

**PA44-180  
Henley Aviation  
Before Start**

Paper Work ..... Check It  
 Parking Brake..... Set  
 Seats Belts ..... Fasten  
 Passenger Brief..... Complete  
 Preflight ..... Complete  
 Circuit Breakers..... Checked  
 Engine Controls..... Full Fwd.  
 Landing Gear Handle ..... Down  
 Cowl Flaps..... Open  
 Fuel Selectors ..... Mains  
 Electrical Switches ..... Off  
 Beacon Light ..... On  
 Battery & Alternators ..... On  
 Fuel Qty..... Verify  
 Ldg. Gear Lts..... 3 Green

**After Start**

Oil Pressures..... Check  
 Instrument Pressure ..... Check  
 Alt/Loads ..... On & Ck  
 Avionics Master ..... On  
 Annunciator Lights..... Test & Set  
 Lights..... As Req.

**Taxi**

Lights..... As Req.  
 Brakes ..... Check  
 T&B / DG's ..... Check

**Henley Aviation  
Before Takeoff**

Controls ..... Check  
 Flight Instr's ..... Check  
 Engine Gauges ..... Check  
 Comm's & Navs ..... Set  
 GPS ..... Set  
 Transponder ..... Set  
 Trim Tabs..... 1-2-3 Set  
 Elect./Trim..... CK & Set  
 Friction Locks..... Adjust  
 Flaps ..... Up  
 Aux Fuel Pumps ..... As Req.  
 Fuel Selectors..... Mains  
 Mixtures ..... Set  
 Feathering Check ..... Check  
 Magneto Checks..... Complete  
 \*Governor Checks ..... Complete  
 Vacuum Pressure ..... Check  
 Doors & Windows ..... Check  
 Departure Brief ..... Complete

**Runway**

Lights ..... As Req.  
 Transponder ..... On  
 Annunciators..... Out

**After Takeoff**

Gear..... Up Lts. Out  
 Flaps ..... Up  
 Power..... As Req.  
 Engine Gauges ..... Check  
 Mixtures..... Set  
 Cowl Flaps ..... As Req.  
 Lights ..... As Req.

**Henley Aviation  
Cruise**

Power ..... Set  
 Mixtures..... Set  
 Engine Gauges ..... Check  
 Cowl Flaps ..... As Req.  
 Lights..... As Req.

**Descent**

Altimeter ..... Set  
 Lights..... As Req.  
 De-Ice / Anti Ice..... As Req.  
 Seat Belts..... Fasten  
 Crew Brief ..... Complete

**Initials**

Mixtures..... Set  
 Landing Lights..... On  
 Flaps ..... Approach  
 Altimeter ..... Set  
 Mixtures..... Full Rich  
 Landing Lights..... On  
 Fuel Selectors ..... Mains

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Gear ..... Down 3 Green  
 Landing Clearance ..... Cleared

**Final**

Gear ..... Verify 3 Down  
 Flaps ..... Full  
 Props..... Max RPM

## Henley Aviation Clear of Runway

Lights.....As Req.  
Cowl Flaps.....Open  
Flaps ..... Up  
Trim.....Reset to T/O  
Transponder.....Stby.  
Anti-Ice ..... Off

## Shut Down

Engine RPM ..... 1000  
Electrical Equip..... Off  
Beacon Lt. .... On  
Enviromentals..... Off  
Aux Fuel Pumps ..... Off  
Avionics Master ..... Off  
Mixtures .....Idle Cutoff  
Mag Sw's..... Off  
Battery / Alt's ..... Off

## Securing Aircraft

Control Lock ..... Install  
Wheels ..... Chocked  
Aircraft..... Secured

### Note:

- Denotes first flight of day check only

## Henley Aviation Limitations

### V SPEEDS:

1.  $V_{NE}$ ..... 190 KIAS
2.  $V_{NO}$  ..... 149 KIAS
3.  $V_A$   
@ 2750LBS..... 121 KIAS  
@ 1863LBS..... 96KIAS  
Linear interpolation may be applied for intermediate weights
4.  $V_{FE}$ ..... 108KIAS
5.  $V_{LE}$  ..... 130KIAS
6.  $V_{LRETRACT}$ ..... 109KIAS
7.  $V_{YGEAR \& FLAPS UP}$ ..... 87KIAS
8.  $V_{YGEAR \& FLAPS DOWN}$  ..... 76 KIAS
9.  $V_{XGEAR \& FLAPS UP}$ ..... 77 KIAS
10.  $V_{XGEAR \& FLAPS DOWN}$  ..... 70 KIAS
11.  $V_{SO}$  ..... 53KIAS
12.  $V_S$ ..... 58KIAS
13.  $V_{TURB}$  ..... 121 KIAS
14. MAX Demo X-wind ..... 17 KTS

### Weights:

1. MAX GTOW ..... 2750LBS
2. MAX BAGGAGE..... 200LBS

### CG LIMITS:

1. @ 2750LBSFWD 90.0 AFT 93.0
2. @ 2400LBSFWD 85.5 AFT 93.0

### LOAD LIMITS:

1. POSITIVE.....3.8Gs
2. NEGATIVE .NOT APPROVED

### FUEL:

1. USEABLE..... 72 USGAL
2. TOTAL ..... 77 USGAL

### Engine Fire during Start

1. Starter... CONTINUE TO ENGAGE
2. Mixture.....IDLE CUT OFF
3. Throttle.....FULL OPEN
4. Electric Fuel Pump..... OFF
5. Fuel Selector ..... OFF
6. If fire will not extinguishEVACUATE

### Engine Failure during Departure

#### FLY FIND FIX

If sufficient runway remains:

1. Gear.....DOWN
2. Land Straight Ahead

If the area ahead is rough, or it is necessary to clear obstacles:

1. Gear..... UP
2. Proceed with EMERGENCY LANDING CHECKLIST, if conditions permit.

If altitude and conditions permit:

1. Proceed with the ENGINE RESTART CHECKLIST

### Engine Failure In-Flight

#### FLY FIND FIX

1. Speed..... 79KIAS
2. Fuel Selector .....SWITCH TANKS
3. Engine Gauges .....CK
4. Electric Fuel Pump.....ON
5. Mixture.....RICH
6. Alternate Air ..... OPEN
7. Magnetos.....ON

If power is restored:

1. Alternate Air .....CLOSED
2. Electric Fuel Pump..... OFF

If power is not restored and altitude and conditions permit:

Proceed with the ENGINE RESTART IN-FLIGHT

If committed to landing and conditions permit:

Proceed with the EMERGENCY LANDING CHECKLIST

### Fire In-Flight

Determine the Source

If the source is ELECTRICAL then:

1. Master Switch..... OFF
2. Vents .....CLOSED
3. Vent Air Fan ..... OFF
4. Cabin Heat ..... OFF

**If fire persists use fire extinguisher and then Proceed with the Emergency Landing Checklist.**

**If fire extinguishes LAND AS SOON AS POSSIBLE**

If the source is the ENGINE then:

1. Fuel Selector ..... OFF
2. Throttle .....CLOSED
3. Mixture.....IDLE CUT-OFF
4. Electric Fuel Pump ..... OFF
5. Defrost and Cabin Heat..... OFF

**PROCEED WITH THE EMERGENCY LANDING CHECKLIST**

### Propeller Overspeed

1. Throttle ..... REDUCE
  2. Oil Pressure..... CK
  3. Prop..... FULL DECREASE
- Then set, if there is any control available.
4. Airspeed ..... REDUCE
  5. Throttle .....AS REQUIRED
- To maintain 2700RPM

### Emergency Gear Extension

1. Master Switch .....ON
  2. Circuit Breakers ..... IN
  3. Panel Light..... OFF(daytime)
  4. Gear Position Lights.. CK BULBS
- If Gear NOT down and locked:
5. Airspeed.....BELOW 87KIAS
  6. Gear Selector..... DOWN
  7. Emergency Gear LeverEMERGENCY DOWN

If gear does not LOCK:

Slow the aircraft to the slowest safe speed and yaw from side to side with the use of the rudder.

### Spin Recovery

1. Rudder ....FULL OPPOSITE THE ..... DIRECTION OF ROTATION
2. Control Wheel ..... FULL FWD ..While NEUTRALIZING ALIERONS
3. Throttle..... IDLE
4. Rudder ..... NEUTRAL WHEN ROTATION STOPS
5. Control Wheel ..... AS RQD

### Door Opening in Flight

1. Airspeed..... LESS THAN 87KIAS
2. Cabin Vents .....OPEN
3. Storm Window ..... OPEN
4. Door Latches ..... SECURE
5. Storm Window .....CLOSE

### **Engine Restart In-Flight**

1. Fuel Selector . FULLEST TANK
  2. Mixture.....RICH
  3. Alternate Air ..... OPEN
  4. Electric Fuel Pump.....ON
  5. Prop ..... FULL FORWARD
  6. Throttle..... OPEN ½”
  7. Ignition ..... BOTH
- If prop has stopped wind milling:
8. Starter ..... ENGAGE

### **Emergency Landing**

#### **FLY FIND FIX**

1. Speed..... 79KIAS
2. Throttle..... CLOSED
3. Mixture..... IDLE CUT-OFF
4. Fuel Selector ..... OFF
5. Ignition ..... OFF
6. Master Switch ..... OFF
7. Seat Belts ..... SECURED
8. Flaps ..... AS REQUIRED
9. Landing Gear ... AS REQUIRED

### **Loss of Oil Pressure**

1. Engine Gauges ..... MONITOR
- Be prepared for engine failure.  
Land as soon as Practical.

### **Loss of Fuel Pressure**

1. Electric Fuel Pump..... ON
2. Fuel Selector VERIFY ON FULL TANK

### **High Oil Temperature**

1. Engine Gauges ..... MONITOR
- Be prepared for engine failure.  
Land as soon as Practical.

### **Alternator Failure**

Reduce the electrical load as much as possible.

1. Alternator Circuit Breakers VERIFY IN
2. Alternator Switch.....  
..... OFF FOR 1sec THEN ON

If Alternator does not reset then REDUCE THE ELECTRICAL LOAD AS MUCH AS POSSIBLE AND LAND AS AON AS PRACTICAL.

CAUTION: If battery is fully discharged the gear will have to be lowered using the alternate gear extension procedure, and the position lights will NOT illuminate.