# N3206E Checklist

## Cabin

1. **Aircraft** ..... **CHECK OUT IN FSP**
2. AROW docs ..... ON BOARD
3. Control wheel lock ..... REMOVE
4. Ignition switch ..... OFF
5. Avionics switch ..... OFF
6. Master switch ..... ON
7. Fuel quantity ..... CHECK
8. Master switch ..... OFF
9. Static pressure alt source valve ..... OFF
10. Baggage door ..... CHECK, LOCK (as required)

## Empennage

1. Rudder gust lock ..... REMOVE
2. Tail tie down ..... DISCONNECT
3. Control surfaces ..... CHECK
4. Static wicks ..... CHECK (4 on elevator, 2 on rudder)

## Right Wing

1. Aileron ..... CHECK
2. Static wicks ..... CHECK (2)
3. Wing tie-down ..... UNTIED
4. Main wheel tire ..... CHECK INFLATION & CONDITION
5. Fuel tank quick drain valves ..... DRAIN, CHECK
6. Fuel quantity ..... CHECK VISUALLY
7. Fuel filler cap ..... SECURE & VENT CLEAR

## Nose

1. Static source opening (R side) ..... CHECK CLEAR
2. Fuel stainer quick drain valve ..... DRAIN, CHECK
3. Engine oil ..... CHECK (at 5, add a qt, 6 min for extended flt)
4. Engine cooling air inlets ..... CLEAR
5. Prop & spinner ..... CHECK
6. Air filter ..... CHECK
7. Nose wheel strut & tire ..... CHECK INFLATIONS & CONDITION
8. Static source opening (L side) ..... CHECK CLEAR

## Left Wing

1. Fuel quantity ..... CHECK VISUALLY
2. Fuel filler cap ..... SECURE & VENT CLEAR
3. Fuel tank quick drain valves ..... DRAIN, CHECK
4. Mail wheel tire ..... CHECK INFLATION & CONDITION
5. OAT sensor ..... CHECK
6. Pitot tube ..... CHECK, COVER REMOVED
7. Fuel tank vent opening ..... CHECK
8. Stall warning opening ..... CHECK
9. Wing tie-down ..... UNTIED
10. Landing/taxi lights ..... CHECK
11. Aileron ..... CHECK
12. Static wicks ..... CHECK (2)
13. Flap ..... CHECK

## Before Starting Engine

1. Passenger briefing ..... COMPLETE
2. Seat belts, shoulder harnesses ..... ADJUST & LOCK
3. Brakes ..... TEST
4. Circuit breakers ..... CHECK IN
5. Electrical equipment ..... OFF
6. Avionics switch ..... OFF
7. Fuel selector valve ..... BOTH

## Starting Engine

1. Mixture ..... RICH
2. Carb heat ..... COLD
3. Master switch ..... ON
4. Prime ..... AS REQ'D (2-6 strokes; none if eng is warm)
5. Beacon (BCN) ..... ON
6. Throttle ..... OPEN ⅛"
7. Prop area ..... CLEAR
8. Ignition switch ..... START (release when engine starts)
9. Oil pressure ..... CHECK



## Before Takeoff

1. Parking brake ..... HOLD or SET
2. Cabin doors & windows ..... CLOSED & LOCKED
3. Flight controls ..... FREE & CORRECT
4. Cabin doors ..... CLOSED & LOCKED
5. Flight controls ..... FREE & CORRECT
6. Flight instruments ..... CHECK & SET
7. Fuel selector valve ..... BOTH
8. Mixture ..... RICH (below 3000')
9. Elevator & rudder trim ..... SET FOR TAKEOFF
10. Throttle ..... 1700 RPM
11. Magneto ..... CHECK (max drop 125, max differential 50)
12. Carb heat ..... CHECK (for RPM drop)
13. Engine instruments & ammeter ..... CHECK
14. Throttle ..... 1000 RPM (or less)
15. Avionics switch ..... ON
16. Radios & avionics ..... SET/PROGRAMED
17. Beacon, nav & strobe lights ..... ON (as required)
18. Throttle friction lock ..... ADJUST
19. Brakes ..... RELEASE

## Normal Takeoff

1. Flaps ..... UP
2. Carb heat ..... COLD
3. Throttle ..... FULL OPEN
4. Elevator control ..... LIFT NOSE WHEEL (55 KIAS)
5. Climb speed ..... 70-80 KIAS

## Short Field Takeoff

1. Flaps ..... UP
2. Carb heat ..... COLD
3. Brakes ..... APPLY
4. Throttle ..... FULL OPEN
4. Mixture ..... RICH (above 3000', LEAN to max RPM)
5. Brakes ..... RELEASE
6. Elevator control ..... SLIGHTLY TAIL LOW
7. Climb speed ..... 59 KIAS (until clear of obstacles)

## Enroute Climb

1. Airspeed ..... 70–85 KIAS
2. Throttle ..... FULL OPEN
3. Mixture ..... RICH (above 3000', LEAN to max RPM))
4. Fuel selector valve ..... BOTH

## Cruise

1. Power ..... 2200–2700 RPM (no more than 75% recomm)
2. Elevator & rudder trim ..... ADJUST
3. Mixture ..... LEAN

## Descent

1. Mixture ..... ADJUST (for smooth ops–full rich at idle rpm)
2. Power ..... AS DESIRED
3. Carb heat ..... AS REQ'D (to prevent carb icing)

## Before Landing

1. Seats, belts, harnesses ..... SECURE
2. Fuel selector valve ..... BOTH
4. Mixture ..... RICH
5. Carb heat ..... ON (apply full heat before closing throttle)

## Normal Landing

1. Airspeed ..... 60–70 KIAS (flaps up)
2. Flaps ..... AS DESIRED
   (0°–10° < 110 KIAS, 10°–40° < 85 KIAS)
3. Airspeed ..... 55–65 KIAS (flaps DOWN)
4. Touchdown ..... MAIN WHEELS FIRST
5. Landing roll ..... LOWER NOSE WHEEL GENTLY
6. Braking ..... MINIMUM REQUIRED



## Short Field Landing

1. Airspeed ..... 60–70 KIAS (flaps UP)
2. Flaps ..... FULL DOWN (40°)
3. Airspeed ..... 60 KIAS (until flare)
4. Power ..... REDUCE to idle after clearing obstacle
5. Touchdown ..... MAIN WHEELS FIRST
6. Brakes ..... APPLY HEAVILY
7. Flaps ..... RETRACT

## Balked Landing

1. Throttle ..... FULL OPEN
2. Carb heat ..... COLD
3. Wing flaps ..... 20° immediately
4. CLIMB SPEED ..... 55 KIAS
5. Flaps ..... 10° (until clear of obstacles)
6. Flaps ..... RETRACT (after reaching safe alt & 60 KIAS)

## After Landing

1. Flaps ..... UP
2. Carb heat ..... COLD

## Secure Airplane

1. Parking brake ..... SET (or chock)
2. Avionics switch, electrical equipment ..... OFF
3. Mixture ..... IDLE CUT–OFF (pull full out)
4. Ignition switch ..... OFF
5. Hobbs & engine times ..... RECORD
6. Master switch ..... OFF
7. Control Lock ..... INSTALL
8. Fuel selector valve ..... LEFT or RIGHT
9. **Aircraft ..... CHECK IN, IN FSP**

## EMERGENCIES

### Engine Failure During Takeoff

1. **Throttle** ..... **IDLE**
2. **Brakes** ..... **APPLY**
3. Flaps ..... RETRACT
4. Mixture ..... IDLE CUT-OFF
5. Ignition switch ..... OFF
6. Master switch ..... OFF

### Engine Failure Imediately After Takeoff

1. **Airspeed** ..... **65 KIAS (flaps up); 60 KIAS (flaps down)**
2. Mixture ..... IDLE CUT OFF
3. Fuel selector valve ..... OFF
4. Ignition switch ..... OFF
5. Flaps ..... AS REQUIRED
6. Master switch ..... OFF

### Engine Failure During Flight

1. **Airspeed** ..... **65 KIAS**
2. **Carb heat** ..... **ON**
3. **Fuel selector valve** ..... **BOTH**
4. **Mixture** ..... **RICH**
5. Ignition switch ..... BOTH (or START if prop has stopped)
6. Primer ..... IN & LOCKED

### Emergency Landing Without Engine Power

1. Airspeed ..... 65 KIAS (flaps UP); 60 KIAS (flaps DOWN)
2. Mixture ..... IDLE CUT-OFF
3. Fuel selector valve ..... OFF
4. Ignition switch ..... OFF
5. Flaps ..... AS REQUIRED (40° recommended)
6. Master switch ..... OFF
7. Doors ..... UNLATCH PRIOR TO TOUCHDOWN
8. Touchdown ..... SLIGHTLY TAIL LOW
9. Brakes ..... APPLY HEAVILY



### Precautionary Landing With Engine Power

1. Flaps ..... 20°
2. Airspeed ..... 60 KIAS
3. Selected field ..... FLY OVER
   (note terrain & obstructions, then retract flaps upon reaching a safe altitude & airspeed)
4. Avionics switch ..... OFF
5. Electrical switches ..... OFF
6. Flaps ..... 40° (on final approach)
7. Airspeed ..... 60 KIAS
8. Master switch ..... OFF
9. Doors ..... UNLATCHED PRIOR TO TOUCHDOWN
10. Touchdown ..... SLIGHTLY TAIL LOW
11. Ignition switch ..... OFF
12. Brakes ..... APPLY HEAVILY

### Ditching

1. Radio ..... TRANSMIT MAYDAY 121.5 with location & intentions; SQUAWK 7700
2. Heavy objects (in baggage area) ..... SECURE OR JETTISON
3. Approach ..... High winds, heavy seas: INTO THE WIND
   Light winds, heavy swells: PARALLEL TO SWELLS
4. Flaps ..... 20°–40°
5. Power ..... ESTABLISH 300 FPM DESCENT @ 55 KIAS

**NOTE**

**If no power is available, approach @ 65 KIAS (flaps up) or 60 KIAS (flaps 10°)**

6. **Cabin doors** ..... UNLATCH
7. **Touchdown** ..... LEVEL ATT @ ESTABLISHED DESCENT RATE
8. **Face** ..... CUSHION at touchdown with folded coat
9. **Airplane** ..... EVACUATE through cabin doors.
   **If necessary, open window & flood cabin to equalize pressure so doors can be opened.**
10. **Life vests & raft** ..... INFLATE

Engine Fire During Start On Ground

1. **Cranking .....CONTINUE (to suck flames/fuel into engine)**

**If engine starts:**

2. Power .....1700 RPM (for a few minutes)
3. Engine..... SHUT DOWN (inspect for damage)

**If engine fails to start:**

4. **Throttle..... FULL OPEN**
5. **Mixture ..... IDLE CUT OFF**
6. **Cranking ..... CONTINUE**
7. **Fire Extinguisher..... OBTAIN**
8. **Master switch .....OFF**
9. **Ignition switch .....OFF**
7. **Fuel selector valve .....OFF**
9. **Fire .....EXTINGUISH** using extinguisher, wool blanket or dirt
10. Fire damage.....INSPECT

Engine Fire In Flight

1. **Mixture ..... IDLE CUT OFF**
2. **Fuel selector valve .....OFF**
3. **Master switch .....OFF**
4. Cabin heat & air .....OFF (except overhead vents)
5. Airspeed.....100 KIAS (or faster, within limits, to blow out fire)
6. Forced landing.....EXECUTE
   (see Emergency Landing Without Engine Power)

Electrical Fire In Flight

1. **Master switch .....OFF**
2. **Avionics switch.....OFF**
3. **All other switches (except ignition).....OFF**
4. **Vents, cabin air, heat .....CLOSED**
5. **Fire extinguisher.....ACTIVATE**

**WARNING**

AFTER DISCHARGING FIRE EXTINGUISHER WITHIN A CLOSED CABIN, VENTILATE THE CABIN.

**Continued next page**



**If the fire appears out and electrical power is necessary for continuance of flight:**

6. Master switch ..... ON
7. Circuit breakers..... CHECK for faulty circuit; do not reset
8. Radio switches .....OFF
9. Avionics switch ..... ON
10. Radio switches.....ON one at a time until faulty circuit found
11. Electrical switches..ON one at a time until faulty circuit found
12. Vents, cabin air/heat..... OPEN when fire is extinguished

Cabin Fire

1. **Master switch .....OFF**
2. **Vents, Cabin air/heat .....CLOSED**
3. **Fire extinguisher.....ACTIVATE**

**WARNING**

AFTER DISCHARGING FIRE EXTINGUISHER WITHIN A CLOSED CABIN, VENTILATE THE CABIN.

4. **Land the airplane asap to inspect for damage**

Wing Fire

1. **Nav light switch .....OFF**
2. **Pitot heat switch .....OFF**
3. **Strobe light switch.....OFF**

**NOTE**

**Perform a side slip to keep the flames away from the fuel tank & cabin and land asap using flaps only as required for final approach & touchdown.**

nadvertant Icing Encounter

1. **Pitot heat** ..... **ON**
2. Turn back or change altitude to obtain an outside air temp that is less conducive to icing.
3. Pull cabin heat control full out & open defroster outlet to obtain maximum windshield airflow. Adjust cabin air control to get maximum defroster heat & airflow.
4. Open the throttle to increase engine speed & minimize ice buildup on propeller blades.
5. Watch for signs of carburetor air filter ice & apply carburetor heat as required. An unexplained loss in engine speed could be caused by carburetor ice or air intake filter ice. Lean the mixture for maximum RPM, if carburetor heat is used continuously.
6. Plan a landing at the nearest airport. With an extremely rapid ice build-up, select a suitable "off airport" landing site.
7. With an ice accumulation of ¼" or more on the wing leading edges, be prepared for significantly higher stall speed.
8. Leave wing flaps retracted. With a severe ice build-up on the horizontal tail, the change in wing wake airflow direction caused by wing flap extension could result in a loss of elevator effectiveness.
9. Open the left window and, if practical, scrape ice form a portion of the windshield for visibility during the landing approach.
10. Perform a landing approach using forward slip, if necessary, for improved visibility.
11. Approach at 65–75 KIAS depending upon the amount of accumulation.
12. Perform a landing in level attitude.



**Static Source Blockage**
**(Erroneous instrument reading suspected)**

1. **Alternate static source valve** ..... **PULL ON**
2. **Airspeed** ..... CONSULT CALIBRATION TABLE (Section 5)

**Landing With A Flat Main Tire**

1. **Approach** ..... NORMAL
2. **Touchdown** ..... GOOD MAIN TIRE FIRST
   (Hold airplane off flat tire as long as possible using ailerons)

**Ammeter–Excessive Rate Of Charge (Full Scale Deflection)**

1. **Alternator** ..... OFF
2. **Nonessential electrical equipment** ..... OFF
3. **Flight** ..... TERMINATE (As soon as practical)

**Low Voltage Annunciator Illuminates In Flight**
**(Ammeter Indicates Discharge)**

**NOTE**

Illumination of the low voltage light may occur during low RPM conditions with an electrical load on the system such as during low RPM taxi. Under these conditions, the light will go out at higher RPM. The master switch need not be recycled since an over-voltage condition has not occurred to de-activate the alternator system.

1. **Avionics switch** ..... OFF
2. **Master switch** ..... OFF (both sides)
3. **Master switch** ..... ON
4. **Low voltage light** ..... CHECK OFF
5. **Avionics switch** ..... ON

**If low-voltage light illuminates again:**

7. **Alternator** ..... OFF
8. **Nonessential radio & electric equipment** ..... OFF
9. **Flight** ..... TERMINATE (As soon as practical)

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2. Master switch ..... OFF (both sides)
3. Master switch ..... ON
4. Low voltage light ..... CHECK OFF
5. Avionics switch ..... ON

**If low-voltage light illuminates again:**

7. Alternator ..... OFF
8. Nonessential radio & electric equipment ..... OFF
9. Flight ..... TERMINATE (As soon as practical)



## Airspeeds

Vr..... 55 KIAS
Vy (sea level)..... 73
Vy (10,000')..... 68
Vx (sea level)..... 59
Vx (10,000')..... 61
Vno..... 128
Vne..... 160
Va 2300 lbs..... 97
Va 1950 lbs..... 89
Va 1600 lbs..... 80
Vso..... 41
Vs..... 47
Vfe..... 110
(0–10°)
Vfe..... 85
(10–40°)
Max glide (MGW)..... 65
Precautionary landing with power..... 60
Landing without power:
Flaps up..... 65
Flaps down..... 60
Normal approach, flaps up..... 60–70
Normal approach, flaps 40°..... 55–65
Short field..... 60
Balked landing..... flaps 20, max power, 55 KIAS
Max demonstrated xwind (T/O & land)..... 15
Max, window open..... 160

## Weights

| | |
|---|---|
| Empty weight | 1536.0 lbs. |
| Max ramp weight | 2550.0 |
| Useful load | 1014.0 |
| Max t/o weight | 2550 |
| Max landing weight | 2550 |
| Max bag weight Area 1 | 120 |
| Max bag Area 2 | 50 |
| Max bag weight Areas 1+2 | 120 |

## Fuel

| | |
|---|---|
| Total | 54 gal. |
| Total usable | 50 |
| Each wing total | 27 |
| Each wing usable | 25 |