landing.
- At Outer Marker: Deploy Landing Gear

Landing:
- Minimum Runway Length: 2,800 ft.
- Target Landing Airspeed: 100 KIAS
- Landing Speed can be decreased to 84 KIAS for shorter runways. When landing at speeds lower than 115 KIAS, you will need to maintain a higher power setting and steeper body angle to prevent excessive rate of descent.
- Check flaps full and gear down at 500 ft. above airport altitude.
- Upon landing (all gear on runway)
  - Apply brakes as needed to safely exit runway
- Exit runway at 15 Knots or less.
2. Operating NOTAMS:

- None at this time.

3. Fuel Loading Formula

- Range = 1,883 NM
- Max fuel: 3,645 lb
- Fuel Burn Rate Factor = 0.552
- Fuel Base Amount = 885 lb (this is the basic fuel load per flight and includes fuel for taxi, climb, descent and reserves)

**NOTAM:** You can always use a full fuel load if you expect headwinds or want an extra measure of safety. Note that the Fuel Loading Formula is specific for No Wind conditions. A tailwind will decrease the amount of fuel consumed. A headwind will increase the amount of fuel consumed. Note that fuel consumption varies with your cruising settings. Expect separate sheet with critical data to come.

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((\text{Fuel Base Amount}) + (\text{Trip Distance} \times \text{Fuel Burn Rate Factor}))/2 = \text{Fuel Load Per Tank}
\]

**Checklists:**

**Pre-Flight:**

- Select departure airport and position aircraft at gate
- Engines off
- Set airspeed indicator to read Indicated Airspeed
- Flight plan completed
- Fuel Load computed and loaded
- Departure procedures reviewed and charts/documents at hand
- Weather for flight set
- Log sheet ready

**Pre-Engine Start:**

- Parking Brake Set
- Waypoints loaded into FMS (Flight Management System)
- Nav Radios Set
- Com Radios Set
- Copy ATIS

**Engine Start:**

- Parking Brake Set
- Engine Area Clear
- Throttle Set to Idle
- Start Fuel Flow
- Start Engines
- Check Engine Operating Normally

**Pre-Taxi:**

- Flaps 1 (NOTAM: Flaps are "0" when retracted and "3" when fully deployed. Flaps "3" indicates the third detent.)
- Check Control Continuity:
  - Confirm Full Aileron Movement
  - Confirm Full Rudder Movement
  - Confirm Full Elevator Movement
- Push Back
- Release Parking Brake
- Taxi to departure runway - set parking brake when holding short of departure runway
Pre-Takeoff:
- Check parking brake set
- Check Set to Flaps 1
- Check engine operating normally
- Auto Pilot On (Do not engage individual A/P functions until airborne.)
- Airspeed set to 230 KIAS
- Departure heading set (Runway Heading Unless Otherwise Directed or Necessary For Safe Departure.)
- "Cleared to" altitude set (This is the altitude you received during your departure)
- Taxi into position and hold

Takeoff:
- Release Parking Brake
- Set power to maximum thrust (full throttle)
- $V_1 = 74$ Knots (Decision Speed)
- $V_r = 96$ Knots (Rotate Speed)
- Initial climb at $9^\circ$ BA (Body Angle)
- Positive Rate Of Climb - Gear Up
- Retract Flaps:
  - Flaps Two: 110 KIAS
  - Flaps One: 145 KIAS
  - Flaps Retracted: 170 KIAS

Post Takeoff:
- Engage Auto-throttle
- Engage Heading Hold
- Engage Altitude Hold
- Check gear up
- Check flaps up
- Check A/P Functioning Properly

Climb:
- Rate of Climb - 2,100 ft./min. (Set to 2,500 ft./min. for expedited climb.)
- Airspeed
  - 250 KIAS under 10,000 ft.
  - Mach .49 - .51 above 10,000 ft.
- Increase throttle as needed to hold published climb airspeed

Cruise:
- Airspeed
  - Mach .49 - .51
  - $V_{ne/Mmo} - Mach .53$ (Never Exceed/Maximum Mach Number)
- Ensure On Course Navigation
- Log TO and cruis data continuously

Descent:
- Set Auto-Throttle to desired airspeed - not to exceed 250 KIAS below 10,000 ft.
- "Cleared To" Altitude Set (the altitude to which you will be descending)

Pre-Approach
- Approach Plate Out
- Approach Brief (Brief yourself on the approach, how you plan to execute it, missed approach procedures, approach and landing configuration review - when to set flaps and lower gear, altitude at approach fixes and any other relevant information to ensure full understanding of approach)
- ILS Freq. Set (Once turned/cleared for approach - do not set ILS freq. if you are still tracking an en-route or approach procedure NAV Aid)
**Approach:**
- Spoiler Armed
- Fly published approach as briefed.
- Normal Approach Airspeed:
  - 115 KIAS (Short Field Landings - 96 KIAS)
- Landing Configuration set at outer marker
  - Gear Down
  - Flaps Full

EXECUTE MISSED APPROACH if you can not establish a stabilized approach or if you deviate significantly from the ILS localizer and/or glideslope.

**Landing:**
- Target Airspeed: 115 KIAS (Short Field Landings - 84 KIAS)
- After touchdown:
  - Apply Brakes as needed to safely exit runway
  - Exit Runway at 15 Knots or less

**Post Landing:**
- Flaps Up
- Taxi To Terminal/Ramp

**Parking:**
- Parking Brake Set
- Flaps Up
- Spoilers Retracted
- Engines Off

**Debriefing:**
- Log into dESPair logbook
- Log/Close your flight and don't forget to enter any aircraft relevant data