

PREFLIGHT

1. Parking Brake SET
2. Controls FREE AND CORRECT
3. Landing Gear Knob DOWN
4. Electrical Equipment OFF
5. Avionic Master OFF
6. Ignition Switches OFF
7. Fuel Pumps OFF
8. BATT Switch ON
9. Landing Gear Lights 3 GREENS
10. Fuel quantity CHECK
11. BATT Switch OFF
12. Pitot and Static System DRAIN
13. Mixtures CUT OFF
14. Cowl Flaps OPEN
15. Flaps FULL DOWN/UP
16. Trimmers CHECK/SET NEUTRAL
17. Fuel Selectors ON
18. Aircraft Documents ON BOARD

EXTERIOR INSPECTION

1. Fuel Cap SECURED
2. Fuel Drains DRAIN
3. Engine oil (max 6-min 4 QTS) CHECK
4. Baggage door CLOSE/LOCKED

BEFORE STARTING ENGINE

1. Exterior inspection COMPLETED
2. Doors, windows CLOSED
3. Seat belts/Harness .. FASTENED/ADJUSTED
4. Circuit breakers ALL IN
5. Prop Sync MANUAL
6. Carburetor OFF
7. Alternators ON
8. BATT Switch ON
9. Avionic Master ON
10. ATIS/Take-off data RECEIVED
11. Altimeters SET/COMPARED
12. Start up clearance RECEIVED
13. Avionic master OFF
14. Mixtures/Propellers FULL FORWARD
15. Anti-collision light ON

ENGINES START

1. Throttles ¼ inch OPEN
2. Fuel Pump ON
3. Magneto switches ON
4. Starter/Primer ENGAGE/PRIME ≤ 2 sec
5. Throttle 1000 RPM
6. Oil press, Alternator, Suction CHECKED
7. Cowl flap CLOSE

Repeat marked items for the second engine.
STARTER MAX 30 SEC THEN 2 MIN REST

ENGINE START/HOT

1. Throttles 1/2 inch OPEN
2. Fuel Pump ON
3. Magneto switches ON
4. Starter ENGAGE
5. Throttle 1000 RPM
6. Oil press, Alternator, Suction CHECKED
7. Cowl flap CLOSE

Repeat marked items for the second engine.
STARTER MAX 30 SEC THEN 2 MIN REST

ENGINE START/FLOODED

1. Mixtures CUT OFF
2. Throttles FULL OPEN
3. Magneto switches ON
4. Starter ENGAGE
5. Throttle RETARD
6. Mixture ADVANCE
7. Throttle 1000 RPM
8. Oil press, Alternator, Suction CHECKED
9. Cowl flap CLOSE

Repeat marked items for the second engine.
STARTER MAX 30 SEC THEN 2 MIN REST

STARTING WITH GPU

1. BATT Switch OFF
2. All Electrical Equipment OFF
3. GPU CONNECT
4. Left Engine start USE CHECKLIST
5. Throttle IDLE
6. GPU DISCONNECT
7. BATT Switch ON
8. Ammeter CHECK
9. Throttle 1000 RPM

AFTER STARTING ENGINES

1. Fuel pumps OFF
2. NAV lights AS REQUIRED
3. Avionic master ON
4. Heater, fan AS REQUIRED
5. Directional gyros CHECK SLAVING/SET
6. Radio/Nav SET

TAXI

1. Clearance RECEIVED
2. Parking Brake RELEASE
3. Transponder ON
4. Brakes TEST
5. Steering TEST
6. Fuel Selector CROSSFEED THEN ON
7. Flight Instruments CHECKED

RUN UP POSITION

1. Parking brakes SET
2. Mixtures/Propellers FORWARD
3. Annunciator panel PRESS TO TEST
4. Throttle 1500 RPM
5. Propeller CHECK FEATHER
6. Throttle 2000 RPM
7. Propeller CHECK GOVERNOR
8. Carburetor heat CHECK/OFF
9. Magnetos CHECK (DROP 175 DIFF±50)
10. Throttle CHECK IDLE THEN 1000 RPM
11. Eng gauges, Alt's, Suction CHECKED
12. Cowl flaps AS REQUIRED
13. Prop De-ice CHECKED
14. Take-off briefing COMPLETED

Repeat marked items for the second engine.

LINE UP

1. Parking Brake RELEASE
2. Fuel selectors ON
3. Trimmers SET FOR TAKE-OFF
4. Flaps 0° NORMAL/25° SHORT
5. Mixtures/Propellers FULL FORWARD
6. Transponder ALT
7. RWY heading, Directional Gyros SET
8. Pitot Heat AS REQUIRED
9. Landing Light ON
10. Fuel Pumps ON
11. Time CHECKED

TAKE OFF

1. Take off power SET
2. Over Boost CHECK
3. Speed INCREASE
4. Rotation 75 NORMAL/63 SHORT

AFTER TAKE OFF

1. Gear UP
2. Climb PWR SET (32 inHg/2400 RPM)
3. Flaps UP
4. Engine gauges MONITOR
5. Cowl flaps AS REQUIRED

CRUISE

1. Cruise Power SET (27 inHg/2200)
2. Landing Light OFF
3. Fuel Pumps OFF (ON above FL100)
4. Altimeters SET/CROSS CHECKED
5. Mixtures ADJUST
6. Engine gauges MONITOR
7. Cowl Flaps AS REQUIRED

DESCENT

1. Altimeters CHECKED/COMPARED
2. NAV setting SET
3. Approach briefing COMPLETED
4. Directional gyros CHECKED
5. Carburetor heat AS REQUIRED
6. Fuel selectors BOTH ON
7. Mixtures RICH
8. Cowl flaps CLOSED
9. Circuit breakers ALL IN

FINAL

1. Mixtures/Propellers FULL FORWARD
2. Prop Sync MANUAL
3. Flaps SET FOR LANDING
4. Gear DOWN/3 GREEN
5. Landing Lights ON
6. Fuel Pumps ON
7. Airspeed 90 KIAS

GO AROUND

1. Throttles MAX POWER
2. Flaps RETRACT
3. Gear UP
4. Cowl flaps AS REQUIRED

RUNWAY VACATED

1. Landing light OFF
2. Fuel Pumps OFF
3. Pitot Heater OFF
4. Transponder STBY
5. Cowl flaps OPEN
6. Carburetor heat OFF
7. Flaps UP
8. Heater FAN (3 MIN)/OFF

SHUT DOWN POSITION

1. Parking brakes SET
2. Avionic Master OFF
3. Throttles IDLE
4. Engines COOLING (3 MIN)
5. Mixtures CUT OFF
6. Anti-collision light OFF
7. Magnetos OFF
8. Alternators OFF
9. BATT Switch OFF

EMERGENCY PROCEDURES

PIPER PA-44 SEMINOLE

SP- MIS

ENGINE SECURING PROCEDURE

1. Dead Mixture CUT OFF
2. Rudder Trim ADJUST
3. Dead Cowl Flap CLOSED
4. Operating Engine Cowl Flap OPEN
5. Dead Fuel Pump OFF
6. Dead Magnetos OFF
7. Dead Alternator OFF
8. Dead Fuel Selector OFF
9. Crossfeed AS REQUIRED
10. Electrical Load REDUCE

ENGINE FAILURE DURING TAKE OFF DECISION TO ABORT

1. Throttles IMMEDIATELY CLOSE
 2. Brakes AS REQUIRED
- IF INSUFFICIENT RUNWAY REMAINS**
3. Mixtures CUT OFF
 4. Fuel Selectors OFF
 5. Magnetos OFF
 6. Fuel Pumps OFF
 7. BATT Switch OFF
 8. Alternators OFF
 9. Brakes AS REQUIRED

ENGINE FAILURE DURING TAKE OFF DECISION TO CONTINUE

1. Mixtures/Propellers FULL FORWARD
2. Throttles MAX POWER
3. Flaps/Gear UP
4. Inoperative Engine VERIFY
5. Inoperative Engine CLOSE THROTTLE
6. Dead Prop. FEATHER (≥ 950 RPM)
7. Bank into Operat. Engine 3-5°
8. Climb Speed 88 KIAS (BLUE LINE)
9. Trim 1/2-3/4 BALL SLIP
10. Engine Securing Procedure APPLY

ENGINE FAILURE DURING FLIGHT

1. Airspeed MIN 88 KIAS
2. Directional Control MAINTAIN
3. Mixtures/Propellers FULL FORWARD
4. Throttles 36,5 inHg MAX
5. Flaps/Gear UP
6. Inoperative Engine VERIFY
7. Inoperative Engine CLOSE THROTTLE
8. Dead Prop. FEATHER (≥ 950 RPM)
9. Engine Securing Procedure APPLY

ONE ENGINE INOP LANDING

1. Engine Securing Procedure COMPLETE
 2. Fuel Selectors (Oper Eng) ON
 3. Fuel Pump (Oper. Eng) ON
 4. Mixture/Prop (Oper. Eng) ... FULL FORWARD
 5. Cowl Flap (Oper. Eng) AS REQUIRED
 6. Altitude & Airspeed NORMAL APPROACH
- IF LANDING IS ASSURED**
7. Gear DOWN
 8. Flap 25°
 9. Airspeed 90 KIAS

ONE ENGINE INOP GO AROUND

1. Throttle (Oper. Engine) 36,5 inHg MAX
2. Flaps/Gear UP
3. Airspeed 88 KIAS
4. Trim Bank into Oper. Engine 3-5°
5. Cowl Flap (Oper. Eng) AS REQUIRED

ENGINE FIRE SECURE CHECKLIST

IF FIRE EXIST

1. Airspeed INCREASE (V_{NE} 202 KIAS)
LAND AS SOON AS POSSIBLE

MANUAL GEAR EXTENSION

1. Circuit Breakers CHECKED
 2. BATT Switch CHECK ON
 3. Navigation Lights OFF
 4. Gear Lights CHECK
- PROCEEDING MANUAL EXTENSION**
5. Airspeed ≤100 KIAS
 6. Landing Gear Knob DOWN
 7. Emergency Gear Knob PULL
 8. Gear Lights 3 GREEN

AIR START DEAD ENGINE

1. Dead Fuel Selector ON
 2. Dead Fuel Pump ON
 3. Dead Throttle 1/4 INCH OPEN
 4. Dead Mixture RICH
 5. Dead Magnetos ON
 6. Dead Primer PRIME ≤ 2 sec
 7. Dead Propeller FULL FORWARD
 8. Dead Starter ENGAGE
- IF ENGINE DOES NOT START**
9. Dead Primer AS REQUIRED (≤ 2 sec)
 10. Dead Alternator ON
- AFTER START UP**
11. Throttle REDUCE POWER until warm
 12. Alternator ON
 13. Engine Instrument CHECK
 14. Throttle ADJUST
 15. Propellers MANUAL SYNC

SINGLE ALTERNATOR FAILURE

1. Verify Failure CHECK AMMETER
 2. Electrical Load (less than 60A) REDUCE
 3. Failed Alternator OFF
 4. Failed Alternator Circuit Breaker CHECK
 5. Failed Alternator ON
- IF POWER NOT RESTORED**
6. Failed Alternator OFF
 7. Amperage (maintain < 60A) MONITOR

DUAL ALTERNATOR FAILURE

1. Verify Failure CHECK AMMETER
 2. Electrical Load (minimum) REDUCE
 3. Alternators OFF
 4. Alternators Circuit Breakers CHECK & RESET
 5. Alternators (after >1s) ON
- IF ONLY ONE RESETS**
6. Operating Alternator ON
 7. Failed Alternator OFF
 8. Electrical Load (< 60A) MAINTAIN
 9. Amperage MONITOR
- IF NEITHER ALTERNATOR RESETS**
10. Alternators OFF
 11. Electrical Load MINIMUM
- ON BAT COMPAS ERROR MAY EXCEED 10°**

ENGINE DRIVEN FUEL PUMP FAILURE

1. Throttle RETARD
 2. Fuel Pump ON
 3. Throttle RESET
- IF POWER NOT RESTORED**
4. Fuel Pump OFF

STARTER ON LIGHT

If light remains illuminated after the starter switch is released:

5. BUS ISO (60A) circuit breakers PULL
 6. BATT Switch OFF
 7. Electrical loads REDUCE
- LAND AS SOON AS PRACTICAL**

CHECKLISTS MARKED WITH THE THICK VERTICAL LINE ON THE LEFT SHOULD BE MEMORAZIED
VERSION IV – 03.02.2017

GEAR UP LANDING

SELECT SUITABLE LANDING AREA

1. Ground Personnel INFORM
 2. Fuel BURN OFF
 3. Seatbelts FASTEN/ADJUST
 4. Normal Landing Checklist COMPLETE
- WHEN LANDING IS ASSURED**
5. Mixtures CUT OFF
 6. Propellers FEATHER
 7. Fuel Selectors OFF
- TOUCH DOWN AT MINIMUM AIRSPEED**
8. BATT Switch OFF

CROSSFEED

CRUISING CROSSFEED:

1. Fuel Selector Oper. Engine CROSSFEED
 2. Fuel Selector Inop. Engine OFF
- USE CROSSFEED IN LEVEL FLIGHT ONLY
DO NOT LAND WITH FUEL ON
CROSSFEED**
- COMING OUT OF CROSSFEED**
3. Fuel Pump Oper. Engine ON
 4. Fuel Selector Oper. Engine ON
 5. Fuel Selector Inop. Engine OFF
 6. Fuel Pump Inop Engine OFF
- LANDING**
7. Fuel Selector Oper. Engine ON
 8. Fuel Selector Inop. Engine OFF
 9. Fuel Pump Oper. Engine ON

ENGINE FIRE DURING START UP

1. Fuel Selectors OFF
 2. Mixture CUT OFF
 3. Throttle FULL FORWARD
 4. Starter CONTINUE TO CRANK
- IF FIRE EXIST**
5. Fuel Selectors OFF
 6. Fuel Pump OFF
 7. Mixture CUT OFF
 8. Throttle FULL FORWARD
 9. Airplane EVACUATE

ENGINE FIRE IN-FLIGHT

1. Affected Engine Fuel Selector OFF
2. Affected Engine Throttle CLOSE
3. Affected Engine Propeller FEATHER
4. Affected Engine Mixture CUT OFF
5. Affected Engine Cowl Flap OPEN
6. Heater OFF
7. Defroster OFF

EMERGENCY DESCENT

1. Carburetor heat ON
2. Throttles CLOSED
3. Propellers FULL FORWARD
4. Mixtures AS REQUIRED
5. Gear (below 140 KIAS) DOWN
6. Airspeed PITCH FOR 140 KIAS

AIRSPEED FOR SAFE OPERATION

- Gear Up MAX 109 KIAS
Gear Down MAX 140 KIAS
Max Flaps Extended Speed (V_{FE}) 111 KIAS
Normal Operating Speed (V_{NO}) 170 KIAS
Turbulent Air Operation Speed 137 KIAS
Landing Final App Speed (Flaps 40°) 90 KIAS
One Eng. Inop. Air Min. (V_{MCA}) 57 KIAS
One Eng. Inop. (V_{YSE}) / V_Y 88 KIAS
One Eng. Inop (V_{XSE}) / V_X 82 KIAS
Maneuvering (V_A) 112-137 KIAS
Never Exceed (V_{NE}) 202 KIAS
Manual Gear Extension MAX 100 KIAS