Beach Bonanza – V35

275BM – Main Checklist

Preflight

- ❑ Operating Handbook - AVAIL
- ❑ Weight & Balance - CHECKED
- ❑ Parking Brake - SET
- ❑ Control Wheel Lock - REMOVE
- ❑ Ignition Switch - OFF
- ❑ Avionics Power - OFF
- ❑ Flaps - UP
- ❑ Master/Battery Switch - ON
- ❑ Fuel Quantity – CHECK (verify visual)
- ❑ Avionics Power - CHECK
- ❑ Fuel Selector - SELECT TANK
- ❑ Baggage Door - CLOSE/LATCH
- ❑ Gust Lock(s) - REMOVE
- ❑ Tie Downs - DISCONNECT
- ❑ Control Surfaces - MOVEMENT
- ❑ Undercarriage/Antennas - CHECK
- ❑ Tail Light / Wicks – CHECK
- ❑ Aileron - MOVEMENT / SECURE
- ❑ Main Wheel Tire - => 40 PSI
- ❑ Fuel Sump Drains - CHECK
- ❑ Fuel Qty - CHECK VISUALLY
- ❑ Fuel Filler Cap - SECURE
- ❑ Left Wing - PITOT / STALL VANE
- ❑ Engine Oil - > 5QT / 7 for X-C
- ❑ Cowling - Secure
- ❑ Prop & Spinner - NICKS/SECURE
- ❑ Engine/Oil Inlets - UNRESTRICTED
- ❑ Nose Wheel/Strut - => 30 PSI
- ❑ Static Source Opening - CLEAR

Pre-Start

- ❑ Gear Handle – DOWN
  "Barber Pole" reads "DN"
- ❑ Gear Crank - FREE/FOLDED
- ❑ Avionics Pwr Switch(es) - OFF
- ❑ Parking Brake - TEST/SET
- ❑ Seats/Belts/Harness - SECURE
- ❑ Circuit Breakers - CHECK IN
- ❑ Flaps - UP / HANDLE CNTRD
- ❑ Cowl Flaps – OPEN (summer > 70°)
- ❑ Battery Switch - ON
- ❑ Gear Down Lights – GREEN
- ❑ Dynon Bootup – WAIT
  Engine Page / MP/RPMs – CHECK

Pre-Start (Cont'd)

- ❑ Fuel - CHECK QUANTITY
- ❑ Fuel Selector - FULLEST > 13g
- ❑ Beacon – ON
- ❑ Strobes – OFF

Engine Start (Cold)

- ❑ Mixture - FULL RICH
- ❑ Prop - FULL FORWARD (hi rpm)
- ❑ Throttle - PUSH FULL IN
- ❑ Aux Fuel Pump – ON (high speed/up)
  (until FLOW PEAKS, then OFF & Cntr)
- ❑ Throttle - PULL CLOSED
- ❑ Throttle - OPEN ¼" - 6 ½ turns in BM
- ❑ Ignition Switch – Call CLEAR / START
  If flooded wait 10min, then HOT START
- ❑ Throttle - ADJUST 1000 RPM
- ❑ Oil Pressure – CHECK
- ❑ Alternator Switch - ON
- ❑ Voltmeter - VERIFY > 13.5
- ❑ Avionics Pwr Switch(es) - ON
- ❑ Nav Lights - As needed
- ❑ **Engine < 1200 RPM until temp > 75 F (in green)**

Engine Start (Hot)

- ❑ Throttle/Mixture – CLOSED (full back)
- ❑ Fuel Pump – RUN 30 seconds
- ❑ Throttle – OPEN 2"
- ❑ Mixture – FULL RICH
- ❑ Fuel Pump – ON until Peak Flow-OFF
- ❑ Throttle – PULL closed
- ❑ Throttle – OPEN ¼" / 6 1/2 turns in BM
- ❑ Ignition Switch – Call CLEAR / START

Pre-Taxi

- ❑ Avionics Master - ON
- ❑ Weight Balance – CHECK on Dynon
- ❑ ATIS – TUNE; set RWY HDG, BARO
- ❑ Transponder – VFR or assigned code
- ❑ If IFR – Pick up Flight Plan
- ❑ Nav Lights – OFF day, ON night
- ❑ Mixture – FULL RICH (no lean for taxi)
- ❑ Brakes – RELEASE & TEST

Warnings:

- Reject takeoff if fuel shows Yellow or < 13 gal in selected tank.

- Engine < 1200 RPM until temp > 75 F (in green)

Pre-Takeoff - RUNUP

- ❑ Seats/Belts/Harness - SECURE
- ❑ Parking Brake – SET
- ❑ Dynon – ENGINE PAGE
  CHECK Top to Bottom
- ❑ Dynon & IFD
  Set Flight Plan and ACTIVATE
  Check both flight plans and Maps
- ❑ Radios/Xpdr/Avionics - SET
- ❑ Trim – SET
  3 up for front only – 0 for four aboard
- ❑ Flaps - SET FOR TAKEOFF
- ❑ Altitude & Climb Rate – SET
- ❑ Cowl Flaps - OPEN
- ❑ Aux Fuel Pump - CHECK OFF / CTR
- ❑ Flight Controls - FREE/CORRECT
- ❑ Throttle - 1700 RPM
  - ❑ Magnetos-R/L < 150 & 50 diff
  - ❑ Exercise Prop 1x - 300 rpm drop
- ❑ Throttle - Check Idle @700, set 1000
- ❑ Mixture - RICH (< 3K)
- ❑ Cabin Doors - CLOSE/LATCH
- ❑ Fuel Selector - RECHECK FULL
- ❑ Throttle Friction Lock - ADJUST
- ❑ Autopilot - OFF
- ❑ Windows - CLOSED
- ❑ Parking Brake - RELEASE

Takeoff (Normal)

- ❑ On Runway Checklist
  - ❑ Time - NOTE
  - ❑ Landing Light – AS NEEDED
  - ❑ DG - Check ok on Rwy Hdg
- ❑ Flaps - 0 DEGREES
- ❑ Brakes – RELEASE
- ❑ Throttle – FULL OPEN 2700
- ❑ Engine Instruments – CHECK
  Oil Prsr/RPM/GPH/IAS
- ❑ Airspeed - ALIVE
- ❑ Rotate – 70 KTS
- ❑ Positive Rate of Climb - CONFIRM
- ❑ Landing Gear – TAP / RETRACT
- ❑ Climb Speed - Vy - 90 KTS
  700 FPM / 7.5°
- ❑ Power - REDUCE mp/prop (25)
- ❑ Temps - MONITOR cht/egt/oil
- ❑ Cowl Flaps - OPEN (at cruise)

A/P on Climb

- ❑ Set Altitude
- ❑ Establish 700 FPM
- ❑ Push "AP" – Note Green Bar
- ❑ Adjust rate w/Dynon VS

Short Field Takeoff

- ❑ Flaps - 25 DEGREES (2nd notch)
- ❑ Brakes - APPLY
- ❑ Mixture - FULL RICH < 3000
- ❑ Throttle - FULL OPEN
- ❑ Brakes - RELEASE
- ❑ Elevator - TAIL LOW
- ❑ Accelerate - 60-65 KTS
- ❑ Elevator - BACK PRESSURE
- ❑ Rotate - CLIMB ATTITUDE
- ❑ Accelerate - 85 KTS
- ❑ Positive Climb – TAP/GEAR UP
- ❑ Accelerate – 90 KTS
- ❑ Obstacles - CLEARED
- ❑ Flaps - RETRACT SLOWLY

Normal Landing

- ❑ Seatbelts, Etc. - SECURE
- ❑ Landing light - ON
- ❑ Mixture - FULL RICH
- ❑ Fuel: Pump - ON / FULLEST TANK
- ❑ Gear - DOWN < 143 KTS
- ❑ Airspeed - (flaps up) 100 KTS
- ❑ Flaps - AS DESIRED < 103 KTS
- ❑ Airspeed - (flaps dn) 100 KTS
- ❑ Prop - SET - (forward when short)

Short Field Landing

- ❑ Same as Normal, thence…
- ❑ Low Safe Airspeed 69kt / 79mph
- ❑ Braking - APPLY HEAVILY

Post Landing

- ❑ EXIT RUNWAY
- ❑ Flaps - UP
- ❑ Landing Light - OFF
- ❑ Mixture - LEAN FOR TAXI
- ❑ Contact Ground Control

Beach Bonanza – V35

275BM – Procedures

ENGINE FAILURE - TAKEOFF

- ❑ Throttle - IDLE
- ❑ Brakes - APPLY
- ❑ Flaps - RETRACT
- ❑ Mixture - IDLE / CUTOFF
- ❑ Ignition Switch - OFF
- ❑ Avionics Switch(es) - OFF
- ❑ Master Switch - OFF
- ❑ Fuel Selector - OFF

ENGINE FAILURE - CLIMB

- ❑ Airspeed - 105 KTS
- ❑ Mixture - IDLE / CUTOFF
- ❑ Fuel Shutoff Valve - OFF
- ❑ Ignition Switch - OFF
- ❑ Flaps - AS REQUIRED
- ❑ Master Switch - OFF
- ❑ Land - LOWEST SAFE SPEED

ENGINE RESTART

- ❑ Airspeed - BEST GLIDE 105 KTS
- ❑ Fuel Selector - SWITCH
- ❑ Mixture - FULL RICH
- ❑ Fuel Pump - ON
- ❑ Ignition Switch - START
  (Check left/right/both)

FORCED LANDING – NO ENGINE

- ❑ Belts, Etc. - SECURE
- ❑ Airspeed - 74 - 78 KTS
- ❑ Mixture - IDLE / CUTOFF
- ❑ Fuel Selector Valve - OFF
- ❑ Ignition Switch - OFF
- ❑ Flaps - AS REQUIRED
- ❑ Gear - AS NEEDED
- ❑ Master Switch - OFF
- ❑ Doors - UNLATCH
- ❑ Touchdown - SLIGHTLY TAIL LOW
- ❑ Brakes - APPLY HEAVILY

ENGINE FIRE

- ❑ Mixture - IDLE / CUTOFF
- ❑ Fuel Selector Valve - OFF
- ❑ Master Switch - OFF
- ❑ Cabin Heat/Air - OFF
- ❑ Airspeed - INCREASE AS NECESSARY TO EXTINGUISH
- ❑ Forced Landing - EXECUTE

SPIN RECOVERY

- ❑ AILERONS - NEUTRAL
- ❑ THROTTLE CLOSED
- ❑ OPPOSITE RUDDER
- ❑ STICK FORWARD-BREAK STALL
- ❑ RUDDER NEUTRAL
- ❑ RECOVER FROM DIVE

GEAR TROUBLESHOOTING

- ❑ Verify Gear Handle - DOWN
- ❑ Gear Light Mechanical Iris - OPEN
- ❑ Check Circuit Breaker - IN
- ❑ Mech Gear Indicator - DOWN
- ❑ Swap "down" lamp Assemblies

EMERGENCY GEAR EXTENSION

- ❑ Gear handle - DOWN
- ❑ Landing Gear Circuit Bkr – PULL OFF
- ❑ Unfold & engage gear handcrank
- ❑ Crank 50 turns counter-clockwise
- ❑ Verify down w/light and indicator
- ❑ When down, leave until repaired

Operational Info

Fuel: 80 gal / 74 Usable
Per Tank: 40g / 37 usable
Tab slot - 35g
Tab bottom - 30g

Max Xwind - 17 KTS / 20 MPH
Typical Cruise Fuel: ≈ 18 gph
Lean: < 1500 EGT

Tires: Main 30, nose 40 – add 5psi on fill

Takeoff & Climb

- ❑ Airspeed - ALIVE
- ❑ Rotate – 70 KTS
  - ❑ Gear – Up
  - ❑ Climb 700 / 7.5°
  - ❑ No Lean
  - ❑ Throttle – FULL
  - ❑ Monitor Temps
    CHT / EGT / Oil

- ❑ **Using Autopilot…**
- ❑ Set Altitude
- ❑ Establish 700 FPM
- ❑ Push "AP" – Note Green Bar
- ❑ Adjust Dynon VS rate

Cruise

- ❑ Pitch / Trim Level
- ❑ 24" – 25" or WOT
- ❑ 2200-2500 RPM
  Optimize for 75%
- ❑ Lean EGT < 1500
- ❑ Close Cowl Flaps
- ❑ **Using Autopilot…**
- ❑ HDG for Hdg Bug
  NAV will follow source
  (Dynon/Skyview/SL30)

C-Climb

- ❑ 104 KTS

Descent

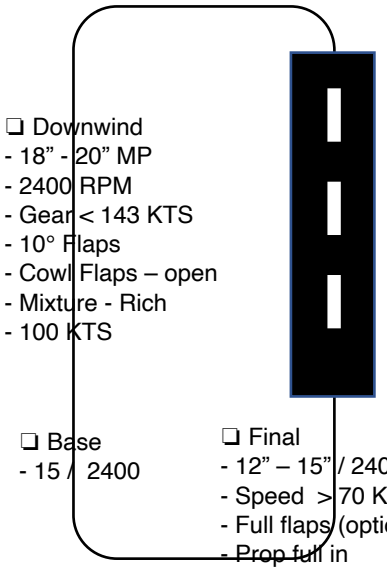
- ❑ Plan 5mi/1K'
- ❑ Reduce MP 1" / 1K
- ❑ Mixture - Per EGT
- ❑ Pitch 500-100 FPM

Init Appr

- ❑ **Using Autopilot…**
- ❑ IFD Select Appr
- ❑ Select NAV
- ❑ VNAV when Estab

Intercept & Final Appr

- ❑ Level 20/2400 for localizer intercept
- ❑ Level 18/2400 to GS intercept
- ❑ At GS, Gear < 143, Flaps 10°
- ❑ Descend 5x GS
- ❑ DH – Full flaps, power back, prop full, cowl flaps



- ❑ Downwind
  - 18" - 20" MP
  - 2400 RPM
  - Gear < 143 KTS
  - 10° Flaps
  - Cowl Flaps – open
  - Mixture - Rich
  - 100 KTS
- ❑ Base
  - 15 / 2400
- ❑ Final
  - 12" – 15" / 2400 RPM
  - Speed > 70 KTS
  - Full flaps (optional)
  - Prop full in
  - Power out

Speed	KTS
Vr	68
Vy	90
Vx	76
Cruise	130
Va	134
Vne	197
Appr	70
Vle	143
Vfe	117
Vs	63
Vso	54
C-Climb	107
E-Desc	144
Glide	105
E-Appr	78

As of August 2022