

BEECHCRAFT BONANZA G36

Checklist & Procedures for MS Flight Simulator

by JayDee v0.2

SPECIFICATIONS / LIMITATIONS

Max. Takeoff Weight.....3.650 lbs
Max. Landing Weight.....3.650 lbs
Service Ceiling.....18.500 ft
Max. Demonstrated Crosswind.....17 kts

Flying in ICING CONDITIONS.....PROHIBITED

VA (Max. Maneuver Speed).....141 KIAS
VSO (Stall Speed Full Flaps).....61 KIAS
VNE (Never Exceed Speed).....205 KIAS
VNO (Max. Structural Cruising Speed).....167 KIAS
VLE (Max. Gear Extended Speed).....154 KIAS
VFE Approach (Max. Flaps Extended Speed).....154 KIAS
VFE Full (Max. Flaps Extended Speed).....124 KIAS

ENGINE START - CHECKLIST

Parking Brake.....SET
Battery 1 & 2ON
Alternator 1 & 2.....ON
Beacon.....ON
Fuel Selector.....FULLEST TANK
Cowl Flaps.....OPEN
Propeller.....FULL FORWARD
Mixture.....FULL RICH
Throttle.....FULL OPEN
Aux Fuel Pump.....ON (3 sec. THEN OFF)
Throttle.....1/2 INCH OPEN

Magneto/Start Switch.....START (max. 30 sec)
Magneto.....BOTH
Avionics.....ON

BEFORE TAXI- CHECKLIST

Flight Controls.....CHECK
Nav Lights.....ON
Taxi Lights.....ON
Altimeter QNH.....SET
Parking Brake.....RELEASE

BEFOR TAKEOFF / HOLDING POINT – CHECKLIST

Landing Lights.....ON
Taxi Lights.....OFF
Strobe Lights.....ON
Pitot Heat.....AS REQ
Fuel Pump.....OFF
Cowl Flaps.....AS REQ
Trim.....SET
Propeller.....FULL FORWARD
Mixture.....FULL RICH
Flaps (Normal Takeoff).....SET 0 (UP)
Flaps (Short Field Takeoff).....SET 1 (APH)

NORMAL TAKEOFF (with Flaps 0 (Up))

Brakes → SET
Throttle → FULL
Brakes → RELEASE
Rotate @ 65 -73 KIAS (dep.on weight)

Initial Climb @ 84 KIAS (Best Angle Of Climb)
or @ 100 KIAS (Best Rate Of Climb)

Gear → RETRACT

SHORT FIELD TAKEOFF (w. Flaps 1 (APH))

Brakes → SET
Throttle → FULL
Brakes → RELEASE
Rotate @ 62 - 67 KIAS (dep.on weight)

Initial Climb @ 84 KIAS (Best Angle Of Climb)
or @ 100 KIAS (Best Rate Of Climb)

Gear → RETRACT
Flaps → RETRACT

CRUISE CLIMB

Max.Power Climb
Throttle → Full
Propeller → 2.700 RPM
Speed → 100 KIAS

Normal Climb
Throttle → Full
Propeller → 2.500 RPM
Speed → 110 KIAS

CLIMB - CHECKLIST

Landing Lights.....OFF
Cowl Flaps.....AS REQ
Mixture.....AS REQ

@Transition Altitude
Altimeter.....STANDARD

CRUISE

Max. Power Cruise
Throttle → 25 MAN
Propeller → 2.500 RPM
Mixture → 20° Rich Side of EGT Peak

Normal Cruise
Throttle → 23 MANI
Propeller → 2.300 RPM
Mixture → 20° Lean Side of EGT Peak

Cowl Flaps.....CLOSE
Fuel Selector.....switch every 30 min.

CRUISE

Estimate your TOD based on your Cruise FL. Descent should begin approximately at a distance of 3 NM per 1.000 ft above destinations altitude, if you want to fly a 3° glidepath.

If your are flying IFR with ATC:

If ATC is not giving you clearance to descent shortly (3-5 Minutes) after your TOD, then most likely the STAR or Approach is broken. Start to descend then anyways and ignore ATC if necessary.

DESCENT

If your are flying IFR with ATC:

Due to a lot of wrong STAR and Approach altitudes in MS FS database, you are advised to constantly check your altitude during descent and approach even if you were given clearance to descend at the TOD. For a standard 3° glidepath approach, make sure you are not significantly higher at a given point, than the altitude of the destination plus a 1.000 ft per 3 NM to go. Example: If you have 21 NM to go, destination is at sea level and you are at an altitude of 12.000 ft, you are too high. you should be around 7.000 ft

Throttle and SpeedAS REQ
Sinkrate for a 3° glidepath..... ~ 5 x Ground Speed
Mixture.....AS REQ
Cowl Flaps.....CLOSE

@Transition Altitude
Altimeter QNH.....SET

APPROACH – CHECKLIST

@ ~ 15 – 10 NM to go

Landing Lights.....ON
Fuel Selector.....FULLEST TANK
Cowl Flaps.....AS REQ
Mixture.....FULL RICH
Propeller.....FULL FORWARD
Altimeter QNH.....CHECK

LANDING – CHECKLIST

(on short final)

Landing Gear.....CHECK 3 GREEN
Flaps.....CHECK DOWN
RPM.....CHECK FULL FORWARD

VISUAL APPROACH & LANDING

approach @ 1.000 ft above destination altitude

@ 8 - 7 NM to go
reduce speed to ~ 110 KIAS

@ Downwind Leg or 6 - 4 NM to go
Landing Gear → DOWN
Flaps → SET 1 (APH)
reduce speed to ~ 90 KIAS

@ Base Leg or 3-2 NM to go
Flaps → SET 2 (DN)
sinkrate ~ 400-800 fpm
speed on final ~ 80 KIAS

@ Runway Treshold / Obstacles Clear:
Throttle → IDLE
slowly start to flare

ILS APPROACH & LANDING

approach @ 3.000 ft above destination altitude or use proper procedure altitude

@ 12 - 10 NM to go
reduce speed to ~ 110 KIAS

@ 1 Dot below Glideslope
Landing Gear → DOWN
Flaps → SET 1 (APH)
reduce speed to ~ 90 KIAS
sinkrate for 3° GS = 5 x Ground Speed

@ 3-2 NM to go
Flaps → SET 2 (DN)
speed on final ~ 80 KIAS
Autopilot → OFF

@ Runway Treshold
Throttle → IDLE
slowly start to flare

AFTER LANDING/TAXI – CHECKLIST

.....RETRACT
Flaps.....CLOSE
Cowl Flaps.....OFF
Landing Lights.....ON
Taxi Light.....OFF
Strobe Lights.....OFF
Pitot Heat.....OFF

PARKING / SHUT DOWN – CHECKLIST

Parking Brake.....SET
Lights.....OFF
Avionics.....OFF
Throttle.....1.000 RPM
Mixture.....CUT OFF
Magnetos.....OFF
Alternator 1& 2.....OFF
Battery 1& 2.....OFF