

WARNING: THIS CHECKLIST WAS COMPILED FROM MANY SOURCES, TO INCLUDE MANUFACTURERS' CHECKLISTS AND MILITARY CHECKLISTS WHERE THEY ARE OPERATING SIMILAR EQUIPMENT (T-41). **NO GUARANTEE OR LIABILITY, EXPRESS OR IMPLIED, WILL BE DERIVED FROM THIS CHECKLIST.** USE OF THIS FILE DENOTES CONSENT AND FOREKNOWLEDGE OF THIS WARNING. THIS CHECKLIST WAS DEVELOPED FOR ONE PARTICULAR AIRCRAFT AND ITS SUITABILITY FOR OTHERS MUST BE DETERMINED BY THE INDIVIDUAL OPERATOR. SIGNIFICANTLY, ALL SPEEDS LISTED IN THIS CHECKLIST ARE MILES PER HOUR INDICATED. ADDITIONALLY, THIS CHECKLIST CONTAINS PERSONAL TECHNIQUES WHICH MAY OR MAY NOT BE ADVISABLE FOR YOUR OPERATION. BEFORE OPERATING AN AIRCRAFT USING ANY TECHNIQUE, ENSURE YOU KNOW THE FULL EFFECTS OF THAT TECHNIQUE. CONSULT YOUR PILOT'S OPERATING HANDBOOK (POH) FOR INFORMATION APPLICABLE TO YOUR PARTICULAR AIRCRAFT. MODIFICATIONS TO THIS

CHECKLIST MUST BE MADE AS REQUIRED. COPIES AND MODIFICATIONS OF THIS PRODUCT MAY BE MADE BY ANY MEANS SO LONG AS APPROPRIATE CREDIT IS GIVEN.

Features of this checklist:

1. It is CAP-specific and tailored to our mission and equipment
2. Includes a general mission briefing guide
3. Includes a weight and balance table (emphasis item by Air Force Liaison)
4. Includes emergency procedures and considerations not ordinarily found in civilian checklists

To utilize this checklist:

1. Print out checklist after required modifications have been performed (laser printer for best quality, recommend canary colored paper)
2. Fold on line
3. Cut 3 non-folded edges so checklist fits into a standard FLIGHT CREW CHECK LISTS binder, available from the CAP Supply Depot, a surplus store, or most Air Force Military Clothing Sales Stores (about \$13).
4. Place tabs on the Emergency Procedures pages.
5. Pencil-in changes and update checklist regularly
6. Ideally, every pilot should have his or her own copy of the aircraft checklist that he or she might insert his own pages for technique (especially for instrument flight, Form 5 guides, etc.)

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NORTH DAKOTA WING, CIVIL AIR PATROL

CIVIL AIR PATROL FLIGHT CREW CHECKLIST

C-172M



**1978 CESSNA 172M
STC O-360 POWERPLANT**

1 JULY 1998

GRAND FORKS COMPOSITE SQUADRON

NOTE: The contents of this checklist are designed for maximum utilization as an operating guide and is not a substitute for adequate knowledge of the aircraft. The pilot must study the Pilot's Operating Handbook and be familiar with the limitations, procedures, performance and operational characteristics of the aircraft.

Per CAP Directives and an agreement with the FAA, Aircraft Tail #N61876 is to utilize the call sign "Cap Flight 3368" when using a radio to communicate, whether it is with Air Traffic Control or another CAP unit. When filing flight plans with Flight Service Stations, use "CPF 3368" in the Call sign section, and put the actual tail number in the remarks section.

Operation Limits

2540 rpm Maximum Power, Less than 1 minute
Horsepower 180 HP @ SL @ 2700 RPM
Demonstrated Crosswind Component—15 kt.
Maximum Takeoff/Landing Weight.—2550 #
Usable Fuel 38 Gal.
Minimum Oil 6 Qt.
Oil Capacity 8 Qt.

GENERAL INFORMATION

V_{SO}.....56 MPH
 V_S.....64 MPH
 V_X.....71 MPH
 V_Y.....84 MPH
 Best Glide78 MPH
 V_{FE}.....100 MPH
 V_A..... 98-112 MPH
 V_{NO}.....145 MPH
 V_{NE}.....182 MPH

CESSNA PRIOR PLANNING

	Weight	Arm	Moment
Basic Empty Weight(4/9/97)	1446.83	39.16	56659.99
Front Seats		37	
Rear Seats		73	
Baggage Area 1 (max 120#)		95	
Baggage Area 2 (max 50#)		123	
Fuel (max 38 gals)	228.00	48	10944.00
TOTALS			

Takeoff (max 2550#)

Maximum Baggage Weights:

Area 1— 120#
 Area 2— 50#
 Total — 120#

GENERAL PREFLIGHT ACTIONS

1. Weather and NOTAMs—PROCURE
2. Flight Plan—FILE
3. Navigation Charts and Tools—ENSURE
IN POSSESSION
4. Pilot Required Items—MEDICAL, PILOT
CERTIFICATE, CAPF 5, 101, 101CN
5. I. M. S.A.F.E. Pilot Free Of—
 - I. — ILLNESS
 - M. — MEDICATION
 - S. — STRESS
 - A. — ALCOHOL
 - F. — FATIGUE
 - E. — EMOTION
6. Ensure Aircraft Has Proper Documentation
 - A. Airworthiness Certificate
 - R. Registration
 - R. Radio Station License (no longer required)
 - O. Operating Manual
 - W. Weight And Balance Data

CAP MISSION/GENERAL BRIEFING GUIDE

1. GENERAL

- a. Crew Introductions, Documents
- b. Time Hack, Time Management
- c. Medical Status, Crew Rest, Nutrition, Glasses, Seat Cushions
- d. NOTAMs, WX, Special Local Procedures
- e. Call Sign/Squawk
- f. Sign Out/Engine Start/Takeoff Time
- g. Fuel Requirements/BINGO data
- h. Weight and Balance
- i. TOLD Card
- j. Aircraft Documents
- k. Wake Turbulence/Spacing

2. CREW COORDINATION

- a. Transfer of aircraft control
- b. Clearing: Obstacles, Terrain, WX, Traffic
- c. Responsibility of Inflight Checks
- d. Communications (wheels off, check ins, codewords)
- e. Observer Equipment and Duties (clearing, radios, ops log)
- f. Scanner Equipment and Duties (look, clear, scan log)
- g. Preflight Responsibilities
- h. Sterile Cockpit

3. MISSION

- a. Target
- b. Available Information

- c. Search Areas/Altitudes
- d. Air-To-Ground Coordination
- e. AFRCC Reports/NTAPs
- f. Equipment Available
- g. Mission Number/Sortie Length/Aircraft Commander
- h. Profile/Type Search
- i. Takeoff: Static/Rolling/Soft/Short
- j. Departure: Routing/Altitude/Airspeed
- k. Recovery: Routing/Altitudes/Airspeeds/Approach

4. EQUIPMENT

- a. Checklists
- b. Flight Pubs: charts, plates, nav & comm logs
- c. Survival Gear and Location
- d. Watches, Rings, Jewelry, Scarves

5. EMERGENCY PROCEDURES

- a. Crew responsibilities during emergencies
- b. Emergency ground egress
- c. Takeoff emergencies
- d. Physiological incident
- e. Birdstrike
- f. Emergency divert airfields

6. QUESTIONS?

FAA FLIGHT PLAN

In numerical order for use via telephone or inflight.

1. Type (VFR, IFR, DVFR)
2. Aircraft Identification: CPF 3368
3. A/C Type and Equipment
4. True Airspeed
5. Departure Point
6. Proposed Departure Time (Z)
7. Cruising Altitude
8. Route of Flight
9. Destination (name airport and city)
10. Estimated Time Enroute (hours/min)
11. Remarks: N61876
12. Fuel On Board (hour/min)
13. Alternate Airport(s)
14. Pilot's name, address, tel #, a/c home base
15. Number Aboard
16. Color of Aircraft
17. Close Flight Plan w/ _____ FSS

INTERIOR INSPECTION

1. Aircraft Documents—A.R.O.W.
2. Flight Log/Inspection Times—CHECK
3. Control Lock—REMOVE
4. Ignition Switch—OFF
5. Electrical Equipment—OFF
6. Avionics Power Switch—OFF
7. Master Switch—ON
8. Low-Vacuum Warning Light—CHECK ON
9. Fuel Gauges—CHECK
- 10.*Flaps—EXTEND
11. Avionics Power Switch—ON
12. Avionics Cooling Fan—CHECK OPERATION
13. Avionics Power Switch—OFF
- 14.*Aircraft Lights—CHECK OPERATION
- 15.*Pitot Heat—CHECK OPERATION
16. Master Switch—OFF
17. Static Pressure Alternate Source Valve—OFF
18. Fuel Selector—BOTH
19. Trim—TAKEOFF

* During cold weather operations, these items may be left until the engine has been started to prevent unnecessary wear on a cold battery.

EXTERIOR INSPECTION

FUSELAGE

1. Survival Equipment— IN PLACE
2. Baggage Door—LOCKED
3. Left Fuselage—CHECK CONDITION
4. Left Stabilizer/Elevator—CHECK
5. Tail Tiedown & Gust Locks—REMOVE
6. Beacon—CHECK
7. Control Surfaces—MOVEMENT AND SECURITY
8. Right Fuselage—CHECK CONDITION
9. Antennas—CHECK SECURE

RIGHT WING

1. Flap & Aileron—MOVEMENT AND SECURITY
2. Wingtip—CHECK
3. Leading Edge—CHECK
4. Tiedown—REMOVE
5. Wing Strut—CHECK
6. Fuel Tank Sump—DRAIN
7. Right Wheel/Brake—CHECK (29 psi)
8. Fuel Tank—VISUALLY CHECK LEVEL
9. Fuel Filler Cap—SECURE

NOSE

1. Windshield—CHECK CONDITION
2. Engine Oil—CHECK LEVEL (6-8 qts)
3. Oil Filler Cap—CHECK SECURE
4. Fuel Strainer Drain Knob—PULL 4 SECONDS
5. Engine Fuel Sump—DRAIN

6. Engine Compartment—SECURE
7. Cowling—SECURE
8. Engine Cooling Air Inlets—CLEAR
9. Carburetor Air Filter—CLEAR
10. Landing/Taxi Lights—CHECK CONDITION
11. Propeller & Spinner—INSPECT
12. Alternator Belt—CHECK
13. Landing & Taxi Lights—CHECK
14. Nose Wheel/Strut—CHECK (31 psi)
15. Tow Bar—REMOVE & STOW
16. Static Port—CLEAR

LEFT WING

1. Fuel Tank Sump—DRAIN
2. Fuel Tank—VISUALLY CHECK LEVEL
3. Fuel Filler Cap—SECURE
4. Leading Edge—CHECK
5. Pitot Tube—REMOVE COVER & CHECK CLEAR
6. Fuel Vent—CLEAR
7. Stall Warning Opening—CLEAR & TEST
8. Wing Strut—CHECK
9. Tiedown—REMOVE
10. Wingtip—CHECK
11. Aileron & Flap—MOVEMENT & SECURITY
12. Left Wheel/Brake—CHECK (29 psi)

BEFORE STARTING ENGINE

1. Preflight Inspection—COMPLETE
2. Seats, Seat belts, Shoulder Harnesses—CHECK
3. Fuel Selector Valve—BOTH
4. Avionics Master Switch—OFF
5. Autopilot—OFF
6. Electrical Equipment—OFF
7. Brakes—HOLD
8. Doors—AS REQUIRED
9. Circuit Breakers—CHECK IN
10. Avionics Power Switch—OFF
11. Cabin Doors—OPEN FOR ENGINE START
12. Alternate Static Source—CHECK
13. Passenger/Mission Brief—COMPLETE
14. Flight Controls—FREE AND CORRECT

STARTING ENGINE

1. Primer—AS REQUIRED (2-6 strokes)
2. Mixture—RICH
3. Carb Heat—COLD
4. Throttle—OPEN 1/4 INCH
5. Beacon—ON
6. Propeller area—CLEAR
7. Master Switch—ON
8. Ignition Switch—START
9. Throttle—1000 RPM
10. Oil Pressure—CHECK (25-115 psi)
11. Engine Instruments and Ammeter—CHECK

BEFORE TAXI

1. Flaps—RETRACT
2. Nav & Taxi Lights (Night only)—ON
3. Master Avionics—ON
4. Intercom—ON
5. Avionics—CHECK AND SET
6. Flight Instruments—SET
7. CAP Radio—SET
8. ATIS—OBTAIN
9. IFR Clearance—OBTAIN
10. Taxi Clearance—OBTAIN
11. Transponder—SET & STANDBY
12. Flight Instruments—CHECK
13. Starting Time—NOTE

TAXI

1. Mixture—LEAN FOR TAXI AS REQUIRED
2. Flight Controls—POSITION FOR WIND
3. Brakes—TEST
4. Airspeed—ZERO
5. Altimeter—CHECK (within 75 ft of elev)
6. Magnetic Compass—CHECK
7. Directional Gyro—CHECK
8. VOR Receivers—TEST
9. Takeoff Briefing—COMPLETE

ENGINE RUN-UP

1. Brakes—SET AND HOLD
2. Seats—UPRIGHT, ADJUST AND LOCK
3. Seat Belts & Shoulder Harnesses—CHECK SECURE
4. Fuel Selector Valve—RECHECK BOTH
5. Trim—SET FOR TAKEOFF
6. Primer—IN AND LOCKED
7. Mixture— RICH
8. Throttle—1800
9. Magnetos—CHECK DROP <125 RPM, 50 RPM
DIFF
10. Carb Heat—CHECK OPERATION
11. Suction Gauge—CHECK (4.6-5.4 In Hg)
12. Oil Pressure—CHECK (60-90 psi)
13. Oil Temperature—GREEN ARC
14. Fuel Quantity—CHECK
15. Mixture—LEAN AS REQUIRED (High DA)
16. Ammeter—CHECK
17. Throttle—IDLE
18. Throttle—1000 RPM
19. Throttle Friction Lock—AS DESIRED
20. Avionics—SET
21. Pulse Light/Landing Light—ON AS REQUIRED
22. Pitot Heat—AS REQUIRED
23. Panel Lighting Rheostat—AS REQUIRED
24. Transponder—SET
25. Brakes—RELEASE

BEFORE TAKEOFF

1. Flight Instruments—SET
2. Radios—SET
3. Instruments—SET FOR APPROACH BACK
4. Doors and Windows—CLOSED AND LOCKED
5. Flight Controls—FREE AND CORRECT
6. Transponder—ALTITUDE ENCODING
7. Strobe Lights—AS REQUIRED
8. Carb Heat—OFF
9. Elevator and Rudder Trim—TAKEOFF
10. Takeoff Clearance/Advisory Call—ENSURE
11. Brakes—RELEASE
12. Time—RECORD

NORMAL TAKEOFF

1. Flaps—FULL UP
2. Carb Heat—COLD
3. Throttle—FULL
4. Rotate—65 MPH
5. Climb—90 MPH

SHORT FIELD TAKEOFF

1. Flaps—10°
2. Carb Heat—OFF
3. Brakes—HOLD
4. Throttle—FULL
5. Engine Instruments—CHECK
6. Brakes—RELEASE
7. Rotate—60 MPH
8. Climb—66 MPH
9. When Clear of Obstacles—CLIMB 86-98 MPH

SOFT FIELD TAKEOFF

1. Flaps—10°
2. Carb Heat—OFF
3. Elevator—NOSE HIGH
4. Throttle—FULL
5. Airborne—LEVEL OFF
6. Climb—71/84 MPH
7. Flaps—RETRACT

CLIMB

1. Airspeed—86-98 MPH
2. Engine Instruments—CHECK
3. Flaps—CHECK FULL UP
4. Pulse Light—CHECK ON

LEVEL OFF

1. Fuel Quantity—CHECK
2. Cruise Power—SET
3. Mixture—LEAN AS REQUIRED

BEFORE DESCENT

1. Fuel Quantity—CHECK
2. Fuel Selector—ON BOTH
3. Mixture—ENRICHEN AS NECESSARY
4. Flight Instruments—AS REQUIRED
5. Carb Heat—AS REQUIRED
6. Throttle—REDUCE

APPROACH TO FIELD

1. Altimeter—SET
2. Transponder—AS REQUIRED
3. Fuel Selector—ON BOTH
4. Mixture—ENRICHEN AS NECESSARY

BEFORE LANDING

1. Fuel—CHECK
2. Mixture—RICH
3. Lights—AS REQUIRED
4. Flaps—AS REQUIRED
5. Carb Heat—ON
6. Approach— Zero Flaps 75-86 MPH
— Full Flaps 69-81 MPH

GO AROUND

1. Throttle—FULL
2. Carb. Heat—OFF
3. Flaps—20°
4. Airspeed—69 MPH
5. Flaps—RETRACT SLOWLY
6. Climb—90 MPH

NORMAL LANDING

1. Mixture—RICH
2. Carb Heat—ON
3. Flaps—AS REQUIRED
4. Approach—65-75 Full Flap, 70-80 No Flap

SHORT FIELD LANDING

1. Mixture—RICH
2. Carb. Heat—ON
3. Flaps—40°
4. Final Approach—75 MPH
5. Threshold Speed—70 MPH
6. Touchdown—ON MAIN GEAR
7. Brakes—APPLY
8. Flaps—RETRACT

SOFT FIELD LANDING

1. Mixture—RICH
2. Carb Heat—ON
3. Flaps—40°
4. Final Approach—75
5. Threshold Speed—70
6. Throttle—AS REQUIRED
7. Touchdown—ON MAIN GEAR
8. Throttle—IDLE
9. Elevator—NOSE HIGH
10. Flaps—RETRACT

AFTER LANDING

1. Flaps—UP
2. Transponder—STANDBY
3. Carb Heat—COLD
4. Landing Light—OFF/TAXI
5. Strobe Light—OFF
6. Pitot Heat—OFF
7. Trim—SET FOR TAKEOFF
8. Mixture—LEAN FOR TAXI
9. Flight Controls—POSITION FOR WIND

ENGINE SHUTDOWN

1. Radios—CHECK 121.5 MHz
2. Avionics Master—OFF
3. Throttle—800 RPM
4. Magneto Grounding—CHECK
5. Throttle—1000 RPM
6. Mixture—FULL LEAN
7. Propeller—CHECK STOPPED
8. Ignition Switch—OFF
9. Master Switch—OFF
10. Electrical Switches—OFF
11. Time—NOTE
12. Fuel Selector Valve—AS REQUIRED

SECURING AIRCRAFT

1. Air & Heat Vents—CLOSED
2. Control Lock—INSTALL
3. Glare Shield—INSTALL
4. Wheel Chocks—INSERT
5. Tie Downs—SECURE
6. Grounding Cable—ATTACH
7. Pitot Tube Cover—INSTALL
8. Gust Locks—INSTALL
9. Leading Edges—CLEAN AND DEBUG
10. CAP Aircraft Forms—COMPLETE
11. Personal Gear—REMOVED
12. Cabin Doors & Windows—LOCKED
13. Aircraft—INSPECT FOR DAMAGE
14. Flight Plan—CLOSE
15. Logbook—ENTER AS APPROPRIATE
16. Mission Debriefing—AS REQUIRED

EMERGENCY PROCEDURES

Introduction: This section provides checklist procedures for coping with emergencies that may occur. Emergencies caused by airplane or engine malfunctions are extremely rare if proper preflight inspections and maintenance are practiced. Enroute weather emergencies can be minimized or eliminated by careful flight planning and good judgment when unexpected weather is encountered. However, should an emergency arise, the basic guidelines described in this section should be considered and applied as necessary to correct the problem.

Always Remember: FLY THE AIRPLANE, then handle the emergency. Also, generally trim for best glide at 78 MPH, wing flaps up. If power is available, this airspeed will provide altitude.

Emergency Communications—Transmit MAYDAY on 121.5 MHz or current facility frequency. Squawk 7700. Notify controlling agency of intentions. When time permits, relay the following information:

1. Call Sign/Aircraft Type/Tail Number
2. Emergency or Precautionary Situation
3. Position
4. Souls on Board
5. Type of Malfunction
6. Estimated Landing Time
7. Fuel on Board (in minutes)
8. Intentions/Assistance Requested

AIRSPEEDS FOR EMERGENCY OPERATION

Engine Failure After Takeoff:

Wing Flaps Up.....78 MPH

Wing Flaps Down.....71 MPH

Maneuvering Speed:

2400 Lbs.....112 MPH

1600 Lbs.....98 MPH

Maximum Glide.....78 MPH

Landing Without Engine Power

Wing Flaps Up.....78 MPH

Wing Flaps Down.....71 MPH

Procedures in the Operational Checklists portion of this section shown in **bold-faced type** are immediate-action items which should be **COMMITTED TO MEMORY**.

STANDARD LIGHTGUN SIGNALS

LIGHT COLOR	ON GROUND	IN FLIGHT
Steady Green	Cleared for Takeoff	Cleared to Land
Flashing Green	Cleared to Taxi	Return For Landing (to be followed by steady green at proper time)
Steady Red	Stop	Give Way to Other Aircraft and Continue Circling
Flashing Red	Taxi Clear of Landing Area/Runway in Use	AIRPORT UNSAFE DO NOT LAND
Flashing White	Return to Starting Point on Airport	Not Used
Alternating Red and Green	EXERCISE EXTREME CAUTION	EXERCISE EXTREME CAUTION

FIRE DURING ENGINE START

1. Cranking—CONTINUE, to get a start which would suck flames and accumulated fuel through the carburetor and into the engine
2. If Engine Starts, Power—1800 RPM for a few minutes
3. Engine—SHUTDOWN and inspect for damage
4. If Engine Fails To Start, THROTTLE—FULL OPEN
5. Mixture—FULL LEAN
6. Cranking—CONTINUE
7. Fire Extinguisher—OBTAIN (have ground attendants obtain if not installed)
8. Engine—SECURE
9. Master Switch—OFF
10. Ignition Switch—OFF
11. Fuel Selector Valve—OFF
12. Fire—EXTINGUISH using fire extinguisher, wool blanket, or dirt

EMERGENCY ENGINE SHUTDOWN ON THE GROUND

1. **MIXTURE—FULL LEAN**
2. **FUEL SELECTOR VALVE—OFF**
3. **IGNITION SWITCH—OFF**
4. **MASTER SWITCH—OFF**

FORCED LANDING OR ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. **GLIDE—ESTABLISH (78 MPH/70 NO FLAP)**
2. **MIXTURE—FULL LEAN**
3. **FUEL SELECTOR VALVE—OFF**
4. **IGNITION SWITCH—OFF**
5. **FLAPS—AS REQUIRED, 40°
RECOMMENDED**
6. **MASTER SWITCH—OFF**
7. Passenger Seat Backs—MOST UPRIGHT POSITION
8. Seats, Seat Belts, Shoulder Harnesses—SECURE
9. Doors—UNLATCH PRIOR TO TOUCHDOWN
10. Touchdown—SLIGHTLY TAIL LOW
11. Brakes—APPLY HEAVILY

OIL SYSTEM MALFUNCTION

1. Throttle—AS REQUIRED If possible, adjust the throttle to maintain the oil pressure within normal limits
2. Mixture—RICH This will aid in engine cooling

PARTIAL ENGINE FAILURE DURING FLIGHT

1. Carb Heat—ON
2. Mixture—RICH
3. Fuel Selector Valve—ON
4. Primer—IN AND LOCKED
5. Ignition Switch—AS REQUIRED
6. Master Switch—ON
7. Mixture—ADJUST TO MAINTAIN SMOOTH ENGINE OPERATION

ENGINE RESTART DURING FLIGHT

1. Glide—ESTABLISH (78 MPH)
2. Carb Heat—ON
3. Mixture—RICH
4. Throttle—IN HALFWAY
5. Fuel Selector Valve—ON
6. Primer—IN AND LOCKED
7. Ignition Switch—AS REQUIRED
8. Master Switch—ON
9. Ignition Switch—START, if the propeller has stopped
10. Mixture—ADJUST TO MAINTAIN SMOOTH ENGINE OPERATION
11. If Restart Is Unsuccessful—Refer to Forced Landing

ENGINE FIRE DURING FLIGHT

1. **MIXTURE—FULL LEAN**
2. **FUEL SELECTOR VALVE—OFF**
3. **IGNITION SWITCH—OFF**
4. **GLIDE—ESTABLISH (78 MPH)**
5. **FLAPS—AS REQUIRED**
6. **MASTER SWITCH—OFF**
7. Refer to Smoke and Fume Elimination If Applicable
8. Airspeed—DIVE TO EXTINGUISH AS REQUIRED
9. Refer to Forced Landing

FUEL LEAK

1. Mixture—FULL LEAN
2. Fuel Selector Valve—OFF
3. Ignition Switch—OFF
4. Master Switch—OFF

THROTTLE LINKAGE FAILURE

1. If the throttle linkage fails inflight, the engine may remain at that power setting. Use power available and flaps required to safely land the aircraft. If the engine is running near full power, initiate a climb in order to lower flaps below the white arc. Flaps (full down) may be required to prevent engine overspeed. If it fails near idle, and straight and level flight cannot be maintained, use no flaps and fly at 78 MPH to set up for a forced landing.

PRECAUTIONARY LANDING WITH POWER

1. Passenger Seat Backs—MOST UPRIGHT POSITION
2. Seats, Seat Belts, Shoulder Harnesses—SECURE
3. Wing Flaps—20°
4. Airspeed—75 MPH
5. Selected Field—FLY OVER, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed
6. Avionics Power Switch And Electrical Switches—OFF
7. Wing Flaps—40° on final approach
8. Airspeed—75 MPH
9. Master Switch—OFF
10. Doors—UNLATCH PRIOR TO TOUCHDOWN
11. Touchdown—SLIGHTLY TAIL LOW

12. Ignition Switch—OFF
- Brakes—APPLY HEAVILY

DITCHING

1. Radio—TRANSMIT MAYDAY ON 121.5—GIVE LOCATION AND INTENTIONS; SQUAWK 7700
2. Heavy Objects (in baggage area)—SECURE OR JETTISON
3. Passenger Seat Backs—MOST UPRIGHT POSITION
4. Seats, Seat Belts, Shoulder Harnesses—SECURE
5. Wing Flaps—20-40°
6. Power—ESTABLISH 300 FT/MIN DESCENT
(NOTE: if no power is available, approach at 78 MPH with flaps up or 70 MPH with 10 degrees flaps)
7. Approach—High Winds, Heavy Seas—INTO THE WIND
8. Light Winds, Heavy Swells—PARALLEL TO THE SWELLS
9. Cabin Doors—UNLATCH
10. Touchdown—LEVEL ATTITUDE AT ESTABLISHED RATE OF DESCENT
11. Face—CUSHION at touchdown with folded coat
12. Airplane—EVACUATE through cabin doors. If necessary, open window and flood cabin to equalize pressure so doors can be opened
13. Life Vests and Raft—INFLATE

ELECTRICAL FIRE/HIGH AMMETER

- 1. MASTER SWITCH—OFF**
2. Refer to Smoke and Fume Elimination If Applicable
3. Fire Extinguisher—**ACTIVATE** if available—
WARNING: After Discharging An Extinguisher within a closed cabin, ventilate the cabin **DO NOT ATTEMPT TO LOCALIZE THE FIRE UNLESS ESSENTIAL FOR FLIGHT** (e.g., Instrument Conditions)

NEGATIVE AMMETER READING AND/OR LOW VOLTAGE LIGHT ILLUMINATES

NOTE: Illumination of the low-voltage light may occur during low RPM conditions with an electrical load on the system such as during a 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 no occurred to de-activate the alternator system.

1. Avionics Power Switch—**OFF**
2. Alternator Circuit Breaker—**CHECK IN**
3. Master Switch—**OFF** (both sides)
4. Master Switch—**ON**
5. Low Voltage Light—**CHECK OFF**
6. Avionics Power Switch—**ON**
7. Ammeter—**CHECK**

If low voltage light illuminates again:

1. Alternator—**OFF**
2. Electrical Load—**REDUCE NONESSENTIAL**
3. Flight—**TERMINATE** as soon as practical

SMOKE AND FUME ELIMINATION

1. Cabin Heat Knob—**IN**
2. Cabin Air Knob—**IN**
3. Upper Air Vents—**OPEN**
4. Windows—**AS REQUIRED** **NOTE:** If necessary, the window(s) may be opened to assist in clearing the smoke or fumes from the cabin.

STRUCTURAL DAMAGE OR CONTROLLABILITY CHECK

CAUTION: DO NOT RESET THE FLAPS IF SIGNIFICANT STRUCTURAL DAMAGE IS LOCATED IN THE WINGS

1. Climb to at least 1,500' above the terrain, if practical, at a controllable airspeed
2. Simulate a landing approach and determine the airspeed at which the aircraft becomes difficult to control—the minimum controllable airspeed
3. Plan to fly a straight-in approach. Fly the normal final approach airspeed for your flap setting, or 6 to 12 MPH above minimum controllable airspeed, whichever is higher
4. Plan to touch down at no less than minimum controllable airspeed. Do not begin to reduce final approach airspeed until the aircraft is very close to the runway

ASYMMETRICAL FLAPS

1. If an asymmetrical flap condition occurs, use aileron and rudder as necessary to maintain aircraft control. Do not attempt to correct the situation by reversing the flaps. Perform a controllability check and land as soon as conditions permit.

CAUTION: FURTHER MOVEMENT OF THE FLAPS MAY CAUSE FLAP BUCKLING AND AILERON DAMAGE

PITOTSTATIC MALFUNCTION

1. If icing is suspected, turn on the pitot heat NOTE: other blockages might be “burned out” of the pitot tube but this should only be attempted if the possibility of a wing fire is better than no airspeed indication (*i.e.*, hard IMC)
2. Static Pressure Alternate Source Valve—PULL ON
3. If the airspeed indicator is unreliable, fly known power settings and pitch pictures
4. Fly a pattern, maintaining 2400 RPM on downwind and 1800 on base and final. Reduce the power to idle in the roundout
5. Do not exceed 20 degrees of bank, and if a stall warning indication occurs prior to the roundout, GO AROUND

INADVERTANT ICING ENCOUNTER

1. Pitot Heat Switch—ON
2. Course—Turn Back or Change Altitude to obtain an outside air temperature that is less conducive to icing
3. Cabin Heat and Defroster Outlets—ON FULL
4. Throttle—INCREASE
5. Carburetor Air Filter Ice—WATCH FOR SIGNS and apply carburetor heat as required, an unexplained loss of 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. Landing—PLAN at the nearest airport
7. Ice Accumulation 1/4 inch or more—PREPARE TO LAND AT SIGNIFICANTLY HIGHER STALL SPEED
8. Wing Flaps—LEAVE RETRACTED due to 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. Window—OPEN AND SCRAPE WINDSHIELD if practical to remove ice to increase visibility in the landing approach
10. Approach—FORWARD SLIP if necessary for improved visibility
11. Approach—90 to 99 MPH depending on the amount of accumulation
12. Landing—PERFORM AT LEVEL ATTITUDE

DEPARTING A PREPARED SURFACE

1. Mixture—FULL LEAN
2. Fuel Selector Valve—OFF
3. Ignition Switch—OFF
4. Master Switch—OFF

ABORT

1. **THROTTLE—IDLE**
2. **BRAKES—AS REQUIRED**

LANDING WITH A FLAT TIRE

NOTE: If a flat tire or tread separation occurs during takeoff and conditions do not permit an abort, land as soon as conditions permit

1. Main Gear: Land on the side of the runway corresponding to the good tire. Hold blown tire off runway as long as possible. Maintain directional control with differential braking and nosewheel steering.
2. Nose Gear: Land in the center of the runway and hold the nosewheel off the ground as long as possible.
3. Stop the aircraft and accomplish a normal engine shutdown. Call for maintenance.

BRAKE FAILURE

1. If an inoperative brake is suspected, land on the side of the runway corresponding to the inoperative brake
2. Use a combination of nosewheel steering and the good brake to maintain directional control
3. If both brakes are inoperative, land in the center of the runway
4. Stop the aircraft on the runway. Shut down the aircraft and call for maintenance.

INADVERTANT SPIN RECOVERY

1. Throttle—IDLE
2. Rudder—FULL OPPOSITE DIRECTION OF SPIN
3. Ailerons—NEUTRAL
4. Elevator—NOSE DOWN
5. Rudder—NEUTRAL WHEN SPINNING STOPS
AND RECOVER FROM DIVE

ADDITIONAL PROBLEMS

Amplified Procedures are in Section 3, page 3-11 of the Manufacturer's Information Manual

CESSNA PERFORMANCE

WIND LIMITATIONS

Maximum Demonstrated Crosswind Component: 15 KTS

Note: 20 Degrees Flaps or less is recommended when crosswind component is stronger than 10 knots

Note: Maximum crosswind is for dry runway conditions

WIND SPEED	DEGREES OFF RUNWAY HEADING								
	10	20	30	40	50	60	70	80	90
8	1	3	4	5	6	7	8	8	8
9	2	3	4	6	7	8	8	9	9
10	2	3	5	6	8	9	9	10	10
11	2	4	5	7	8	10	10	11	11
12	2	4	6	8	9	10	11	12	12
13	2	4	6	8	10	11	12	13	13
14	2	5	7	9	11	12	13	14	14
15	3	5	7	10	11	13	14	15	15
16	3	5	8	10	12	14	15		
17	3	6	8	11	13	15			
18	3	6	9	12	14				
19	3	6	9	12	15				
20	3	7	10	13	15				
21	4	7	10	13					
22	4	8	11	14					
23	4	8	11	15					
24	4	8	12	15					
25	4	9	12						
26	5	9	13						

Surface to Air Visual Signal Code

Require Assistance	V
Require Medical Assistance or Unable to Proceed	X
No or Negative	N
Yes or Affirmative	Y
Proceeding In This Direction	↑
Operation Completed	LLL
We Have Found All Missing Personnel	<u>LL</u>
We Have Found Only Some Missing Personnel	++
We are not able to continue. Returning to base.	XX
Have divided into two groups. Each proceeding in direction indicated.	↔
Information received that aircraft is in this direction	→→
Require Doctor Serious Injuries	I
Require Medical Supplies	II
Require Food & Water	F
Indicate Direction to Proceed	K

Aircraft Seriously Damaged	G
Require Fuel & Oil	L
Probably Safe To Land Here	Δ
All Well	LL
Not Understood	JL
Require Map & Compass	□
Require Signal Lamp	
Will Attempt Takeoff	I>
Nothing found. Will continue to search	NN
Require Firearm & Ammunition	
Require Engineer	W
Have Found Only Some Personnel	

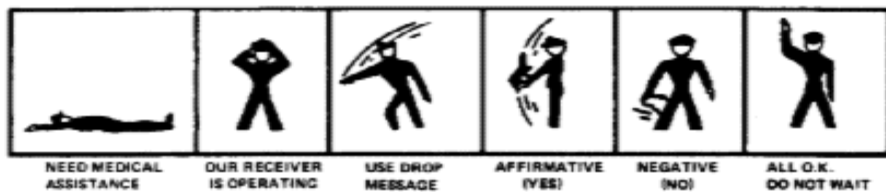


Figure C-3. Body Signals

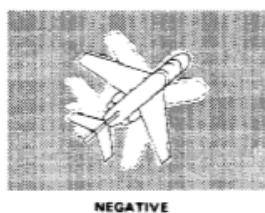


Figure C-4. Standard Aircraft Acknowledgment

COLORED DIAGRAMS



ON LAND WALKING IN THIS DIRECTION
AT SEA DRIFTING

PANEL SIGNALS

SURVIVORS USE LIFERAFT SAILS TO CONVEY SIGNALS

NOTE: ANY SQUARE PIECE OF CLOTH OR CANVAS WITH EACH SIDE OF CONTRASTING COLORS CAN BE USED

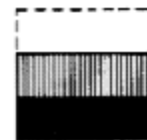
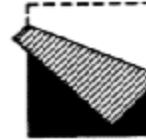
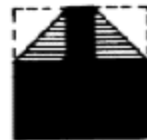


Figure C-5. Panel Signals