

## 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; check last fuel level  
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 prop, spinner, bulkhead for chips & cracks  
Check spinner solidity with a good shake  
Check oil (4-6 qts); 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  
Log fuel tank levels from visual inspection

### Safety briefing

Lap and shoulder belts, seat adjustment  
Door latches (operation and testing)  
What to touch or not (esp vents)  
Radio / intercom / headset operation + call sign  
Sterile cockpit requirements  
Observing traffic / Zoon / GPS  
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!)  
Strobe lights on (other custom at this airport?)  
Nav lights on (night)  
Clear prop area  
Doors shut and top latch locked  
Key switch to "on"; push to prime as necc  
Key switch to start and hold; bring in throttle when the engine catches. [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  
Visual fuel caps check  
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)

### Short/Soft Takeoff

10 degrees of flaps

### 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

### Short/Soft landing

20? 30? degrees of flaps

### 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  
Flaps from 30 to 10 if in  
Level flight till **63 kts**  
Establish positive rate of climb  
Flaps up to 0

### Post Landing

**Yoke back pressure when braking**  
Flaps up  
Carb heat off  
Lean for taxi at this altitude  
Fuel boost off  
Landing light off (day)  
Control held (as required) during taxi

### Shut Down

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

### Park

Control lock in place  
Pitot cover in place  
Nose plug in place  
Log fuel tank levels  
Tow bar stowed  
Both doors latched closed  
Top door latch locked  
Cover in place

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

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

**Takeoff Emergency - No Restart**  
(as "on runway" except batt sw)  
Radio to local or 121.5  
Maintain **63 kts**  
Select landing area, avoid steep turns, and land into the wind

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

**Spin recovery**  
Simultaneous yoke full forward and opposite rudder  
Power off, flaps up, ailerons neutral

**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 emergency descend without some power.  
Stall recovery: 300 feet is a normal altitude loss  
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; then use 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 set 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 air pressure.

## 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

## 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 (15W50 winter ; 100W+/15W50 summer)  
Weight 1680 Takeoff 1675  
Tire pressures: F20-23psi; M31-34psi

This is v26 of 2011/07/02

## Beechcraft Skipper Checklist