

I'M SAFE

Pre-flight - Interior 1

Rotate top door handle; open left side door
Confirm AROW [Airworthiness Cert; Registration; Operating Lim; W&B]
Log hour meter & tach times
Remove and stow control lock
Check brake master cylinders on pedals
Radios / intercom / transponder off
Circuit breakers in
Master battery switch on
Landing, strobe, nav lights on
Flaps down
Once around to check all lights
Lights and master battery off
Retrieve fuel sump tool & strut cloth from seat pocket.
Door shut (if windy)

Pre-flight - Left wing

Flap and aileron hinges
Aileron counterweight secure
Remove pitot cover
Stall warning sensor free
Visual check of fuel level (same as last ending?)
Fuel tank cap on properly
Remove chocks and tiedown as necessary
Check below for fuel leaks (blue dye traces)
Sump check for water & debris
Main gear fairings, tire and wheel
Check brake pads and for hydraulic fluid leaks

Pre-flight - Nose

Sump check for water & debris
Wipe down strut (oily cloth)
Minimum 4 inches of strut extension
Nose tire and shimmy damper
Remove chocks as necessary
Engine cowl and belly for oil leaks
Oil cooler for leaks (above strut)
Air intake and air filter clear
Wipe down propeller (oily cloth)
Check propeller for chips or cracks
Check prop spinner + bulkhead plate for cracks
Check oil (4-6); ensure cap replaced
Check brake fluid; ensure cap replaced
Ensure cowling panel closure.

Pre-flight - Right wing

Visual check of fuel level (same as last ending?)
Fuel tank cap on properly
Remove chocks and tiedown as necessary
Check below for fuel leaks (blue dye traces)
Sump check for water & debris
Main gear fairings, tire and wheel
Check brake pads and for hydraulic fluid leaks
Aileron counterweight
Aileron and flap hinges

Pre-flight - Fuselage and Tail

General inspection for any damage
Aux power plug cover on (right)
Static port (right)
ELT switch on (right)
Stabilizer, rudder, elevator hinges and trim tabs
Remove tail tiedown as necessary
Stow sump tool & strut cloth in seat pocket

Safety briefing

Lap and shoulder belts, seat adjustment
Door latches (operation and testing)
What to touch or not (esp vents)
Radio / intercom / headset operation
Sterile cockpit requirements
Observing traffic
1x around the pattern 1st flight
Passenger questions

Pre-flight - Interior 2

Elevator & rudder trims set
Seats adjusted and locked
Lap belts and shoulder harness fastened
Mic and headsets (as required) ready
Radios / intercom / transponder still off
Master battery & alternator switches on
Over- and under-voltage lights (press to check)
Fuel low light (both tanks)
Fuel gauges out of yellow range

Engine Start

Key in switch at "off"
Fuel selector on
Mixture full rich (or set for altitude)
Fuel boost on; confirm 4-7 psi
Throttle full & back (once!) and then 1/3
Strobe lights on
Nav lights on (night)
Clear prop area
Doors shut and top latch locked
Key switch to "on"; push to prime
Key switch to start and hold [Max start cycle 10 seconds; max 3 attempts; then cool for 2-minutes]
Oil Pressure - Green Arc (60 to 90)
Throttle to fast idle at 1000 rpm
Mixture leaned for altitude
Oil Temp - normal range 120 to 245 F
Vacuum - 4.3 to 5.9 in. Hg

Flooded Engine Start

Mixture off
Throttle full
Key to "start"
Mixture eased forward when engine tries to start
Throttle back to fast idle

Pre-Taxi and Taxi

Flaps up
Fuel tank gauges above yellow range (again)
Alternator switch on, indicator light out (again)
Circuit breakers in (again)
Radios & int on, freqs set, transponder 1200 standby
ATIS data or visual check
Confirm both brakes (+ copilot if aboard)
Flight controls free
Flight instruments set (DG and **altimeter**)
Landing light on (night)
Fuel boost - off, confirm 3 to 8 psi, back on

Pre-Takeoff

Brakes held
Run up to 1800rpm
Mags (L/R) 50-175rpm drop each + within 50rpm
Carb heat on; note some rpm drop
Throttle to full idle for 5 sec; still running?
Carb heat off + throttle to 1000rpm
Engine instruments - re-check oil pressure & temp
Mixture (leaned for altitude, then richened slightly)

Takeoff

Clearance or clear traffic pattern
Compass/DG aligned with **intended** runway
-- **Lights, Camera, Action** -- [Landing light on (day);
Transponder to altimeter reporting; Confirm trim,
pump, mix]
Full Power (friction lock as required)
Rotate **56 kts**
Liftoff **60 kts**
Climb **68 kts**

Cruise

500 feet AGL - landing light off
1000 feet AGL - fuel boost off
Mixture leaned for altitude

Descent

ATIS information or visual wind observation
Altimeter to local setting
Cruise descent power (carb heat as required)
Mixture increased as required

Pre-Landing

Fuel boost on before reducing power
Check fuel pressure
Pattern speed **68 kts** minimum
On final **63 kts**
-- **GLUMPS** --
Carb heat on as required
Landing light on
Full flaps on base or final (if desired)

Go-Around

Throttle full
Carb heat off
Level flight till **63 kts**

Establish positive rate of climb
Flaps up in increments above 68 kts

Post Landing

Flaps up
Carb heat off
Fuel boost off
Landing light off (day)
Control held (as required) during taxi

Shut Down

Landing light off (night)
Nav lights off
Radios, intercom, & transponder off
Confirm fuel boost off
Idle 1000-1200 rpm
Key off, engine falters, key on, stabilize
Mixture to full lean
Key off and out (after prop stops)
Strobe off
Master battery and alternator switches off
Log hour meter & tach times
Log fuel tank levels

Park

Control lock in place
Pitot cover in place
Tow bar stowed
Top door latch locked
Cover in place

Speeds

Vne - never exceed **143 kts**
Vno - structural ("normal") cruise **119 kts**
Va - maneuvering ("anything") **109 kts**
Vfe - max flaps extended **90 kts**
Vso - min flaps extended **52 kts**
Vx - best angle of climb **61 kts**
Vy - best rate of climb **68 kts**
Best glide and best approach **63 kts**
Maximum crosswind **15 kts**
Flaps extended - White Arc **52-90 kts**
Operating - Green Arc **54-119 kts**
Power-on emergency descent **143 kts**
Power-off rapid descent - **63 kts** and full flaps

Spin recovery

Simultaneous yoke full forward and opposite rudder
Power off, flaps up, ailerons neutral
Stall recovery: 300 feet is a normal altitude loss

Short/Soft TO/landing

Find them :-)

Takeoff Emergency - On runway
Throttle full off
Master batt & alt switches off
Magnetos all off
Fuel selector off
Maximum braking (after firmly on ground)

Takeoff Emergency - No Restart
(same as on runway, plus)
Maintain **63 kts**
Select landing area, avoid steep turns, and land into the wind

Takeoff Emergency - After lift off
Trim for **63 kts** and level flight
Check mixture is at full rich (or lean slightly)
Check carb heat is off
Check fuel boost is on
Check fuel selector is on
Check magneto is on both
Throttle to 1/4 and select start (if engine has quit)
Key switch to "start" - push to prime (as required)

Takeoff Emergency - Rough Engine
(same as after lift off, plus)
Mixture to rich or lean for best operation
Magneto positions to Left, Right or Both for best operation

Engine Fire - Engine start
Throttle to full power
Mixture to lean
Fuel boost off

Engine Fire - In flight

Mixture full off
Fuel Selector to off
Heat and Air Vents off
Expedite rapid decent and safe landing

Electrical Fire - In cockpit
Master batt and alt switches off
Extinguisher (as required)
Determine source and turn off or pull circuit breakers
Land at next available safe airport

Alternator Failure
Alternator switch to off
All non-essential electrical off - switches off or circuit breakers pulled
All non-essential radios off (even temporarily)

Flight Operations

Maximum slip time is 30 seconds.
Do not descend without some power.
Glide is **63 kts** - gives 1.3 nm per 1000 feet
Do not spiral for more than two turns.
Pitot heat should be on when in visible moisture.
DensAlt = PA+(120*(OAT-(15d-PA*(2d/1kft))))

Non-standard Operation

Stall warning is inoperative when master batt off.
Unlatched door will trail open about 3" - some buffeting; hold during flare.
Low fuel light may be inoperative if gauges are operative.
Alternate static air source is below instrument panel on lower left sidewall.
Flap indicator allowed to be inoperative if flap travel is visually observed.
Avoid extended use of the landing light while on the ground.
The alternator bulb may be pressed to test.
An ammeter reading at zero is normal.
Ammeter below 25% charge at 1100 rpm is normal.
Battery switch is on and alternator switch is off when using external power.
Battery must be installed when using external power.
Aircraft is negative ground. Power pin on external power receptacle is connected directly to the battery and will short out the battery if grounded. Use only a negatively grounded power cart.

Ground Handling

Tiedown lugs are weak. Tiedown rope must be nylon, not cotton; tie nose down in high wind.
Clean windows with water and soft cloth only prior to using approved cleaner.
Prior to washing, cover all air intakes.
Remove oil and dirt from nose strut with soft rag.
Never taxi with a flat shock strut.
Main tires 35 psi; nose 25 psi (4-ply tube type tires).
In cold weather, rotate propeller backwards to loosen oil. Never move propeller with magneto on.
To sets parking brakes, hold the rudder brakes and pull out the park brake control.
Do not leave aircraft with parking brake set for long periods of time.
Do not turn nose wheel in excess 15-degrees left or right when towing. See red marks.
Do not place weight on the empennage to raise the nose wheel.
Do not insert fuel nozzles in more than three inches.
Do not top off tank at high pressure.

Specifications & Dimensions

Model 77 (ASEL)
Classification: Standard
Category: Utility
Engine: Lycoming O-235
FAA License: N_37148__
Serial number: WA-_188__
Mfg date: _1980_____
Span 30' Length 24' Height 6'11"
Prop 72" Turn Radius 20'8"
Fuel 30 with 29 usable
Oil 6 quarts
Weight 1680 Takeoff 1675

This is v20 of 2010/04/26

Beechcraft Skipper Checklist