

INTRO

- This is a multi-page document, compiled for personal use by one pilot. Many of these checklists items were derived originally from the owner's manual for the ASH26E, but the specific items may have been altered, amended, or portions deleted. Many of these checklists items were the ideas of pilots who generously and helpfully shared their thoughts with other pilots. Attribution is specifically avoided, since these checklists are not the idea of a single person, but a compilation of ideas which some pilots have deemed to be practical. These checklists are continually under revision. All previous versions of these checklists are obsolete with each newly circulated version. No attempt has been made to keep track of the circulation of these checklists, thus revisions are not published, and pilots who may have received previous versions may be attempting to follow faulty ideas. Pilots using these checklists do so at their own risk. Each and every pilot reviewing these checklists is encouraged to post their comments on the ASH26 Owners web page, so that pitfalls may be uncovered and new ideas circulated. These checklists do not have any copyright attached to them and may be altered and reproduced freely.
- The following additional notes should serve as a warning to all persons using these checklists
- These checklists are not all encompassing
- They may be misleading or even incorrect
- These Checklists are:

- Not procedures
- Not intended to serve a means of training
- Not a substitute for commons sense

- Recommendations, procedures, rules regulations and requirements as stipulated by the manufacturer, the J.A.R., the FAA and any other applicable or governing agency should be strictly adhered to.

- Secure Trailer – brakes, chocks, extend legs
- Position Equipment:
 - On right: wing stand, wing wheel, rig dolly.
 - On left: Tail lifting bar, Tail dolly.

- Position rails, raise dolly jack, carpet guards,
- Disconnect solar wire from trailer
- Slowly roll fuselage out, check brake fluid level
- Prep cockpit – secure solar cord, unfasten cradle
- Position wing pins, tool pouch, grease and towels
- Prep fuselage, tailplane, and winglet holes – clean and lube all fittings and pins.
- Unlock spoilers, Flaps 2, Center stick, Close dump valve, Instruct Assistant
- Lower fuselage as much as possible
- Position rig dolly at right aft drag spar, with wheels off center, trailing edge stop on ground
- Manual rig – tell helper not to deflect the ailerons
- Wing into dolly, set: center on axle, tighten nuts
- Insert right root, level, position end of spar
- Wing support at aileron / flap split
- Remove rig dolly, move to left side, repeat
- Install left wing and wing pins
- Raise fuselage, Remove rig dolly
- Tip Tool in pocket, lube and install Winglets
- Tail wrench in pocket, install Tailplane
- Remove TE plug, tail wrench
- Remove Aileron Locks, Pitot Plug
- Positive Control Check, Battery Volts
- Extend Gear, Install Right wing wheel,
- TE probe, Tail dolly, lift bar to rear
- Tape, secure tool pouches, roll off dolly
- Perform Daily Preflight
- Confirm accessories in side pocket :

- Lifting Strap
- Mirror to view engine bay doors

- Secure wing stand, equipment
- Secure Trailer

DAILY PREFLIGHT**PAGE 2**

- | |
|---|
| <ul style="list-style-type: none"> • Canopy – lock, release, jettison connections • Main pins home and secured • Check cockpit |
| <ul style="list-style-type: none"> ○ Battery voltage 1 and 2 ○ Controls for operation and loose objects |
| <ul style="list-style-type: none"> • Tow release check • Pitot tube clean and unobstructed • Exterior check |
| <ul style="list-style-type: none"> ○ Gel coat ○ Locks on winglets ○ Spoilers – no water, over center lock ○ Wheel brake check, brake pressure in handle ○ Control connects, hinges ○ Gap on ailerons junction = 1/16 minimum ○ Static ports ○ Turbulator tape |
| <ul style="list-style-type: none"> • Tire 42 to 46 psi • Reconfirm - Positive Control Check done • Engine preflight |
| <ul style="list-style-type: none"> ○ Extract prop – quiet and smooth ○ All bolted connections ○ Front engine mounting screws ○ Locking wire on rear engine bolts ○ Move prop mast – check engine mounts ○ Both over center prop extensions ○ Shake muffler – inspect mountings ○ Radiator support – no cracks ○ Throttle and Stop prop assembly ○ Hoses, cables cords ○ Carb and filter ○ Limit switch for jack ○ Drive belt ○ Turn prop one revolution |
| <ul style="list-style-type: none"> • Prop and mounting check • Oil tank full = 1 cm or 3/8 inch below top, 5/8 below top of outer rim • Fuel tanks – no damage, see full (5 L min for launch) |

REFUELING**PAGE 3**

- Wings level
- Position paper towel, refuel box and fuel can
- Install overflow pipe on tail, or intend to listen to hear the sound of full tanks
- Connect fuel pump – elect and hoses
- Master power on (horizontal), monitor qty
- Pump on– monitor for 12 L, then listen
- When sound of flow into main tank ends, turn off pump within 5 seconds, to avoid overflow.
- Place paper towels below fittings and disconnect
- Remove overflow pipe from tail
- Secure external pump and hoses in refuel box
- Raise prop, top off oil – (RPM sensitive)
 - 1 Oz (30 cc) of oil per 2 L of fuel consumed (at high rpm)
 - 2 OZ (120 cc) oil, per 4 L fuel
 - 8 Oz of oil per 16 L (1 tank) of fuel
 - One pint (16 oz) per 2 tanks of gas

PERSONAL EQUIPMENT

- Parachute / O2/ Cannular
- Ear plugs / Headset/ Camelback / Water
- Food and Relief equipment – baggies, tube
- PDA /SPOT/ Flight bag – charts, task list
- Wallet / cell phone
- Hat / Sunglasses / Sungloves

BEFORE BOARDING

- Personal Equipment loaded
- Ballast removed/ installed
- Avionics/ GPS all tuned, loaded and operating
- Altimeter set, SPOT on, PCAS on
- Wing wheel and tail dolly removed

TAKEOFF

- Trim, Flaps – set
- Spoilers - Locked

ENGINE START**PAGE 4**

- Start FEES-IT-clear-PS
 - Fuel cock - open
 - Electrical- Main Battery On, CB clsd
 - Extract prop (green light)
 - Stop for prop – disengaged
 - Ignition – On (hear pump)
 - Throttle - $\frac{1}{4}$ +, ($\frac{1}{3}$ if inflight, idle if cold on grnd)
 - CLEAR/“Clear Prop” IAS 49-60
 - Prime – 2 to 4 Sec +
 - Starter – 5 Sec (max)
- Warm 3 + minutes at 4000 RPM- coolant=60
- Mag check – 200 max drop
- Limits
 - Coolant: T.O. : 60 min, 90 max, 107 c Max, 106 c honk,
 - Internal Air 125 c max, 128 c honk
 - Fuel 15.3L useable, 4L honk
 - Oil light 10 minutes to failure
 - Gen Warning < 12.8 v
 - RPM: 7500 max T.O. and at 51 kts (5 Min limit) 7800 max overspeed (red), over 6900 (ylw light), < 6900 continuous
 - X-Wind t.o. = 10kts, Ind = 13kts

ENGINE SHUTDOWN

- Cooling Run - RPM 66-6900 at 70 kts, if hot
- Shutdown = RIRS
 - RPM stabilized, idle, 50 kts,
 - Ignition - off
 - Revs – stopped
 - Stop for prop – engaged
- Stow = RCR-EF
 - Retract prop – until tip is gone
 - Cool – 2 deg H2O drop, minimum
 - Retract fully – hear clunk
 - Electrical Main - off
 - Fuel cock – leave open (vs. closed)

- Clear runway
- Quit GN2, and initiate transfer of flight log
- Practice bailout

- Ignition off
- Engage prop stop
- Simulate Canopy Jettison
- Push instrument Panel up
- Release Harness
- Get out

- Push ship to parking
- Chock wheel
- Switches all off after log transfer is complete

- 302 off
- Elect vario off
- PDA, SPOT off and removed
- Radio off
- Batteries off
- Electrical Main off (vertical)
- O2 EDS off
- O2 supply off

- Remove personal gear

- Parachute / O2 Cannular
- Ear Plugs / Headset/ Camelback/Water
- Food and relief equipment/Baggies/Tube
- Flight bag/ charts/ cell phone
- Wallet/ PDA/ Sungloves
- Hat/ sunglasses

- Clean Exterior
- Post Flight Engine

- Raise prop, remove prop stop
- Inspect engine and prop
- Clean prop, and center it
- Prop stop on and Lower prop

- Complete After Landing Checklist
- Prep trailer, approach, and remove tail dolly
- Pull onto cradle stop at left edge of "26E" or align with mark on fuselage
- Position right wing stand at aileron flap split
- Be sure stand is high enough for rig dolly
- Raise fuselage, Retract Gear
- Position removal tools, pins box, paper towels
- Remove Tape
- Remove winglets
- Remove TE probe and install plug
- Loosen tail bolt, insert spacer, stow tailplane
- Unlock spoilers, Dump valves closed, Flaps 2
- Left wing first:

- Raise Fuselage to get rig dolly on
- Attach rig dolly outboard of mid-spoiler, Instruct assistant, Remove spar pins and walk wing

- Relocate rig dolly, remove Right wing
- Connect fuselage into cradle with pins
- Install Pitot plug and TE Plug
- Recheck all switches off

- Radio off, Vario off, 302 off
- Battery switch off
- Electrical Main off - Vertical
- O2 supply closed
- O2 EDS off

- Recheck all personals removed from pockets

- Compaq-PDA, SPOT, Cannular
- Cell phone, Wallet, food
- Charts, kit bag, etc

- Attach solar extension cord to batteries, remove all cockpit clutter
- RECHECK pocket empty, all switches off
- Canopy closed, push fuselage into trailer
- Connect solar charger cord, stow rail and jack
- Reload front of trailer, inspect area.
- Prep for road travel, if intended - secure fuselage strap, raise trailer legs

EMERGENCY PROCEDURES

PAGE 7

• (1)To Jettison Canopy

- Power plant- shut off (Ignition-off, maybe retract prop)
- Red jettison Handles- pull all the way back
- Push canopy UP by the Red Handles (front lifts off first)

(Canopy Jettison = P-off, RH-pull, RH-push up)

• (2)Bailing Out

- Ignition : Off!
- Engage prop stop
- Push instrument Panel UP
- Release safety harness
- Roll over cockpit side
- Push off strongly
- Watch wing and tailplane!
- Pull parachute

(Bailout = I P P H G P) (Ign-off, Prop-stop, Panel-up, Harness-release, Go and Pull)

▪ (3)Spinning

- Throttle to idle
- Apply opposite rudder and at same time
- Relax back pressure on stick until rotation stops
- Centralize rudder and immediately pull out gently from dive

▪ (4)Fire

- Fuel valve : Shut!
- Full Throttle until engine stops
- Ignition off!
- Prop retract, if possible
- Electric - power plant main switch off!
- Land AQAP
- Extinguish fire

(Fire = F F I P E L E) (Fuel-off, Full-throttle, Ign-off, Prop-retract, Elect-off, Land, Extinguish)

OTHER EMERGENCIES**PAGE 8**

- (1)Jammed Elevator
 - Use flaps to control pitch
- (2)Emergency Landing with Retracted Gear
 - Fly it on – don't stall it in
- (3)Intentional Ground Loop
 - Decide 140 feet before obstacle
 - Turn into the wind
 - At same time - Wing down and stick forward and apply opposite rudder
- (4)Ditching
 - Water at least 6 ft deep
 - Gear down
 - Fly it on – don't stall in
 - Expect ship to submerge
 - Only as a last resort
- (5)Asymmetric Water Ballast
 - Stop dumping so it doesn't get worse
 - Maintain adequate speed above stall
 - Avoid turning towards heavy wing
- (6)Strong noise due to defective muffler
 - stop engine
- (7)Defective airbrake
 - Visually scan
 - Extend other, regain control, land
- (8)Throttle cable broken
 - engine will run at full throttle
 - climb, switch off ignition
 - stop prop and retract
 - if ceiling and no airfield, consider spoilers/flaps to limit climb
 - switch off ignition and retract prop prior to landing

Notes Section

Over the years there have been many discussions of operating procedures, techniques, and concerns. See the ASH-26E Owners page for helpful info. Here a few notes I have made to myself...

Mixture: When changing operating locations, adjust engine mixture by turning the T shaped upper screw clockwise approx five degrees for each 2,000 ft increase in field elevation. Opposite when going to lower elevations.

Engine Air Temp: Never let the engine get to 125 air temp. When climbing, and engine temp hits 120 increase speed to approx 62 kts and decrease throttle to keep RPM below 7,000. Do not shutdown engine if internal air temp is 120 or above without cooling engine. Thermal at min of 55 kts and adjust throttle to match RPM with airspeed (60 kts, set 6,000 RPM, etc). Temp should drop to 115 or below before shutdown.

Rig – derig: Lower the fuselage before inserting or removing wings.

Starting engine sequence:

Leave Stop for prop ON until prop is fully extended – this prevents rotation of prop until clear of doors.

Leave Ignition off until prop is up and Stop is off –

A system failure could allow start if a dumb ass hit Start button out of sequence.

In flight you can arm the system for a quick start by:

- Engine C/B open.
- Battery #1 switch on.
- Throttle 1/3 open.
- Prop brake on.
- Prop switch in the up position.

When it is time to start, slow to less than 55 and push breaker in. See green light on prop extended, raise prop stop lever, lower nose, ignition on, prime and start.

Printing: cut into 5 inch wide strips, staple along top left corner, fold each along staple – advantages: keeps pages in order, all together in one place. Laminating each page individually works ok also – but change is inevitable. Share your suggested techniques.

Please send your additional note and comments to pjkelly@sonic.net