

Expanded **CHECKLIST**
D-EEKE
BEECH BONANZA F33A



Normal AIRSPEEDS

Vr	71 KIAS
Vx	77 KIAS
Vy	96 KIAS
Vycruise	107 KIAS
Vg	134 KIAS
Vfe15°	154 KIAS
VfeFull	123 KIAS
Vno	167 KIAS
Vlo/Vle	154 KIAS
Vns	196 KIAS
Vinitial appr.	90-95 KIAS

Emergency AIRSPEEDS

Emerg. Descent	154 KIAS
Glide	105 KIAS
Engine out landing	83 KIAS

DATA

MTOW	1542 kg / 3400 lbs
Usable Fuel	74 UsGal / 280 Ltr
Fuel Capacity	80 UsGal / 302 Ltr
av. Fuel Flow	15 UsGal/h

This Checklist does not replace the AFM.

This checklist is a Recommended Operator Checklist and for reference only. It is not a substitute for and does not supersede the current approved Airplane Flight Manual or any of its supplements or parts thereof, or any training or procedures required by any regulatory or advisory bodies. Use of the checklist is at the users sole risk and discretion.

Created by Simon Kollreider

PREFLIGHT INTERIOR + EXTERIOR.

- 1 Check Aircraft papers
- 2 Remove pitot cover
- 3 Check interior for foreign objects
- 4 Check flight controls free
- 5 Cowl Flaps OPEN
- 5 Check circuit breakers
- 6 Magnetos OFF, key removed
- 7 Mixture IDLE CUT OFF
- 8 Flight controls CHECK FREE
- 9 Avionic master + electrics OFF
- 10 Master Switch ON
- 11 Check battery voltage
- 12 Ldg Gear lights CHECK 3 GREEN
- 13 Check fuel quantity
- 14 Fuel selector to FULLER TANK
- 15 External lights ON
- 16 Pitot heat ON (cover removed !)
- 17 Parking brake SET
- 18 Check stall warning
- 19 Check pitot heat
- 20 Check external lights
- 21 Pitot heat + ext. lights OFF
- 22 Electric Master OFF

PREFLIGHT EXTERIOR

Right Fuselage

- 1 Baggage Comp. Door SECURE
- 2 Static Pressure Button UNOBSERVED
- 3 ELT ARMED

Empennage

- 1 Control Surfaces CHECK
- 2 Tie Down REMOVE
- 3 Position Light CHECK
- 4 Cabin Air Intake CHECK

Left Fuselage

- 1 Static Pressure Button UNOBSERVED
- 2 All Antennas CHECK

Left Wing Trailing Edge

- 1 Flap CHECK
- 2 Aileron CHECK
- 3 Wing Tip CHECK
- 4 Position Light CHECK

Left Wing Leading Edge

- 1 Fuel Tank CHECK QUANTITY
- 2 Filler Cap SECURE
- 3 Cabin Air Intake CHECK
- 4 Tie down and Chocks REMOVE

Left Landing Gear

- 1 Wheel Well Door, Tire and Strut CHECK
- 2 Fuel vent CHECK
- 3 Fuel Sump DRAIN
- 4 Fuel Selector Valve Sump DRAIN
- 5 Cover SECURE

Nose Section

- 1 Left Cowl Flap CHECK
- 2 Engine Oil CHECK (9-11 qts.)
- 3 Cap and Dipstick SECURE
- 4 Propeller CHECK
- 5 Wheel well Doors, Tire and Strut CHECK
- 6 Induction Air Intake CLEAR
- 7 Landing lights CHECK
- 8 Engine CHECK GENERAL CONDITION
- 9 Right Cowl SECURE
- 10 Right Cowl Flap CHECK
- 11 Chocks REMOVE

Right Landing Gear

- 1 Wheel Well Door, Tire and Strut CHECK
- 2 Fuel vent CHECK
- 3 Fuel Sump DRAIN

Right wing Leading Edge

- 1 Cabin Air Intake CHECK
- 2 Tie Down and Chocks REMOVE
- 3 Fuel Tank CHECK QUANTITY
- 4 Filler Cap SECURE

Right Wing Trailing Edge

- 1 Position Light CHECK
- 2 Wing Tip CHECK
- 3 Aileron CHECK
- 4 Flap CHECK

CHECK BEFORE ENGINE START

1	Preflight check	.....COMPLETED	1
2	Seat & Seatbelts	..... SECURED	2
3	Parking brake	..... SET	3
4	All Avionics	..... OFF	4
5	Circuit breakers	..... CHECKED IN	5
6	Flap selector	..... UP	6
7	Landing Gear Handle	.....DOWN	7
8	Cowl Flaps	..... OPEN	8
9	Electric Elevator Trim Switch	..... OFF	9
10	Selector Valve	..... FULLER TANK	10
11	All Light Switches	..... OFF	11
12	Alternate Air	..... CLOSED	12
13	Emergency Gear Handle	..... STOWED	13
14	Alternate static	..... CLOSED	14
15	Propeller Anti Ice Switch	.....OFF	15
16	Bat. Switch	..... ON	16
17	Fuel Quantity	..... CHECKED	17
18	Warning Lights Test Switch	.....PRESS	18
19	Gear Lights / Annunciator	.....CHECK	19
20	Rudder pedals	.....ADJUSTED	20
21	Passengers	..... INSTRUCTED	21
22	Seat belts	.....FASTENED	22
23	Fuel Selector	.....CHECK FULLER TANK	23
24	Beacon	.....ON	24
25	Hobbsmeter	.....NOTE	25
26	Propeller Area	.....CLEAR	26

End of Checklist

ENGINE START PROCEDURE: next page

ENGINE START PROCEDURE

Cold engine:

ThrottleFORWARD / FULL
 PropellerHIGH RPM
 Mixture.....FULL RICH
 Electrical Fuel pump..... ON
 Fuel FlowSTABILIZED
 Electrical Fuel pump..... OFF
 Throttle.... 1 cm OPEN (draw+2*back)
 Magneto/Start Switch START
 RPM.....1000 - 1200 RPM

Hot engine:

ThrottleIDLE
 PropellerHIGH RPM
 Mixture.....FULL LEAN
 Electrical Fuel pump... ON (min.30 sec.)
 Electrical Fuel pump..... OFF
 Mixture..... **RICH**
 Throttle.... 1 cm OPEN (draw+2*back)
 Magneto/Start Switch START
 Electrical Fuel pump..... **ON**
 RPM.....1000 - 1200 RPM
 Electrical Fuel pump.....**OFF**

Procedure for starting of a FLOODED ENGINE on Page 7

CHECK AFTER ENGINE START

1	Oil pressure	..... CHECKED / GREEN	1
2	Gen. Switch	..... ON	2
3	Suction	..... CHECKED / GREEN	3
4	Ampermeter	..... CHECKED / POSITIV	4
5	All Engine Indicators	.....CHECK	5
6	Avionic Master	.....ON	6

AUTOPILOT TEST

DISCONN press, check electric trim not working
 AP ON, check overpowering servos
 DISCONN press, check AP off

BEFORE TAXI CHECK

7	Altimeters	..... SET	7
8	Com/Nav/GPS	..... SET	8
9	Slaving Selector on slave	.....CHECKED	9
10	Flaps	.....full travel then UP	10
11	Horizon / Directional gyro	.....CHECKED / SET	11
12	Transponder	.....CODE/MODE CHECKED	12
13	Lights	.....AS RQUIRED	13
14	Parking brake	..... RELEASED	14

End of Checklist

DURING TAXI

Check Brakes
 Check flight instruments

BEFORE TAKE OFF CHECK

- 1 Parking brake..... SET 1
- 2 Seat belts FASTENED 2
- 3 Engine Instruments.....CHECKED / GREEN 3
- 4 Fuel SelectorFULLER TANK 4
- 5 Cowl FlapsOPEN 5
- 6 Mixture ControlFULL RICH 6
- 7 Propeller ControlHIGH RPM 7
- 8 Circuit breakers CHECKED 8
- 9 Doors and WindowsSECURE 9

RUN UP

Throttle 1700 RPM
 Prop control cycle 3 times (300-400 drop)
 Magnetos(max 150/50) CHECKED
 Circuit breakers, voltage RECHECKED
 ThrottleIDLE CHECK(500-700RPM) then 1000 RPM

- 10 Electric elevator trimCHECKED, T/O SET 10
- 11 Flaps..... CHECKED UP 11
- 12 Flight controls CHECKED 12
- 13 Propeller ControlCHECK HIGH RPM 13
- 14 Electric fuel pumpCHECK OFF 14
- 15 Pitot heat AS REQUIRED 15
- 16 TransponderCODE/MODE CHECKED 16
- 17 Parking brake..... RELEASED 17

End of Checklist

LINE UP PROCEDURE

Landing light ON
 Approach sector..... CLEAR
 Runway IDENTIFIED

*EMERGENCY BRIEFING --- on the Runway.....Throttle IDLE/Brake/
 --- after Departure.....Nose Down/Glide Speed 105 KIAS*

TAKE OFF

- 1 Throttle full Forward.....2700 RPM-29,6"MP 1
- 2 Rotate / Vx71 / 77 KIAS 2
- 3 Positive ROC BRAKES + GEAR UP 3
- 4 Increase Speed96 KIAS 4

End of Checklist

CLIMB /CRUISE CLIMB

- 1 Cimb Power 25"MP/2500 RPM 1
- 2 Gear / Flaps CHECK UP 2
- 3 Cowl FlapCHECK OPEN 3
- 4 MixtureRICH ../set fuel flow 4
- 5 Cruise Climb107 KIAS 5
- 6 LightsAS REQUIRED 6

End of Checklist

CRUISE CHECK

- 1 Power65% (23"MP/2300RPM) 1
- 2 Mixt. lean 25°F-100°F below Peak 2
- 3 Cowl Flap..... CLOSE 3
- 4 AltimetersSTANDARD + compared 4

End of Checklist

PERIODICALLY DURING CRUISE

*Fuel Radio Engine Direction Altitude
 CHECK FUEL BALANCE*

DESCENT CHECK

- 1 Cowl FlapsCLOSE 1
- 2 Power.....as required 2
- 3 Mixture.....ENRICH as required 3
- 4 Fuel QuantityCHECK BALANCED 4

End of Checklist

APPROACH CHECK

- 1 Fuel Selector FULLER TANK 1
- 2 Landing Light..... ON 2
- 3 Mixture ControlFULL RICH 3
- 4 AltimetersSET QNH + Compared 4
- 5 Gear (below 154 KIAS)DOWN / 3 GREEN 5
- 6 Flaps (below 154 KIAS)App. 15° 6

End of Checklist

FINAL CHECK

- | | | | |
|---|------------------------------------|---------------|---|
| 1 | Gear Down/3 Green | CHECKED | 1 |
| 2 | Flaps | as required | 2 |
| 3 | Propeller..... | FULL FORWARD | 3 |
| 4 | Electric Elevator Trim Switch..... | OFF | 4 |
| 5 | App. Speed on Final..... | 80 KIAS | 5 |
| 6 | Vref (0°/15°/full)..... | 80/75/70 KIAS | 6 |

End of Checklist

BALKED LANDING/GO AROUND

- Power Full Forward
- Airspeed..... 70 KIAS
- Positive ROCCHECKED
- FlapsSET 15°
- Landing Gear UP
- Airspeed..... 77 KIAS
- Flaps.....UP

STARTING A FLOODED ENGINE

- MixtureIDLE CUT OF
- ThrottleOPEN (FULL FORWARD)
- Magneto/Start SwitchSTART
- As engine firesTHROTTLE IDLE
- and MIXTURE FULL RICH

AFTER LANDING CHECK

- | | | | |
|---|---------------------------------|------------|---|
| 1 | Flaps..... | UP | 1 |
| 2 | Trim Tab | SET to 0° | 2 |
| 3 | Cowl Flap | OPEN | 3 |
| 4 | Pitot Heat | OFF | 4 |
| 5 | Propeller Anti Ice Switch | OFF | 5 |
| 6 | Taxi/Strobe/Landing Light | ON/OFF/OFF | 6 |

End of Checklist

SHUTDOWN

- | | | | |
|----|--|---------------------|----|
| 1 | Parking brake | SET | 1 |
| 2 | Throttle | 1000 RPM | 2 |
| 3 | ELT | CHECK not activated | 3 |
| 4 | Hobbs meter | NOTED | 4 |
| 5 | Avionic Master | OFF | 5 |
| 6 | Electrical consumers except Beacon | OFF | 6 |
| 7 | Gen. Switch | OFF | 7 |
| 8 | Mixture | IDLE CUT OFF | 8 |
| 9 | Magneto/Start Switch | OFF | 9 |
| 10 | Beacon | OFF | 10 |
| 11 | Bat. Switch | OFF | 11 |
| 12 | Control Lock | INSTALL | 12 |

End of Checklist

EMERGENCY CHECKLIST

EMERGENCY AIRSPEEDS

Emergency Descent.....154 KIAS
 Glide105 KIAS
 Landing without Engine.....83 KIAS

ENGINE FAILURE

During Take-Off Grund. Roll.....	Page 2
After Liftoff and in Flight.....	Page 2
Engine Discrepancy Checks	
Rough Running Engine.....	Page 2
Loss of Engine.....	Page 3
Air Start Procedure.....	Page 3
Engine Fire	
In Flight.....	Page 4
On Ground.....	Page 4
Maximum Glide Configuration.....	Page 4
Emergency Descent.....	Page 4
Landing Emergencies	
Landing without Power.....	Page 5
Landing Gear retracted.....	Page 5
System Emergencies	
Propeller Overspeed.....	Page 5
Alternator Fail.....	Page 6
Starter voltage.....	Page 6
Unscheduled Electric Elevator Trim.....	Page 7
Landing Gear Manual Extension.....	Page 7
Landing Gear Retraction after Man.Exten.....	Page 7
Induction Air System Blockage.....	Page 8
Emergency Static Air System (Alternate Air).....	Page 8

ENGINE FAILURE during TO Ground Roll

- | | | | |
|---|---------------------------|---------|---|
| 1 | Throttle | CLOSED | 1 |
| 2 | Braking | MAXIMUM | 2 |
| 3 | Fuel Selector Valve | OFF | 3 |
| 4 | Bat & Gen Switch..... | OFF | 4 |

ENGINE FAILURE after Liftoff + in Flight

- | | | | |
|---|--------------------------|----------------------------------|---|
| 1 | Fuel Selector Valve..... | SELECT OTHER TANK | 1 |
| 2 | Auxiliary Fuel Pump..... | ON | 2 |
| 3 | Mixture..... | FULL RICH, then LEAN as required | 3 |
| 4 | Magnetos..... | CHECK LEFT and RIGHT | 4 |
| 5 | Magnetos..... | BOTH | 5 |

• IF No Restart

- | | | |
|---|---|---|
| 1 | Select most favorable landing site | 1 |
| 2 | See EMERGENCY LANDING Procedure | 2 |
| 3 | The use of landing gear is dependent on the terrain where landing must be made. | 3 |

ROUGH RUNNING ENGINE

- | | | | |
|---|----------------|----------------------------------|---|
| 1 | Mixture | FULL RICH, then LEAN as required | 1 |
| 2 | Magnetos | CHECK LEFT and RIGHT | 2 |
| 3 | Magnetos..... | BOTH | 3 |

LOSS OF ENGINE POWER

- | | | | |
|---|--|-------------------|---|
| 1 | Fuel Flow Gage | CHECK | 1 |
| | • <i>IF Fuel flow is abnormal low:</i> | | |
| a | Mixture | FULL RICH | a |
| b | Auxiliary Fuel Pump | ON | b |
| | (Lean as required) | | |
| | • <i>IF performance does not improve in a few moments:</i> | | |
| c | Auxiliary Fuel Pump | OFF | c |
| 1 | Fuel Quantity Indicator..... | CHECK | 1 |
| | .(for fuel supply in tank being used) | | |
| | • <i>IF tank being used is empty:</i> | | |
| a | Fuel Selector | SELECT OTHER TANK | a |

AIR START PROCEDURE

- | | | | |
|---|--|--------------------------|---|
| 1 | Fuel Tank Selector..... | FULLER TANK | 1 |
| 2 | Throttle | RETARD | 2 |
| 3 | Mixture | FULL RICH | 3 |
| 4 | Auxiliary Fuel pump..... | ON | 4 |
| | until power is regained, then .....OFF | | |
| 5 | Throttle | ADCANCE to desired power | 5 |
| 6 | Mixture | LEAN as required | 6 |

ENGINE FIRE in Flight

- | | | | |
|---|--|---------------|---|
| 1 | Firewall Air Control..... | PULL TO CLOSE | 1 |
| 2 | Mixture | IDLE CUT OF | 2 |
| 3 | Fuel tank selector | OFF | 3 |
| 4 | Bat & Gen Switches..... | OFF | 4 |
| | (extending the Landing Gear can be accomplished manually if desired) | | |
| 4 | DO NOT ATTEMPT TO RESTART ENGINE | | 4 |

ENGINE FIRE on Ground

- | | | | |
|---|-----------------------------------|--------------|---|
| 1 | Mixture..... | IDLE CUT-OFF | 1 |
| 2 | Fuel Tank Selector..... | OFF | 2 |
| 3 | Bat/Gen/Magenta Switch..... | OFF | 3 |
| 4 | Extinguish with Fire Extinguisher | | 4 |

MAXIMUM GLIDE CONFIGURATION

- | | | | |
|---|-------------------|------------------|---|
| 1 | Landing Gear..... | UP | 1 |
| 2 | Flaps..... | UP | 2 |
| 3 | Cowl Flaps..... | CLOSED | 3 |
| 4 | Propeller | PULL for LOW RPM | 4 |
| 5 | Airspeed | 105 KIAS | 5 |

Glide Distance is ~ 1.7 NM / 1000 ft

EMERGENCY DESCENT

- | | | | |
|---|-------------------|---------------|---|
| 1 | Power..... | IDLE | 1 |
| 2 | Propeller | HIGH RPM | 2 |
| 3 | Landing Gear..... | DOWN | 3 |
| 4 | Airspeed | max. 154 KIAS | 4 |

LANDING without Power

- 1 Airspeed.....83 KIAS 1
- 2 Fuel tank selector..... OFF 2
- 3 Mixture.....IDLE CUT-OFF 3
- 4 Magnetos OFF 4
- 5 Flaps AS REQUIRED 5
- 6 Landing GearUP or DOWN 6
DEPENDING ON TERRAIN
- 7 Bat & Gen Switch OFF 7

LANDING with Power (LDG retracted)

If possible, choose firm sod or foamed runway. Make a normal approach, using flaps as necessary. when you are sure of making the selected landing spot:

- 1 Throttle.....IDLE 1
- 2 Mixture..... IDLE CUT-OFF 2
- 3 Bat & Gen Switch OFF 3
- 4 Fuel tank selector..... OFF 4
- 5 Keep wings level during touchdown 5
- 6 Get clear of the airplane as soon as possible 6
after it stops.

PROPELLER Overspeed

- 1 ThrottleRETARD TO RPM RED LINE 1
- 2 Airspeed REDUCE 2
- 3 Oil Pressure.....CHECK 3

WARNING: If oil pressure was the cause of over-speed, the engine will seize after a short period of operation

- 4 LAND on NEAREST SUITABLE SITE and follow 4
LANDING EMERGENCIAS procedures

ALTERNATOR FAIL

Alternator Warning Light indication

- IF Ampermeter does *not* show DISCHARGED: the Alternator warning light has a failure. No further action required.
- IF Ampermeter shows DISCHARGED:
 - a Gen Switch.....OFF then ON a
(this resets the Gen. Relay)
 - IF Warning light disappears:
 - a Gen Switch.....CHECK ON a
 - b No further action required b
 - IF Warning light does not disappears:
 - a Gen Switch.....OFF a
 - b Nonessential ConumersOFF b
 - c Land asap c

STARTER under voltage

Warning Light indication

- IF on Ground:
 - a Bat & Gen Switch.....OFF a
 - b Do not try to start again b
- IF in the air, after a restart attempt in the air:
 - a Bat & Gen Switch.....OFF a
 - b Land asap b

UNSCHEDULED ELECTRIC ELEVATOR TRIM

- 1 Airplane Attitude.....MAINTAIN using elevator 1
- 2 Trim Switch on Control WheelOPPOSITE 2
DIRECTION
- 3 Trim ON-OFF Switch..... OFF 3
- 4 Elevator Control Wheel.....RETRIM as required 4
- 5 Do not attempt to operate the electr. trim sy- 5
stem until the cause of the malfunction has
been determined and corrected.

LANDING GEAR Manual Extension

- 1 AirspeedREDUCE as required 1
- 2 LDG Circuit Breaker.....PULL OUT 2
- 3 LDG Handle.....DOWN Position 3
- 4 Handrack Handle Cover..... REMOVE 4
- 5 Handrack.....ENGAGE 5
and TURN CCW (~50 turns)
- 6 LDG LightCHECK 3 GREEN 6
- 7 HandrackDISENGAGE 7

LANDING GEAR Retraction after manual Ext.

- 1 HandrackCHECK STOWED 1
- 2 LDG Circuit Breaker.....PUSH IN 2
- 3 LDG Handle.....UP Position (retract) 3

INDUCTION AIR System Blockage

If the alternate induction air door becomes stuck in the closed position, it can be opened by PULLING AND RELEASING THE T-HANDLE located directly below the propeller control knob.
"ALTERNATE AIR PULL AND RELEASE"

EMERGENCY STATIC AIR Source Sytem

- 1 Emerg.Static Source.....ON 1
- 2 For Airspeed Calibration and Altimeter 2
Correction, refer to PERFORMANCE section.