

N2306D FULL CHECKLIST



JAX NAVY FLYING CLUB

1979

**CESSNA 210N
SER#21063828
CONTINENTAL ENGINE**

IO-550-P

SPECIFICATIONS & PERFORMANCE

Rated HP	310 HP - 2700 RPM (STC)
Fuel Capacity (Full)	90 gals (89 gals useable)
Fuel Capacity (Tabs)	67 gals (66 gals)
Fuel Flow	42-102 lbs/hour
Oil (Max/Normal) 20-50W	10 quarts (JNFC/POH)
Oil Capacity (Min)	7 quarts
Oil Pressure	10-100 psi
Battery	24v
Alternator	28v, 60 amp
Standby Alternator	2350 RPM for full output 20 amps continuous > 20 amps / 5 minutes
Tire Pressure	Main: 55 psi, Nose: 88 psi
Load Factor Flaps Up	1.52g to +3.8g
Load Factor Flaps Down	+2.0g
Vso Flaps 10	61 KIAS (STC)
Vso Flaps 20	57 KIAS (STC)
Vso Flaps 30	54 KIAS (STC)
Vs	73 KIAS (STC)
Go Around	70 KIAS
Vr	65-70 KIAS
Vx (Flaps 20)	66 KIAS (STC)
Vx	82 KIAS
Engine Fail on Takeoff	85 / 80 (Flaps Up/Down)
Best Glide (4000#)	88 KIAS
Best Glide (3350#)	80 KIAS
Best Glilde (2700#)	72 KIAS
Vy	100 KIAS
Vfe 0-10	160 KIAS
Vfe 11-30	109 KIAS (STC)
Vlo	165 KIAS
Vle	203 KIAS
Va (4000#)	130 KIAS
Va (3350#)	119 KIAS
Va (2700#)	106 KIAS
Vno	168 KIAS
Vne	203 KIAS

POH: Pilot's Operating Handbook

STC: Supplemental Type Certificate

CHECKOUT

1. PIF Vol. 2 All Pilot Read.....READ & INITIAL
2. Covenant Not To Sue..... COMPLETED (If Req'd)
3. Flight Circle CHECKOUT
4. Maintenance Discrepancies REVIEW
5. Hobbs/Tach..... RECORD
6. Aircraft Flight Bag..... VERIFY

..... **Keys**

Emergency Checklists..... Page 18

Emergency Contacts Page 27

Securing Aircraft Overnight..... Page 28

Crosswind Component Chart Page 29

PRE-FLIGHT PLANNING

1. Weather and NOTAMs..... REVIEW
2. Club Minimums Review (As req'd)
3. Crosswind Limits..... Review (As req'd)
4. Gusts Limits Review (As req'd)
5. Density Altitude Determine
6. Takeoff and Landing Performance Determine
7. Runway Minimum Length..... Determine
8. Fuel Requirements..... Determine
9. Weight and Balance In Limits
10. Chart Supplement (A/FD)..... Review (As req'd)
11. Flight Plan File

CABIN CHECKLIST

1. Required Documents PRESENT
2. Aircraft Bag PRESENT
3. Pitot Tube Cover REMOVED
4. Control Wheel Lock..... REMOVED
5. PARKING BRAKE..... SET
6. AVIONICS MASTER..... OFF
7. Circuit Breakers..... CHECK IN
8. Digital Clock SET TIME (If Req'd)
9. RAD ALT Switch & Radar Altimeter OFF
10. MAP Light OFF
11. A/P MSTR..... OFF
12. TRIM MSTR ON

- 13. ALT STATIC AIR..... CHECK - OFF
- 14. STBY ALTON
- 15. IgnitionOFF
- 16. Landing Gear LeverDOWN

WARNING: When turning on the master switch using an external power source, or by pulling the propellor through by hand, treat the propellor as if the ignition switch were on. Do not stand, nor allow anyone else to stand within the arc of the propellor, since a loose or broken wire or a component malfunction could cause the propellor to rotate.

CABIN CHECKLIST CONTINUED

- 1. MASTER.....ON
- 2. CO2 Detector.....AUDIBLE ALARM/LIGHT ON

Note: The detector performs a test when the master switch is turned on. If needed, press the TEST/RESET button to manually test the alarm and light.

- 3. Avionics FanVERIFY ON
- 4. LDG Lights (2) & Horn..... CHECK/Push to Test
- 5. Note: Gear Lights Have Night Dimming Shutters
- 6. STBY VACUUM CHECK
- 7. NAV..... ON
- 8. BEACON..... ON
- 9. STROBE ON
- 10. TAIL STROBE ONLY OFF
- 11. TAXI..... ON
- 12. LDG..... ON
- 13. PITOT HEAT ON (If to be used)
- 14. Pitot Heater CHECK (within 30 secs of ON)
- 15. Stall Warning HornCHECK
- 16. Exterior LightsCHECK
- 17. Exterior Lights OFF
- 18. PITOT HEAT OFF
- 19. FUEL QTYCHECK
- 20. FUEL SELECTOR..... EXERCISE, then FULLER TANK
- 21. FLAPS..... FULL
- 22. COWL FLAP FULL OPEN
- 23. ELEVATOR & RDR TRIM TAKEOFF/NEUTRAL

- 23. MASTER..... OFF
- 24. LANDING GEAR HYDROLOGIC FLUID ... CHECK

EXTERIOR PROCEDURE

- 1. Chocks REMOVED
- 2. Air Intake Plugs REMOVED
- 3. Pitot Cover REMOVED
- 4. Tie-Downs REMOVED
- 5. Fuel Tank Drains (7) DRAIN & INSPECT
- 6. Fuel Quantity VISUALLY CHECK / MEASURE
- 7. Oil Quantity CHECK

EMPENNAGE CHECKLIST

- 1. Left Static Port..... CHECK
- 2. Left Main Gear Wheel Well CHECK
- 3. Baggage Compartment SECURE
- 4. Baggage Compartment Door SECURE
- 5. Left Autopilot Static Port..... CHECK
- 6. Left Elevator Counterbalance Weight..... CHECK
- 7. Control Surfaces FREE & SECURE
- 8. Tail Tie-down..... REMOVED
- 9. Tail Navigation Light..... CHECK
- 10. Right Elevator Counterbalance Weight CHECK
- 11. Right Autopilot Static Port CHECK
- 12. Right Main Gear Wheel Well CHECK
- 13. Right Static Port CHECK

RIGHT WING CHECKLIST

- 1. Flap Check security & condition
- 2. Aileron Free & Secure
- 3. Aileron Gap Seal Check
- 4. Fuel Tank Vent..... Check
- 5. Wingtip Lights..... Check
- 6. Wing Tie-Down..... Removed
- 7. Fuel Quantity Check visually
- 8. Fuel Filler Cap..... Secure
- 9. Leading Edge Check
- 10. Fuel Tank Quick Drains (2) Drain & Inspect
- 11. Right Main Wheel Strut, Tire, Brake Check
- 12. Chock..... REMOVED
- 13. Retractable Cabin Step Check
- 14. Door Check

NOSE CHECKLIST

1. Belly Sump (2).....DRAIN
2. Exhaust Stack CHECK
3. Cowl Flap CHECK
4. Engine Cowling/Fasteners CHECK
5. Propeller and Spinner..... CHECK
6. Engine Air Inlet Openings..... CHECK
7. Landing and Taxi Lights CHECK
8. Nose Gear Doors CHECK
9. Nose Wheel Tire, Strut, Wheel Well..... CHECK
10. Chock.....REMOVED
11. Engine Oil Filler Cap CHECK
12. Engine Oil Dipstick CHECK OIL LEVEL
13. Normal Flight..... 10 Quarts
14. Engine Cowling/Fasteners CHECK
15. Fuel Strainer Drain DRAIN & INSPECT
16. Exhaust Stack CHECK
17. Cowl Flap CHECK
18. Windshield..... CHECK

LEFT WING CHECKLIST

1. Door CHECK
2. Left Main Wheel Strut, Tire, Brake CHECK
3. Chock.....REMOVED
4. Fuel Tank Quick Drains (2) DRAIN & INSPECT
5. Leading Edge CHECK
6. Pitot Tube..... Check for Blockage
7. Fuel Quantity VISUALLY CHECK
8. Fuel Filler Cap..... SECURE
9. Wing Tie-Down.....REMOVED
10. Wingtip Light CHECK
11. Fuel Tank Vent..... CHECK
12. Aileron Gap Seal CHECK
13. Aileron Free & Secure
14. Flap Check Security & Condition

BEFORE START CHECKLIST

1. Hobbs/Tach..... VERIFY
2. Pax Briefing..... COMPLETE
3. Seats, Belts, Harness..... ADJUSTED & LOCKED
4. Brakes/Parking Brake TEST & SET
5. **AVIONICS MASTER**..... **OFF**

CAUTION: The avionics master switch must be OFF during start to prevent possible damage to avionics

6. **Landing Gear Handle** **Down**
7. **MASTER**..... **ON**
7. Fuel Comp..Hold REM+/USED- Press ENTER/TEST
8. PANEL LT. DIMMER SWITCH ROTATE LEFT

START CHECKLIST

1. **Fuel** **Left Tank**
2. **BEACON** **ON**
3. **THROTTLE** **CLOSED**
4. **PROP** **HIGH RPM**
5. **MIXTURE** **RICH**
6. **AUXILIARY FUEL PUMP (HIGH)**..... **ON**
7. **THROTTLE**Prime 50-60 PPH for 3 Secs., then Idle

START PROCEDURE

1. **Propellor Area** **CLEAR**
2. **THROTTLE** **1/4-1/2" OPEN**
3. **Ignition**..... **START**
4. **THROTTLE**..... **1000 RPM**
5. **Oil Pressure** **CHECK (within 30 secs)**

Note: The engine should start in 2 or 3 revolutions. If it does not continue running, start again by priming 50-60 PPH. If the engine does not start, go to engine hot start checklist.

HOT ENGINE / DAY START CHECKLIST

1. **THROTTLE** **1/2 TO 1/3 OPEN**
2. **AUX FUEL PUMP (LOW)**..... **ON / 25-35PPH / OFF**

Note: If unable 25-35 PPH: AUX FUEL PUMP HIGH

Without hesitation:

3. **Ignition**..... **START**
4. **THROTTLE**..... **1000 RPM**

5. Oil PressureCHECK (within 30 secs)

If engine RPM drops after 2-3 seconds:

1. AUX FUEL PUMP(HIGHON FOR 1 SEC,
2. repeat as req'd
3. THROTTLE 1200 RPM UNTIL STEADY
4. THROTTLE 1000 RPM

AFTER START CHECKLIST

1. **Volts/Amps** **CHECK**
2. 28.5 +/- 0.5v
3. Positive Amps
4. Discharge Light Out
5. **Navigation Lights**..... **ON**
6. **MIXTURE**..... **LEAN (~1")**
7. **FLAPS**..... **UP**
8. **AVIONICS MASTER** **ON**
9. RAD ALT Switch ON
10. Radar Altimeter ON, TEST & SET
11. Radios ON
12. NAV ON
13. HSI Mode SLAVE
14. **Transponder**..... **1200, ALT**
15. Flight Instruments CHECK & SET
16. **GARMIN GPS**..... **Set**
17. **Weather** **ATIS, Record**

AUTO PILOT/TRIM CHECKLIST

1. **MASTER TRIM**..... **ON**
2. **AUTOPILOT** **ON**
3. Trim Switch Down
4. Verify trim moves down
5. Verify "TRIM" Annunciator
6. Repeat #3 for Trim Up
7. Trim Switch Up & Down
8. Manual trim wheel Grab
9. Verify you can overpower trim
10. Verify BOTH trim switches must be actuated to move trim
11. While trimming Press & Hold AP DISC
12. Verify Trim Stops
13. AP DISC Release
14. Verify trim resumes Check

AUTO TRIM

1. HDG and VSI Modes.....Select
 2. Control Wheel....Hold AFT
 3. Verify trim moves UP
 4. Control Wheel....Hold FORWARD
 5. Verify trim moves DOWN
 6. Trim Switches....Hold DOWN or UP
 7. Verify AP disconnects and trim moves
 8. HDG and VSI Modes....Select
 9. AP DISC.....Press & Release
 10. Verify AP disconnects
- If ANY portion of Steps 11A or 11B Fail, MASTER TRIM must be selected OFF

TAXI PROCEDURE

1. PARKING BRAKE RELEASE
2. **Brakes**.....**TEST**
3. Co-pilot Brakes TEST (As req'd)
4. ADI Check
5. **Turn Coordinator**..... **CHECK**

RUN-UP CHECKLIST

· **Note: To prevent heat shocking the engine, CHT should be above 200°F and oil temp above 100°F**

1. **AUXILIARY FUEL PUMP**.....**OFF**
2. PARKING BRAKE SET
3. **Doors/Windows** **Closed & Locked**
4. **Switch Fuel Tanks****Right**
5. **COWL FLAPS****FULL OPEN**
6. **MIXTURE**..... **FULL RICH**
7. **THROTTLE**..... **1700 RPM**
8. **Magnetos****(150 Drop / 50 Delta)**
9. **PROP**..... **Exercise**
10. Engine Instruments CHECK
11. Oil Pressure/Oil Temp..... CHECK
12. Volt/Loadmeter..... CHECK
13. Suction Gage CHECK

STANDBY ALTERNATOR CHECKLIST

1. Primary AlternatorOFF
2. Discharge Light ON
3. STBY ALT ON Light CHECK ON
4. THROTTLE 2000 RPM
5. Electrical Load.....INCREASE
6. STBY ALT ON Light CHECK FLASHING
7. Electrical Load..... DECREASE
8. STBY ALT ON Light CHECK ON
9. THROTTLE 1000 RPM
10. Primary Alternator ON
11. Discharge Light OFF
12. STBY ALT ON Light OFF
13. THROTTLE CLOSED
14. THROTTLE 800-1000 RPM
15. Throttle Friction Lock..... ADJUST
16. MIXTURE LEAN (~1")

BEFORE TAKEOFF CHECKLIST

1. **Flight Controls**..... **FREE & CORRECT**
2. **Elevator Trim** **TAKE-OFF**
3. **Rudder Trim**..... **NEUTRAL**
4. **FLAPS** **SET**
5. · Normal: 0-10° (10° Preferred)
6. · Short Field: 20° (Robertson Mod)
7. **FUEL SELECTOR**..... **CHECK LEFT/RIGHT**
8. **Flight Instruments**..... **SET**
9. **Clock/Alarm**..... **ET / SET 30 MIN**
10. **Windows**..... **CLOSED & LOCKED**
11. **Seatbelts & Harness**..... **LOCKED**
12. **EMERGENCY PROCEDURE** **REVIEW**

“Lights - Camera - Action x 2 - Heat”

1. **Fuel Pump**.....**OFF**
2. **LAND Light** **ON**
3. **STROBE** **ON**
4. **Transponder**..... 1200, ALT
5. **MIXTURE** **FULL RICH**
6. **COWL FLAPS** **OPEN**
7. **PITOT HEAT** **ON (IF REQ'D)**
8. **Circuit Breakers** **RECHECK**

NORMAL TAKEOFF PROCEDURE

FLAPS 0-10° (10° Preferred)

1. **Power** **FULL THROTTLE & 2700 RPM**

2. **Rotate** **65-70 KIAS**

Note: When nose wheel is lifted, the gear motor may run 2-3 seconds to restore hydraulic pressure

3. **Climb** **80-90 KIAS (Vy: 100 KIAS)**

4. **Brakes** **APPLY MOMENTARILY**

5. **Landing Gear** **RETRACT**

6. When clear of obstacles, 85 KIAS, and 400' AGL,

7. **FLAPS** **RETRACT**

Note: Do not reduce power until wing flaps and landing gear have been retracted.

SHORT FIELD TAKEOFF PROCEDURE

With STC - Robertson Flap Mod

FLAPS 20°

1. **Brakes** **HOLD**

2. **AUXILIARY FUEL PUMP** **ON HIGH**

3. **POWER** **FULL THROTTLE & 2700 RPM**

4. **MIXTURE** **MIN 150 PPH**

5. **Engine Instruments** **CHECK**

6. **Brakes** **RELEASE**

7. **Elevator Control** **SLIGHTLY TAIL LOW**

8. **Rotate** **60 KIAS**

Note: When nose wheel is lifted, the gear motor may run 2-3 seconds to restore hydraulic pressure

9. **Climb to 50' / Above Obstacle** **66 KIAS**

10. **Brakes** **Apply momentarily**

11. **Landing Gear** **RETRACT**

· When clear of obstacles and 80 KIAS:

12. **FLAP** **RETRACT**

· Note: Do not reduce power until wing flaps and landing gear have been retracted.

AFTER TAKEOFF CHECKLIST

1. Landing Gear UP
2. FLAPS UP
3. COWL FLAPS OPEN
4. LAND Light OFF
5. AUX FUEL PUMP OFF
6. Flight Plan ACTIVATE / OPEN

NORMAL CLIMB

1. **Airspeed** **110-120 KAIS**
2. **THROTTLE** **Top of Green Arc**
3. **PROP** **Top of Green Arc**
4. **MIXTURE** **LEAN TO 120 PPH / 21 GPH**
5. COWL FLAPS As Req'
6. Full Open on Warm Day
7. Maintain CHT 2/3 of Green Arc
8. AUXILIARY FUEL PUMP As Req'd

Note: On hot days, turn the AUXILIARY FUEL pump ON momentarily if switching tanks in climb.

MAXIMUM PERFORMANCE CLIMB

1. Airspeed Vy: 100 KIAS
2. THROTTLE Top of Green Arc
3. PROP Top of Green Arc
4. MIXTURE Per PLACARD FUEL FLOW

Note: See power and fuel flow placard for maximum continuous power manifold pressure and fuel flow above 17,000 feet. Refer to section 5 in the POH for airspeed above 17,000 feet.

5. COWL FLAPS AS REQ'D
6. Full Open on Warm Days
7. Maintain CHT 2/3 of Green Arc
8. AUXILIARY FUEL PUMP AS REQ'D

Note: During climb on a warm day, be alert for fuel vapor indications. If fuel flow fluctuates or a drop-off are observed, set AUXILIARY FUEL pump switch in the ON position and reset the MIXTURE control to maintain placarded fuel flow. If vapor symptoms persist, change the FUEL SELECTOR valve position in accordance with POH section 3, Fuel Flow Stabilization Procedures checklist.

Note: On hot days, turn the AUXILIARY FUEL pump ON momentarily if switching tanks in climb.

CRUISE

1. **THROTTLE** **WITHIN GREEN ARC**
2. **PROP** **Within Green Arc**
3. **MIXTURE** **LEAN**
 - Best Power: 50° Rich of Peak EGT
 - Best Economy ($\leq 70\%$): Peak EGT
4. **COWL FLAPS** **CLOSE / AS REQ'D**
5. **Maintain CHT 2/3 of Green Arc**
6. **Fuel** **Check every 30 Minutes**
7. **Engine Gauges** **Check**

Note: On hot days, turn the AUXILIARY FUEL pump ON momentarily if switching tanks within the first 30 minutes of cruise.

Note: In hot weather at high altitudes, be alert for fuel vapor indications. If fuel flow fluctuations or an unexplained drop in fuel flow are observed, place the AUXILIARY FUEL pump switch in the ON position and reset the MIXTURE control AS DESIRED. If vapor symptoms persist, place the FUEL SELECTOR valve position to another tank containing fuel. When fuel flow remains steady, the AUXILIARY FUEL pump switch may be turned OFF and the MIXTURE reset AS DESIRED.

DESCENT CHECKLIST

1. **COWL FLAPS** **AS REQUIRED**
2. · **Full Stop: CLOSED**
3. · **Touch-N-Go/Stop-N-Go: OPEN**
4. **THROTTLE** **As Desired**
5. **PROP** **As Desired**

Note: Optimum engine RPM is lowest RPM in green arc and CHT temps normal.

6. **AUXILIARY FUEL PUMP** **OFF**
7. **MIXTURE** **ENRICHEN (As Req'd)**
..... **Adjust for Smooth Operations Full Rich if Idle**

CAUTION: Failure to turn the AUXILIARY FUEL PUMP OFF may result in a complete power loss at reduced throttle settings due to an excessively rich mixture. If loss occurs, turn

OFF the AUXILIARY FUEL PUMP and adjust mixture to restore power.

BEFORE LANDING CHECKLIST

1. Seats, Seatbelts, Harnesses CHECK SECURE
2. AUXILIARY FUEL PUMP OFF
3. **LAND Light** **ON**
4. **MIXTURE** **FULL RICH**
5. **PROP** **HIGH RPM**
6. **FUEL SELECTOR** **FULLER TANK**
7. Autopilot OFF

1.3X Vso Bank Angle 0° / 30°

STC Robertson Mod

- | | |
|-----------------|--------------------|
| FLAPS 0° | 95 KIAS / 101 KIAS |
| FLAPS 10° | 79 KIAS / 88 KIAS |
| FLAPS 20° | 74 KIAS / 79 KIAS |
| FLAPS 30° | 70 KIAS / 77 KIAS |

NORMAL LANDING PROCEDURE

1. FLAPS UP MIN 100 KIAS
2. Landing Gear Vle: 165 KIAS
3. **Landing Gear Handle** **DOWN**
4. Landing Gear CHECK DOWN
5. · Visually
6. · Green Indicator Light
7. Flaps Vfe 0-10°: 160 KIAS
8. ABEAM: FLAP 10..... 90 KIAS
9. **Flaps Vfe 11-30°: 109 KIAS**
10. **BASE: FLAPS 20 80 KIAS**
11. FINAL: FLAPS 30..... 70 KIAS
12. Touchdown..... Main Wheels First
13. Landing Roll Lower Nose Wheel Gently
14. Braking..... Minimum Required

SHORT FIELD LANDING PROCEDURE

With STC Robertson Mod

1. FLAPS..... FULL
2. Airspeed 70 KIAS
3. Power IDLE After Clearing Obstacle
4. Touchdown..... Main Wheels First
5. Braking Apply Heavily
6. FLAPS..... Retract

LANDING CHECKLIST

“G.U.M.P.F.S”

1. Gas FULLER TANK
2. Undercarriage DOWN & LOCKED
3. MIXTURE FULL RICH
4. PROP HIGH RPM
5. FLAPS DOWN
6. SPEED SET

BALKED LANDING PROCEDURE

1. **Power** **FULL THROTTLE & 2700 RPM**
2. **FLAPS** **20° Immediately**
3. Airspeed 70 KIA
4. When Obstacles Cleared:
5. FLAPS 10°
6. **Airspeed** **75-80 KIAS**
7. **Upon Reaching Safe Altitude:**
8. FLAPS UP
9. COWL FLAPS OPEN

AFTER LANDING CHECKLIST

1. **COWL FLAPS** **OPEN**
2. **FLAPS** **UP**
3. **MIXTURE** **LEAN**
4. **Transponder** **ON, ALT**
5. **Lights** **SET**
6. PITOT HEAT OFF
7. RAD ALT Switch / RAD ALT OFF

SHUTDOWN CHECKLIST

1. PARKING BRAKE SET
2. THROTTLE 1000 RPM
3. **AVIONICS MASTER** **OFF**
4. Ignition OFF - ON (Don't let engine shutdown)
5. MIXTURE IDLE CUTOFF
6. THROTTLE Closed As Engine Stops
7. Ignition OFF (when prop stops)
8. KEY REMOVED
9. MASTER OFF
10. STBY ALT OFF

- 11. Flight PlanCLOSE
 - 12. Hobbs/Tach Record
- Note: If Hobbs inoperative, flight time is 1.3xTach

SECURE CHECKLIST

- 1. Control Lock INSTALL
- 2. FUEL SELECTOR..... Select Low Wing if on Slope
- 3. CABIN HEAT OFF
- 4. CABIN AIR.....OFF
- 5. CABIN DEFROST OFF
- 6. **Personal items/trashRemoved**

REFUELING PROCEDURE

Minimum Distance: 50'

- 1. Ground Strap.....Connect to aircraft
- 2. Refueling Perform
- 3. Fuel Added Record
- 4. Grounding StrapRemove/SLOWLY RETRACT
- 5. Refueling Hose..... SLOWLY WALK BACK

CAUTION

At NAS JAX, slowly walk back the grounding cable/fuel hose.
Do not let go and allow it to uncontrollably retract.

CAUTION

POST FLIGHT CHECKLIST

- 1. Air Intake Plugs..... INSTALLED
- 2. Pitot Cover INSTALLED
- 3. Tie-Downs.....ATTACHED
- 4. Chocks (If Required)..... SET
- 5. PARKING BRAKE OFF
- 6. Flight CircleCHECK-IN

Note: If Hobbs/Tach Errors, notify the BOD

- 1. Any discrepancies..... NOTIFY MECHANICS
- 2. If Suspect Hard Landing NOTIFY MECHANICS
- 3. If Suspect Prop Strike NOTIFY MECHANICS
- 4. Discrepancies..... IN FLIGHT CIRCLE
- 5. Aircraft Down Tag HANG (If req'd)
- 6. Closed Field Ops Form COMPLETE (If req'd)
- 7. Payment COMPLETE

DISCREPANCY WRITE-UP

1.Provide phase of flight
 2. Provide observation
 - 3.....Provide control/switch position(s) and indication.
Provide altitude/airspeed for flight instrument, landing gear,
and flight control discrepancies. Provide any troubleshooting
done and results
-

FOR TRAINING - DEMO ONLY

LANDING GEAR EMERGENCY EXTENSION

FOR TRAINING - DEMO ONLY

1. GEAR PUMP Circuit Breaker (Row 3, #4) PULL
2. LANDING GEAR Handle.....DOWN
3. EMERG. HAND PUMPEXTEND & PUMP
4. Gear Down LightON
When Landing Gear Indicate Down and Locked:
5. EMERG. HAND PUMP STOW
6. GEAR PUMP Circuit Breaker IN
When complete:
7. LANDING GEAR Handle..... UP

AIRSPEEDS FOR EMERGENCY OPERATIONS

1. **MAXIMUM GLIDE 4000 LBS** 88
2. **MAXIMUM GLIDE 3350** 80
3. **MAXIMUM GLIDE 2700** 72

Max Weight = 3800 Lbs/Empty Weight 2493.70

ENGINE FAILURE ON TAKEOFF ROLL

1. THROTTLE..... IDLE
2. BRAKES..... APPLY
3. WING FLAPS RETRACT
4. MIXTURE DLE-CUTOFF
5. IGNITION SWITCH OFF
6. MASTER SWITCH OFF

ENGINE FAILURE AFTER TAKEOFF

1. **AIRSPEED** 85
2. MIXTURE DLE-CUTOFF
3. FUEL SELECTOR OFF
4. IGNITION SWITCH OFF
5. WING FLAPS 30 RECOMMENDED
6. MASTER SWITCH OFF
- 7.

ENGINE

RESTART PROCEDURES

1. **AIRSPEED** 85
2. AUXILIARY FUEL PUMP ON
3. FUEL SELECTOR..... OPPOSITE TANK
4. THROTTLE..... HALF OPEN
5. AUXILIARY FUEL PUMP OFF
6. If fuel flow 0 (engine fuel pump failure) return auxiliary fuel pump ON.
7. MIXTURE LEAN
8. If propeller has stopped windmilling, use ignition switch to start.. Advance throttle slowly, lean the mixture from full rich.
9. MIXTURE ADJUST
10. THROTTLE..... ADJUST
11. FUEL SELECTOR AS DESIRED

EMERGENCY LANDING (W/O POWER)

1. **AIRSPPEED****90 FLAPS UP/80 FLAPS DOWN**
2. MIXTURE IDLE CUTOFF
3. FUEL SELECTOR..... OFF
4. IGNITION SWITCH OFF
5. LANDING GEARDOWN
6. UP if terrain rough or soft
7. WING FLAPS 30 RECOMMENDED
8. DOORS UNLATCH
9. MASTER SWITCH OFF
10. TOUCHDOWN SLIGHTLY TAIL LOW
11. BRAKES.....APPLY HEAVILY

EMERGENCY LANDING (W/POWER)

1. **AIRSPPEED** **85**
2. WING FLAPS 10 DEGREES
3. SLECTED FIELD..... FLY OVER
Noting terrain and obstructions then retract flaps upon reaching a safe altitude and airspeed
4. ELECTRICAL SWITCHES OFF
5. LANDING GEARDOWN
6. UP if terrain is rough or soft
7. WING FLAPS (ON FINAL) 30
8. AIRSPPEED 75
9. DOORS UNLATCH
10. MASTER OFF
11. TOUCHDOWN SLIGHTLY TAIL LOW
12. IGNITION SWITCH OFF
13. BRAKES.....APPLY HEAVILY

DITCHING

1. MAYDAY 121.5
2. SQUAWK 7700
3. HEAVY OBJECTS..... SECURE/JETTISON
4. LANDING GEAR UP
5. WING FLAPS 30
6. POWER..... 300FT/MIN AT 75
7. APPROACH, High Winds/Heavy Seas.. INTO THE WIND
8. APPROACH,Light Winds/Heavy Seas . PARALLEL TO SWELLS

ENGINE

If no power, approach at 85 with flaps up or 80 with 10 degree flaps

- 9. CABIN DOORS UNLATCH
- 10. TOUCHDOWN LEVEL ATTITUDE
- 11. FACE CUSHION
- 12. EVACUTE

If necessary, open windows to equalize pressure so doors can be opened.

- 13. LIFE RAFT/VESTS INFLATE

STATIC SOURCE BLOCKAGE

- 1. ALT. STATIC SOURCE PULL ON
- 2. AIRSPEED CLIMB 5 KTS FASTER
- 3. APPROACH 7 KTS FASTER
- 4. ALTITUDE CRUISE 180' HIGHER/APPROACH 70' HIGHER

EMERGENCY DESCENT - SMOOTH AIR

- 1. Seats, Belts & Harnesses SECURE
- 2. THROTTLE IDLE
- 3. PROP HIGH RPM
- 4. MIXTURE FULL RICH
- 5. LANDING GEAR (165 KAS) EXTEND
- 6. FLAPS UP
- 7. AIRSPEED 200 KIAS

EMERGENCY DESCENT - ROUGH AIR

- 1. Seats, Belts & Harnesses SECURE
- 2. THROTTLE IDLE
- 3. PROP HIGH RPM
- 4. MIXTURE FULL RICH
- 5. AIRSPEED 130 KIAS (Va)

ENGINE

ENGINE FIRE DURING START

1. Ignition START (CRANK TO START)
2. AUXILIARY FUEL PUMP OFF
3. If engine starts
4. POWER 1700 RPM
5. ENGINE SHUTDOWN/INSPECT
6. If engine fails to start
7. IGNITION START
8. THROTTLE FULL OPEN
9. MIXTURE IDLE CUTOFF
10. FIRE EXTINGUISHER OBTAIN
11. ENGINE SECURE
12. IGNITION SWITCH OFF
13. MASTER SWITCH OFF
14. FUEL SELECTOR OFF
15. If ground personnel available, move airplane away from fire by pushing rearward on the leading edge of the horizontal tail.

ENGINE FIRE INFLIGHT

1. MIXTURE IDLE-CUTOFF
2. FUEL SELECTOR OFF
3. MASTER SWITCH OFF
4. CABIN HEAT AND AIR OFF
5. AIRSPEED 120
Increase airspeed which will put out fire.
6. FORCED LANDING EXECUTE

ELECTRICAL FIRE IN FLIGHT

1. MASTER OFF
2. STDBY ALTERNATOR OFF
3. AVIONICS OFF
4. ALL SWITCHES OFF
5. VENTS/CABIN AIR/HEAT CLOSED
6. FIRE EXTINGUISHER ACTIVATE
If fire appears out and electrical power is necessary for flight
7. MASTER SWITCH ON
8. CIRCUIT BREAKERS CHECK
9. Check for faulty circuit, do not reset
10. RADIO/ELECTRICAL ON

FIRES

11. On with delay for each switch to determine fault
12. VENTS/CABIN AIR/HEAT OPEN

CABIN FIRE

1. MASTER OFF
2. VENTS/CABIN AIR/HEAT CLOSED
3. FIRE EXTINGUISHER ACTIVATE
4. LAND AS SOON AS POSSIBLE

WING FIRE

1. NAVIGATION LIGHTS OFF
2. PITOT SWITCH OFF
3. STROBES OFF
4. Perform sideslip to keep flames away from fuel tank and cabin.

ICING

1. PITOT HEAT ON
2. TURN BACK/CHANGE ALTITUDE
3. CABIN HEAT/DEFROST FULL
4. ENGINE SPEED INCREASE
5. To minimize ice build-up on propeller. If excessive vibration reduce engine speed to 2200 RPM with propeller control then rapidly move full forward.
6. Watch for signs of induction air filter ice and retain manifold pressure by increase the throttle setting.

EXCESSIVE FUEL VAPOR

1. If fuel flow fluctuations of 5 bls/hor or more or power surges occur
2. AUCILIARY FUEL PUMP ON
3. MIXTURE RESET AS REQUIRED
4. FUEL SELECTOR VALVE AS DESIRE

LANDING GEAR FAILS TO RETRACT

1. MASTER SWITCH ON
2. LANDING GEAR LEVER FULL UP
3. LANDING GEAR /GEAR PUMP CIRCUITS CHECK
4. LANDING GEAR LEVER CYCLE
5. GEAR MOTOR CHECK

LANDING GEAR FAILS TO EXTEND

1. LANDING GEAR LEVER DOWN
2. EMERGENCY HAND PUMP EXTEND/PUMP
3. About 35 cycles
4. GEAR DOWN LIGHT ON
5. PUMP HANDLE STOW

GEAR UP LANDING

1. LANDING GEAR LEVER UP
2. LANDING GEAR /GEAR PUMP CIRCUITS IN
3. RUNWAY LONGEST HARD SURFACE/SMOOTH SURFACE
4. WING FLAPS 30 ON FINAL
5. AIRSPEED 75
6. DOORS UNLATCH
7. AVIONICS/MASTER OFF
8. TOUCHDOWN SLIGHTLY TAIL LOW
9. MIXTURE IDLE CUTOFF
10. IGNITION OFF
11. FUEL SELECTOR OFF
12. AIRPLANE EVACUATE

LANDING W/O GEAR LOCK

1. BEFORE LANDING CHECKLIST COMPLETE
2. APPROACH NORMAL
3. LANDING GEAR/GEAR PUMP CIRCUITS IN
4. LANDING TAIL LOW/SMOOTH AS POSSIBLE
5. BRAKING MINIMIZE
6. TAXI SLOWLY

LANDING GEAR

LANDING WITH DEFECTIVE NOSE GEAR

1. LOAD MOVE TO BAGGAGE AREA
2. PASSENGER MOVE TO BACK SEAT
3. BEFORE LANDING CHECKLIST COMPLETE
4. WING FLAPS 30
5. CABIN DOORS UNLATCH
6. AVIONICS/MASTER OFF
7. LAND SLIGHTLY TAIL LOW
8. MIXTURE IDLE CUTOFF
9. IGNITION SWITCH OFF
10. FUEL SELECTOR OFF
11. ELEVATOR HOLD NOSE OFF GROUND
12. AIRPLANE EVACUTATE

LANDING WITH A MAIN FLAT TIRE

1. APPROACH NORMAL
2. TOUCHDOWN GOOD TIRE FIRST
3. DIRECTIONAL CONTROL MAINTAIN W/GOOD WHEEL

AMMETER SHOWS EXCESSIVE RATE OF CHARGE

1. ALTERNATOR OFF
2. ALTERNATOR CIRCUIT BREAKER FULL
3. STANDBY GENERATOR ON
4. NON-ESSENTIAL ELECTRICAL EQUIPMENT OFF
5. FLIGHT ... TERMINATE AS SOON AS POSSIBLE

LOW VOLTAGE LIGHT

1. Low voltage may occur at low RPM, increase RPM as needed.
2. AVIONICS OFF
3. ALTERNATOR CIRCUIT BREAKER CHECK
4. MASTER SWITCH OFF
5. MASTER SWITCH ON
6. If low voltage still present
7. ALTERNATOR OFF
8. STANDBY GENERATOR ON
9. NON-ESSENTIAL EQUIPMENT OFF
10. FLIGHT ... TERMINATE AS SOON AS POSSIBLE

ELECTRICAL

RADIO FAILURE

1. Volume Check
2. Circuit Breakers/Fuse Check
3. Transponder 7600
4. Transmit in the Blind
5. Look for Tower Light Signals

AIRBORNE

Solid Green: Cleared to Land

Flashing Green: Return to Land

Solid Red: Continue Circling

Flashing Red: Airport Unsafe, Do Not Land

Alt. Red/Green: Use Extreme Caution

GROUND

Solid Green: Cleared for Takeoff

Flashing Green: Cleared to Taxi

Solid Red: Stop

Flashing Red: Taxi Clear of Runway

Alt. Red/Green: Use Extreme Caution

White: Return to Starting Point

SPINS

1. RETARD THROTTLE..... IDLE
2. AILERONS NUETRAL
3. FULL RUDDER OPPOSITE OF SPIN
4. CONTROL WHEELFULL FORWARD TO BREAK STALL
5. HOLD CONTROLS UNTIL SPIN STOPS
6. SMOOTH RECOVERY
7. UTILIZE TURN COORDINATOR AS NECESSARY

JNFC STANDARD OPERATING PROCEDUES

CURRENCY

Standardization Flight	Annually
Currency: 3 Take-Offs/Landings	Category/Class: 90 Days
Night Currency	Make/Model: 180 Days
Duty Day—Single Pilot/Duel	3 Full Stop Landings/90 Days
Crew Rest	12 hours/16 Hours
Student Solo Duel Requirement	12 Hours
	10 Hours Solo or 15 Days

LIMITATIONS

VFR Mins: Day/Night	Day 1500'/3 SM/ Nt 2500' 5 SM
Stalls, Steep Turns, Slow Flight	2500' AGL
Total Wind (Student/<200/>200)	12/20/30 Knots
Cross Wind (Student/<200/>200)	6/9/20 Knots
Gust Factor (Student/<200/>200)	0/5/10 Knots
Runway Length	2000' or Req. take-off + land. Distance
Runway Length - Solo Student	3,000'
Runway Width	50'
Fue Resever VFR Flight	TOF +45 mins @ cruise

OPERATIONS

Local Area	100 nm/Students: 50 nm
Night > Local Area	Instrument rating required or Private Pilot > 100 hours
Night - Non-Instrument Pilot	Local Area, w/visual of aifield
Night Cross Country Flight	IFR equiped/VOR
Update ETA with FSS, Base Ops	> 30 Min. Late
Standard Pattern	Left
Straight-In at Uncontrolled Field	Prohibited
Student Solo Sim S/E	Prohibited
Clear Eng During Sim S/E	Every 500'
Shutdown from Refueling	50'

Mishap Plan/Important Phone Numbers
Do not call non-board members until someone from 1-4 has been contacted

Position	Name	Cell
1. President	Bob Brinley	(904) 466-7030
2. Vice President	David Broche	(904) 382-6613
Operations	Rafael Appe	(904) 252-5431
Maintenance Off.	John Barnard	(904) 509-7487
3. Safety	Rick Sorrell	(904) 343-8084
4. Secretary	Mitch Corey	(904) 403-4166
MWR Director	Kelley Harkins	(904) 566-8113

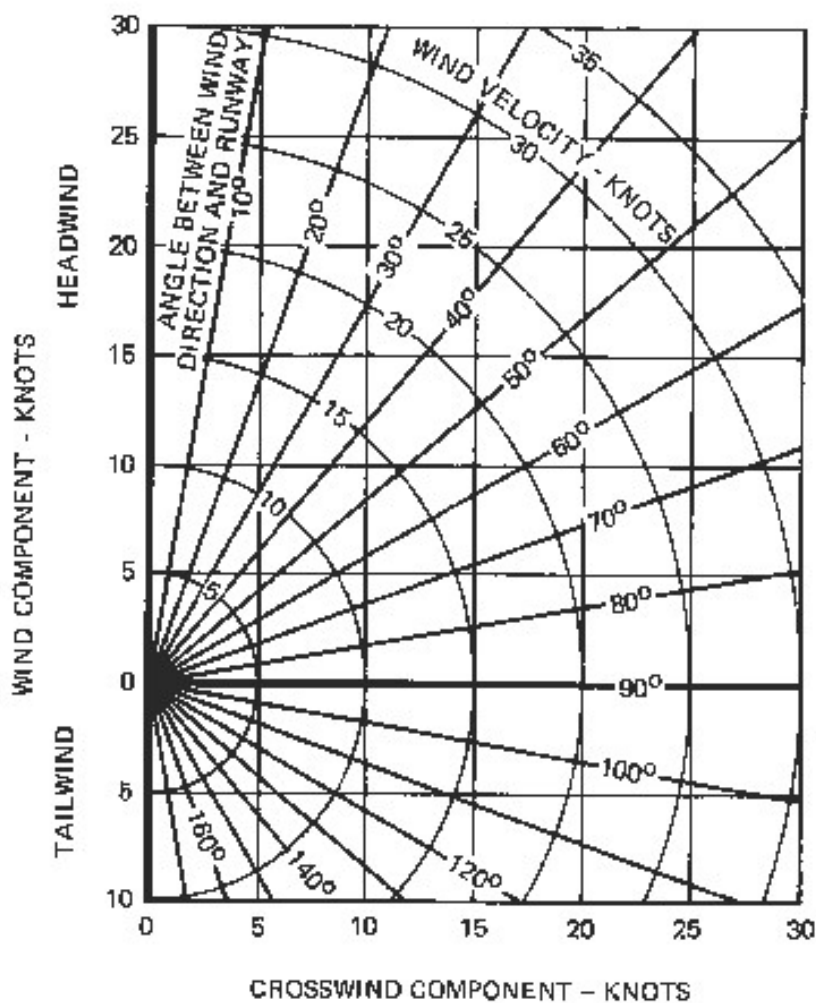
Other Important Numbers (Non Board Members)

Position	Name	Phone
KNIP Air Ops		(904) 542-2511
NASJAX CDO	Comm Duty Off.	(904) 509-1106
NAS Jax Watch Commander	Security Off.	(904) 509-6962
Command Safety Advisor	LCDR Jeff Muenchrath	(904) 542-2460
Past MO	Woody Gilbert	(904) 588-4742
Navy Flying Club Program Manager	John Shaw (CNIC)	(901) 674-4593
Contract Mechanics	Jamie Walp Dan Woods	(904) 207-8497 (904) 708-9645

OVERNIGHT SECURING OF AIRCRAFT

1. Contact NAS Jax Air Operations Center to report aircraft secure. Provide details on duration of stay if known. (904) 542-2511
2. If unscheduled stop, contact JNFC Board of Directors per attached Emergency Contact Information listing.
3. Contact Maintenance Officer for any discrepancies.
4. Update Sky Manager with completion of flight. Add information in comments section of reservation as needed.
5. Check Master Switch is in the off position
6. Install yoke lock or use seat belts to secure yoke.
7. Tie-down aircraft if available or use chocks. If neither available determine best means to either obtain tie downs or borrow chocks.
8. Place key in club provided key lock and place on tail of aircraft. Secure flight bag inside aircraft.

CROSSWIND COMPONENT CHART



KNIP COMMS

ATIS 124.35
CLRNC 134.775
GRND 128.6
TWR 125.15

