

C-172 K/L

SKYHAWK

PRE FLIGHT INSPECTION

1. W_x & DENSITY ALT.....DETERMINE
2. WEIGHT AND BALANCE.....CALC
3. PERFORMANCE REQUIREMENTS.....CALC
4. FLIGHT PLAN / NOTAMs.....FILE AS REQ / REVIEW
5. AROW / FLIPS.....CHECK / STOW
6. CABIN FOD.....REMOVE
7. WINDSHIELD / WINDOWS.....CLEAN AS REQ
8. CONTROL WHEEL / RDR GUST LK.....REMOVE
9. FLIGHT CONTROLS / TRIMS.....FREE / CORRECT
10. AVIONICS MSTR / MAGS / ELEC SWS.....OFF
11. KEY.....PLACE ON DASH
12. BATT.....ON
13. FLAPS.....40°
14. FUEL QTY GAGES.....CHECK
15. NAV / BCN / LDG / CABIN LTS (NIGHT).....CHECK
16. PITOT HEAT < 40° F.....CHECK
17. BATT.....OFF
18. ALT STATIC SOURCE.....OFF
19. FUEL SELECTOR.....CHECK EACH POSN, SET BOTH
20. HOBBS METER / TACH.....RECORD
21. FRONT SEAT SECONDARY STOPS.....CHECK SECURE
22. PREFLIGHT.....PERFORM
 - a. FUEL SUMPS & STRAINER.....SAMPLE
 - b. FUEL QUANTITY.....VISUALLY CHECK
 - c. FUEL CAPS.....CHECK SECURE
 - d. ENGINE OIL.....6-8 QTS
23. BAGGAGE DOOR.....SECURE

ENGINE PRE START

1. PAX BRIEF.....COMPLETE
2. DOORS.....SHUT
3. SEATS / BELTS / HARNESS.....SECURE
4. FUEL SELECTOR.....BOTH
5. C/B'S.....IN
6. PARKING BRAKE.....OFF
7. BRAKES.....PUMP

ENGINE START

1. MIXTURE.....FULL RICH
2. CARB HEAT.....COLD
3. PRIME.....(2-6 STROKES) AS REQ
4. PRIMER.....LOCKED
5. THROTTLE.....OPEN 1/8"
6. BCN.....ON
7. MASTER.....ON
8. BRAKES.....HOLD
9. PROP AREA.....CLR
10. MAGS.....START
11. OIL PRESS / SUCTION.....CHECK
12. MIXTURE.....LEAN FOR TAXI
13. RPM.....1000

PRE TAXI

1. WINDOWS.....AS REQ
2. CABIN HEAT / VENTS / AIR.....AS REQ
3. FLAPS.....RETRACT
4. AMMETER.....CHG +
5. AVIONICS MASTER.....ON
6. COMM / NAV / XPDR.....ON / ON / STBY
7. ATIS / CLNC DEL.....COPY
8. ALTIMETER.....(+/- 75' FLD ELEV) SET
9. ENG INSTS.....CHECK
10. VSI / A/S.....ZERO
11. D/G.....SET
12. AI.....(ERECT AND STABLE) SET
13. CLOCK.....SET
14. TAXI CLNC.....CNTC GND
15. PNL / NAV / TAXI LTS (NIGHT).....ON / ON / ON

TAXI

1. BRAKES.....(BOTH IF PAX) CHECK
2. D/G / MAG COMP.....FREE / TRACKING
3. NDL / BALL.....TRACKING IN TURNS
4. AI.....<= 5° PRECESSION

C-172 K/L OPS LIMITS

NORM T/O – LIFT NOSE @.....**60 MIAS**
 CLIMB @.....**75 – 85 MIAS**

SHORT FLD – 0° FLAPS, ELEV CONT TAIL LOW,
 CLIMB @.....**68 MIAS**

V_{SO}.....**49 MIAS**
 V_S.....**57 MIAS**
 V_X (@ S/L).....**68 MIAS**
 V_Y (@ S/L).....**82 MIAS**
 V_{FE}.....**100 MIAS**
 V_A (@ 2300 LBS).....**122 MIAS**
 V_{NO}.....**140 MIAS**
 V_{NE}.....**174 MIAS**

MAX OIL TEMP.....**245° F**
 MIN / MAX OIL PRESS.....**25 – 100 PSI**
 MAX RPM.....**2700**

MAX T/O / LDG WT.....**2300 LBS**

MAX LOAD FACTORS (NORM T/O WT) / (UTILITY T/O WT):
 FLAPS UP.....**+3.8g, -1.52g** / **+4.4g, -1.76g**
 FLAPS DOWN...**+3.5g** / **+3.5g**

BEST GLIDE.....**80 MIAS**

SHRT FLD APPR – 40° FLAPS @.....**69 MIAS**

NORM APPR - (40° - 0° FLAPS) @.....**65 - 80 MIAS**

X-WIND (ADD ½ GUST FACTOR TO APPR SPEED).....**13 KTS**

BEFORE T/O / RUN UP

1. FUEL SELECTOR VALVE.....CHECK BOTH
2. FLIGHT CONTROLS.....FREE / CORRECT
3. TRIMS.....SET FOR T/O
4. SEATS / BELTS / HARNESS.....SECURE
5. DOORS / WINDOWS.....SECURE
6. PRIMER.....CHECK LOCKED
7. BRAKES.....HOLD
8. MIXTURE.....(< 3000' DA) RICH
9. RPM.....1700
10. ENG INSTS.....CHECK
11. MAGS.....(< 125 RPM DROP / < 50 SPLIT) CHECK
12. CARB HEAT.....(RPM RISE = ICE) CYCLE
13. SUCTION GAGE.....(4.6 – 5.4) CHECK
14. AMMETER.....ONE NDL WIDTH W/ LDG LT
15. RPM.....1000
16. COMM / NAV / XPNDRTWR / SET / SET
17. FLAPS.....0° - 10°
18. FUEL QTY.....CHECK
19. THROTTLE FRICTION.....ADJ
20. NAV / STROBE / TAXI / LDG LTS (NITE).....ON / ON / OFF / AS REQ

TAKE OFF BRIEF

1. PIC.....IDENTIFY
2. XFR OF CONTROLS.....POSITIVE 3 WAY
3. EMERGENCY OPS.....**BRIEF**
 - a. This will be a [Normal, Short or Soft Field] takeoff.
The wind is _____, computed T/O distance is _____ FT,
T/O PWR is 2260-2360 RPM and Vr is **60 MIAS**.
 - b. Any problem before rotation, takeoff will be aborted.
 - c. Engine Failure prior to _____ FT MSL, we will maintain **80/65 MIAS** Flaps UP/DOWN, then land straight ahead.
 - d. Engine Failure above _____ FT MSL, we will [discuss options] and maintain **80 MIAS**.
4. T/O CLNC.....CNTC TWR

LOCAL MONTEREY FLIGHT AREA INFORMATION

* = RT TFC

(MRY) MONTEREY 257' TPA **1757**(1500) / **1257**(1000) 10R / 28L* 10L / 28R*

ATIS: **119.25**
 CLNC DEL: **135.45**
 GND: **121.9**
 TWR / CTAF: **118.4** SNS 231° R 12.5 NM
 UNICOM: **122.95**
 NORCAL APPR / DEP: **133.0** (360°-150°) **127.15** (151°-359°)

(OAR) MARINA 137' TPA **1137**(1000) 11 / 29*

AWOS **134.025**
 CTAF / UNICOM: **122.7** SNS 261° R 7.7 NM
 NORCAL APPR: **133.0** (360°-150°)

(SNS) SALINAS 85' TPA **885**(800) 8* / 26 13 / 31*

ATIS: **124.85**
 TWR / CTAF: **119.4**
 GND: **121.7**
 UNICOM: **122.95**
 NORCAL APPR / DEP: **133.0** (360°-150°)
SNS VORTAC: **117.3** (... _)
 CHULAR NDB (UAD): **263** 312° BRG 12.1 NM (... _)

(WVI) WATSONVILLE 163' TPA **1163**(1000) 2 / 20 8 / 26

ASOS: **132.275**
 CTAF / UNICOM: **122.8** SNS 314° R 18.6 NM
 PAJAR NDB (PDG): **327** 017° BRG 1.6 NM (... _ _ _)

(CVH) HOLLISTER 230' TPA **1030**(800) 6 / 24 13 / 31

AWOS: **120.425**
 CTAF / UNICOM: **123.0** SNS 017° R 16.6 NM

(E16) SOUTH COUNTY (SAN MARTIN) 281' TPA **1281**(1000) 14 / 32*

CTAF / UNICOM: **122.7** SAN JOSE VOR/DME (SJC): **114.1**
 120° R 24.2 NM (... _ _ _)

(KIC) MESA DEL REY (KING CITY) 370' TPA **1170**(800) 11 / 29

CTAF: **122.9** BIG SUR VORTAC (BSR): **114.0**
 067° R 25.4 NM (... _)

POSITION RPT (WHEN NOT IN RADAR CNTC OR VFR)

1. P OSITION
2. T IME (UTC)
3. A LTITUDE (VFR / IFR)
4. P OINT (NEXT RPT)
5. T IME (EST TO NEXT PT)
6. P OINT (SUCCEEDING PT)

PIREP FORMAT (122.0 FLIGHT WATCH)

1. LOC OF PHENOMENA (STA ID, FIX)
2. TIME (UTC)
3. ALT
4. TYPE A/C
5. SKY COND (BASES, TOPS AND AMOUNT)
6. FLT VIS AND W_x
7. OAT
8. WINDS (MAGNETIC)
9. TURB
10. ICING
11. RMKS

MNFC RESTRICTIONS

No VFR straight-in to uncontrolled field
 No aero initiated < 2500' AGL
 VFR Day W_x: >= 1500' AGL 3 SM
 VFR Night W_x: >= 2500' AGL 5 SM
 Winds: <= 30 KTS, or <= 15 KT Gust
 PAX: PIC w/in 60 days and 3 T/O and LDGs
 EACH MAKE AND MODEL: 3 T/O and LDGs w/in 180 days

AIR TO AIR FREQUENCY

122.75

RWY LINEUP

1. NOSE WHEEL.....CTRD
2. D/G.....CORR HDG
3. CARB HEAT.....CHECK COLD
4. SQUAWKALT
5. TAKEOFF TIME.....NOTE

TAKE OFF

1. THROTTLE.....(RPM 2260 – 2360 STATIC) FULL
2. MIXTURE.....(> 3000' DA) LEAN (PEAK)
3. ENG INSTS.....CHECK
4. A/S.....ALIVE
5. ELEV CONTL.....LIFT NOSE @ **60 MIAS**
6. CLIMB SPEED.....**75–85 MIAS**

SHORT FIELD T/O

1. FLAPS.....0°
2. BRAKES.....HOLD
3. THROTTLE.....(RPM 2260 – 2360 STATIC) FULL
4. MIXTURE.....(> 3000' DA) LEAN (PEAK)
5. ENG INSTS.....CHECK
6. BRAKES.....RELEASE
7. A/S.....ALIVE
8. ELEV CONTL.....SLIGHTLY TAIL LOW
9. CLIMB.....(UNTIL CLR OF OBSTACLE) **68 MIAS**

AFTER T/O

1. FLAPS.....RETRACT @ SAFE A/S / ALT
2. LDG LT.....AS REQ
3. FLIGHT PLAN.....OPEN

CLIMB

1. A/S.....**80 - 90 MIAS**
2. MIXTURE.....> 3000' MSL LEAN (PEAK)
3. FUEL SELECTOR (172K).....> 5000' MSL SGL TANK

LEVEL OFF

1. PWR.....SET <= 75%
2. THROTTLE FRICTION.....ADJ
3. TRIMS.....ADJ
4. MIXTURE.....> 3000' MSL LEAN (PEAK)

CRUISE (EVERY 15 MINS LEVEL)

1. ENG INSTS.....CHECK
2. AMMETER / SUCTION.....CHECK
3. FUEL QTY.....CHECK
4. FUEL SELECTOR.....BALANCE AS REQ
5. D/G.....SET
5. LOCATION.....DETERMINE
6. W_x.....(WHEN EN ROUTE) CHECK

FLIGHT INTO HEAVY RAIN

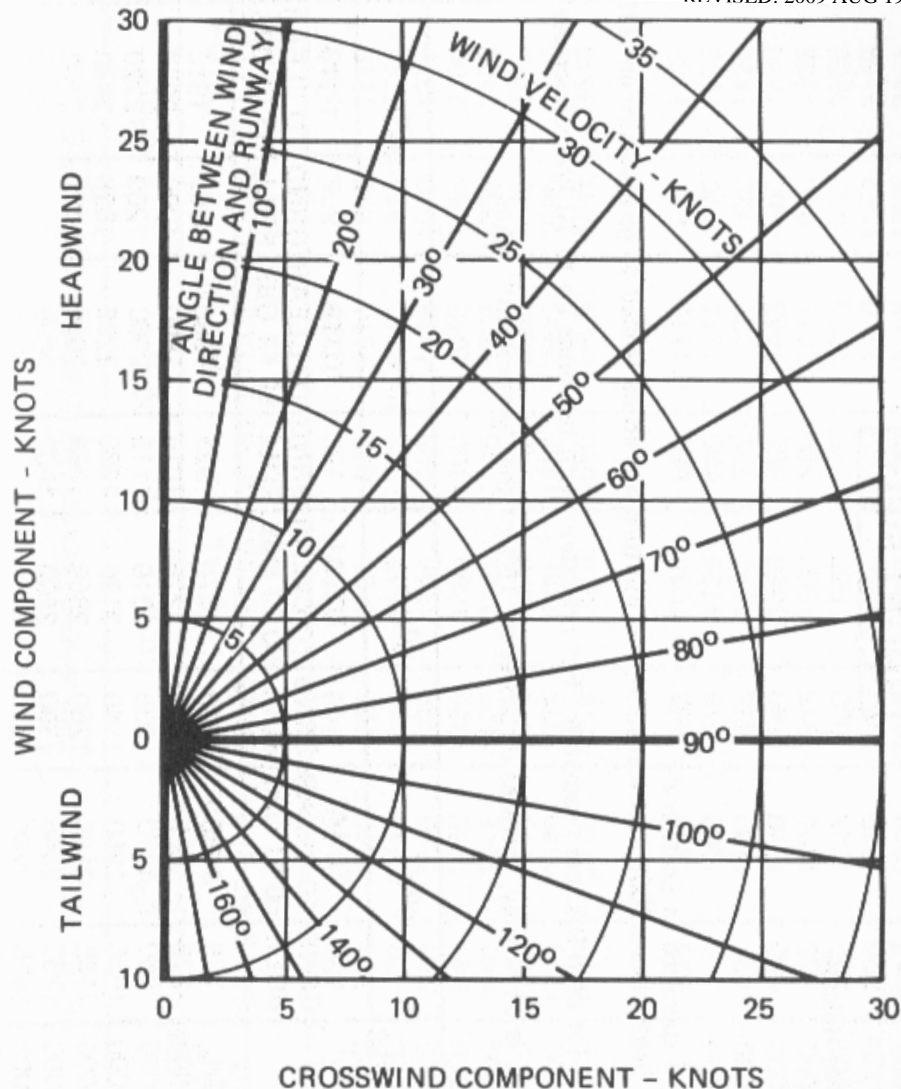
1. CARB HEAT.....ON
2. MIXTURE.....LEAN FOR CARB HEAT
3. PWR.....ADJ SLOWLY

STALL / SPIN / AERO MANEUVERS

1. SEATS / BELTS / HARNESS.....SECURE
2. BILGES.....CLEAR
3. LOOSE ITEMS.....SECURE
4. MIXTURE.....RICH
5. AREA.....CLEAR

POST STALL / SPIN / AERO (LEVEL)

1. D/G.....RESET



AFTER LANDING

1. CARB HEAT.....COLD
2. MIXTURE.....LEAN FOR TAXI
3. FLAPS.....RETRACT
4. XPDR.....STBY
5. PITOT HT.....OFF
6. LDG / TAXI LTS.....AS REQ
7. TRIMS.....SET FOR T/O

ENGINE SHUTDOWN

1. RPM.....1000
2. NAV / PNL / TAXI LTS.....OFF
3. ELT.....CHECK ON 121.5 MHZ
4. AVIONICS MASTER.....OFF
5. MAGS.....TEST FOR HOT MAG
6. RPM.....(FOR 20 SEC) 1800
7. RPM.....1000
8. MIXTURE.....IDLE / CUT - OFF
9. BCN.....OFF
10. MAGS / MASTER.....OFF / OFF
11. KEY.....PLACE ON DASH
12. FUEL SELECTOR.....LEFT OR RIGHT
13. CONTROL LOCK.....INSTALL
14. CABIN HEAT / AIR / VENTS.....OFF / OFF / AS REQ
15. HOBBS METER / TACH.....RECORD

POST FLIGHT

1. FUEL.....RECORD
2. WHEELSCHOCKED
3. TIE DOWNS.....SECURE
4. CABIN DOORS / WINDOWS.....SECURE
5. RUDDER GUST LOCK.....INSTALL
6. DISCREPANCIES.....WRITE UP

CLOSE FLIGHT PLAN

PRE DESCENT

1. ATIS / W_X.....CHECK
2. ALTIMETER.....SET
3. PITOT HT.....AS REQ
4. LDG LT.....ON
5. FUEL QTY.....CHECK
6. NAVAIDS.....TUNED / IDENT
7. D/G.....SET
8. DRAFT.....AS REQ

DESCENT

1. CARB HEAT.....(BELOW 2200 RPM) ON
2. MIXTURE.....AS REQ
3. FUEL SELECTOR (C172 K).....< 5000' MSL BOTH

PRE LANDING

1. FUEL SELECTOR (C172 K).....< 5000' MSL BOTH
2. MIXTURE< 3000' MSL FULL RICH
3. GEAR.....DOWN
4. FLAPS.....(BELOW **100 MIAS**) AS REQ
5. SEATS / BELTS / HARNESS.....SECURE
6. BRAKES.....PKG BRAKE OFF / PUMP
7. A/S.....CALC
8. LDG LT.....ON

WAVE OFF / MISSED APPR

1. THROTTLE.....FULL OPEN
2. CARB HEAT.....COLD
3. FLAPS.....20°
4. CLIMB A/S.....**65 MIAS**
5. FLAPS.....RETRACT SLOWLY @ SAFE – A/S / ALT

ABNORMAL PROCEDURES

IF ENGINE FLOODING SUSPECTED

1. MIXTURE.....IDLE / CUT-OFF
2. THROTTLE.....FULL OPEN
3. MAGS.....(SEVERAL REVS) START
4. ENGINE START CHECKLIST.....REPEAT
(Do not reprime the engine)
5. RPM.....(SLOWLY) 1800
6. RPM.....1000

IF PLUG FOULING SUSPECTED DURING GND RUN UP

1. RPM.....2000
2. MIXTURE.....50 RPM DROP LEAN OF PEAK
3. TIME.....30 SEC
4. MIXTURE.....RICH
5. RPM.....1700
6. MAGS.....RECHECK / REPEAT ONCE AS REQ

RADIO FAILURE SUSPECTED

1. VOLUME.....CHECK
2. HEADSET CONNECTION.....CHECK
(Switch to co-pilot's jack)
3. AUDIO CONTROLS.....CHECK
4. C/Bs.....CHECK
5. EXTERNAL SPEAKER.....ON
6. HAND HELD MICROPHONE.....CHECK
7. FREQUENCY.....SWITCH

If IFR (or VFR in Class B, C, D airspace):

8. SQUAWK.....7600

If failure occurs in VFR conditions, or VFR conditions are encountered after failure, continue flight under VFR and land as soon as practicable.

EMERGENCY PROCEDURES

AIRSPEEDS FOR EMERGENCY C-172 K/L OPS

ENGINE FAILURE AFTER T/O:

- WING FLAPS UP.....80 MIAS
- WING FLAPS DN.....65 MIAS

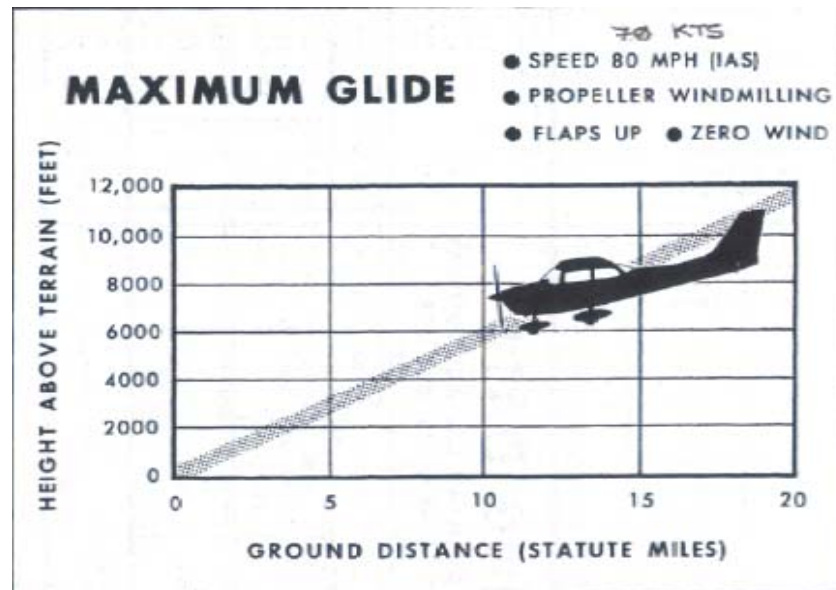
MANEUVERING SPEEDS:

- 2300 LBS.....122 MIAS
- 2000 LBS.....106 MIAS
- 1800 LBS.....95 MIAS

- MAXIMUM GLIDE.....80 MIAS
- PEL W/ PWR AVAIL.....70 MIAS

LDG W/O ENG PWR:

- FLAPS UP.....70 - 80 MIAS
- FLAPS DN.....65 - 75 MIAS



ENGINE FAILURE

ENGINE FAILURE DURING TAKEOFF RUN

1. **THROTTLE**.....**IDLE**
2. **BRAKES**.....**APPLY**
3. **FLAPS**.....**RETRACT**
4. **MIXTURE**.....**IDLE / CUT-OFF**
5. **MAGS**.....**OFF**
6. **TWR**.....**NOTIFY**
7. **MASTER**.....**OFF**

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. **A/S (FLAPS UP / FLAPS DN)**.....**80 / 65 MIAS**
2. **MIXTURE**.....**IDLE / CUT – OFF**
3. **FUEL SELECTOR**.....**OFF**
4. **MAGS**.....**OFF**
5. **FLAPS**.....**AS REQ**
6. **TWR**.....**NOTIFY**
7. **MASTER**.....**OFF**

ENGINE FAILURE DURING FLIGHT

1. **A/S**.....**80 MIAS**
2. **ENG INTS**.....**CHECK**
3. **FLAPS**.....**UP**
4. **LDG SITE**.....**SELECT**
5. **SEAT BELTS / SHLDR HARNESS**.....**SECURE**
6. **AIR START**.....**PERFORM**
 - i. **FUEL SELECTOR**.....**BOTH**
 - ii. **PRIMER**.....**IN / LOCKED**
 - iii. **MAGS**.....**BOTH**
 - iv. **CARB HEAT**.....**FULL ON**
 - v. **MIXTURE**.....**RICH**
 - vi. **MAGS**.....**(PROP STOPPED) START**

VFR Landing at a Controlled Field:

1. Remain outside or above Class D airspace until traffic flow determined.
2. Transmit intentions “in the blind” advising tower of aircraft type, position, altitude, and intention to land.
3. Enter pattern, report position “in the blind”, and watch for light signals from tower.

If failure occurs in IFR conditions, continue flight according to the following:

Route to Fly (in order): (AVE F)

- A – Assigned
- V – Vectored
- E – Expected
- F – Filed

Altitude (highest for the segment being flown): (MEA)

- M – Minimum IFR Altitude
- E – Expected as Advised by ATC
- A – Assigned by ATC

Descent for approach from en route altitude upon reaching the IAF but not before:

1. Expect-further-clearance (EFC) time (if given)
2. ETA as calculated from filed ETE

7. PRECAUTIONARY EMERGENCY LANDING (PEL):
 - i. TURN.....TOWARD LDG SITE
 - ii. CLIMB.....TO HIGH KEY
 - iii. CONFIGURATION.....CLEAN
 - iv. ENG INTS.....CHECK
 - v. THROTTLE.....MIN
 - vi. HIGH / LOW KEY.....ENTER
 - vii. AVIONICS MASTER.....OFF
 - viii. FLAPS.....(ON FINAL APPR) 40°
 - ix. A/S.....**70 MIAS**
 - x. MASTER.....OFF
 - xi. CABIN DOORS.....UNLATCH
 - xii. TOUCHDOWN.....SLIGHTLY TAIL LOW
 - xiii. MAGS.....OFF
 - xiv. BRAKES.....APPLY HEAVILY
8. IF NO START:
 - i. MIXTURE.....IDLE / CUT-OFF
 - ii. FUEL SELECTOR.....OFF
 - iii. MAYDAY / SQUAWK.....**7700**
 - iv. HIGH / LOW KEY.....ENTER
 - v. FLAPS.....(ON FINAL APPR) 40°
 - vi. CABIN DOORS.....UNLATCH
 - vii. MAGS / MASTER.....OFF / OFF
 - viii. BRAKES.....APPLY HEAVILY

GRADUAL LOSS OF RPM / ENGINE ROUGHNESS

IF OVER 5000' MSL:

1. VAPOR IN FUEL TANK.....EXECUTE

IF <= 5000' MSL, OR VAPOR IN FUEL TANK PROCEDURE DOESN'T CORRECT, SUSPECT CARBURETOR ICE:

1. CARB HEAT.....FULL ON
2. THROTTLE.....FULL

DITCHING

1. MAYDAY / SQUAWK.....**7700**
2. CABIN.....(HVY OBJECTS) SECURE / JETTISON
3. SEAT BELTS / SHLDR HARNESS.....SECURE
4. APPR -- HEAVY WINDS / SEAS.....INTO WIND
-- LIGHT WINDS / HEAVY SEAS.....PARALLEL
TO SWELLS
5. FLAPS.....40°
6. PWR.....EST 300 FT/MIN ROD @ **70 MIAS**
7. DOORS.....UNLATCH
8. TOUCHDOWN.....LEVEL @ 300 FT/MIN ROD
9. FACE.....LOWER / PROTECT
10. EGRESS.....AFTER MOTION STOPS

FIRES

DURING START:

1. **CRANKING**.....**CONTINUE**

IF ENG STARTS:

2. PWR.....(FOR A FEW MINS) **1700 RPM**
3. ENG.....(INSPECT) SHUTDOWN

IF ENG FAILS TO START:

4. **THROTTLE**.....**FULL OPEN**
5. AVIONICS MASTER / RADIO.....ON / ON
6. GND CONTL.....NOTIFY
7. **MIXTURE**.....**IDLE / CUT-OFF**
8. FUEL SELECTOR.....OFF
9. MAGS / MASTER.....OFF / OFF
10. FIRE.....EXTINGUISH

ENG FIRE IN FLIGHT

1. MIXTURE.....IDLE / CUT-OFF
2. FUEL SELECTOR.....OFF
3. MASTER.....OFF
4. CABIN HEAT / AIR.....SECURE
5. A/S.....>= 120 MIAS
6. ENGINE FAILURE.....(DO NOT RESTART) EXECUTE

ELECTRICAL FIRE IN FLIGHT

1. MASTER.....OFF
2. AVIONICS MASTER / ELEC SWS.....OFF
3. VENTS / CABIN AIR / HEAT.....SECURE
4. FIRE EXTINGUISHER.....USE

IF ELECTRICAL PWR IS NECESSARY AND FIRE OUT:

5. MASTER.....ON
6. C/B'S.....(DO NOT RESET) CHECK
7. COMM / NAV / XPNDR.....ALL OFF
8. AVIONICS MASTER.....ON
9. COMM / NAV / XPNDR.....(ONE AT A TIME) ON
10. CABIN.....VENTILATE

WING FIRE

1. NAV / STROBE / TAXI / LDG LTS.....ALL OFF
2. PITOT HEAT.....OFF
3. SIDE SLIP.....AWAY FROM FIRE
4. FLAPS.....LEAVE RETRACTED

WHEN ENGINE RUNS SMOOTHER:

1. CARB HEAT.....MIN REQ
2. MIXTURE.....(FOR CARB HEAT USAGE) LEAN

IF SPARK PLUGS FOUL OR MAGS MALFUNCTION:

1. MAGS.....(VERIFY MALF MAG) L / R
2. MAGS.....BOTH
3. MIXTURE.....LEAN

IF ENGINE STILL RUNS ROUGH:

1. MIXTURE.....ENRICH
2. FAULTY MAG / SPARK PLUG.....ISOLATE
3. LAND.....AS SOON AS PRACTICAL

HIGH OIL TEMPERATURE:

1. RPM.....REDUCE
2. MIXTURE.....RICH
3. AIRSPEED.....INCR

IF HIGH OIL TEMPERATURE PERSISTS:

1. LAND.....AS SOON AS PRACTICAL

LOW OIL PRESS / HIGH OIL TEMP:

1. PWR.....REDUCE IMMEDIATELY
2. PEL.....PERFORM

VAPOR IN FUEL TANK (> 5,000' MSL)

DURING OPERATION ON SINGLE TANK:

1. FUEL SELECTOR.....SWITCH TO OPPOSITE TANK

DURING OPERATION ON BOTH TANKS:

1. FUEL SELECTOR.....SWITCH TO A SINGLE TANK
FOR 60 SECONDS
2. FUEL SELECTOR.....SWITCH TO OPPOSITE TANK

STRUCTURAL MALFUNCTIONS

LANDING WITHOUT ELEVATOR CONTROL

1. FLAPS.....20°
2. PWR / TRIM.....**70 MIAS**
3. PWR.....(DO NOT CHG TRIM) ADJ FOR DESCENT
4. FINAL APPR.....TRIM FULL NOSE UP
5. PWR.....ADJ FOR HORIZONTAL ATTITUDE
PRIOR TO TOUCHDOWN

LANDING WITH A FLAT MAIN TIRE

1. FLAPS.....AS REQ
2. APPR.....NORMAL
3. TOUCHDOWN.....GOOD TIRE FIRST
(HOLD OTHER OFF W/ AILERON AS LONG AS POSSIBLE)

SUSPECTED BLOCKAGE OF STATIC PORT

1. ALT STATIC SOURCE.....ON, OR
2. CAREFULLY BREAK GLASS FACE OF VSI
(A/S BEST FLOWN W/ VENTS / CABIN HEAT OPEN)

INADVERTENT FLIGHT INTO ICING CONDITIONS

1. PITOT HEAT.....ON
2. ALTITUDE / DIRECTION....(BETTER OAT) CHANGE
3. CABIN HEAT.....PULL FULL OUT
(ADJ FOR MAX DEFROSTING AIRFLOW)
4. THROTTLE.....(MIN ICE BUILD ON PROP) INCR
5. CARB HEAT.....(LEAN MIXTURE) AS REQ
6. FLAPS.....LEAVE RETRACTED
7. WINDSHIELD.....SCRAPE ICE IF NECESSARY
8. LDG APPR.....FWD SLIP AS REQ FOR BETTER VIS
9. APPR SPEED.....INCR
10. LAND.....LEVEL ATTITUDE

DEPARTURE FROM CONTROLLED FLIGHT

1. AILERONSNEUTRAL
2. THROTTLE.....IDLE
3. ALTIMETER / VSI.....CHECK
4. ANALYZE.....A/S / TURN NDL

SPIN RECOVERY

1. RUDDER.....FULL OPPOSITE TURN NDL
2. ELEVATOR.....BRISKLY FWD OF NEUTRAL
3. CONTROL INPUTS..... HOLD
4. AS ROTATION STOPS, RUDDER...NEUTRALIZE AND
RECOVER FROM DIVE

SPIRAL DIVE RECOVERY

1. AILERON / RUDDER.....COORD OPPOSITE TURN NDL
2. AFTER WINGS LEVEL.....RECOVER FROM DIVE

VACUUM SYSTEM FAILURE

IF VMC:

- 1. A/I AND H/I.....COVER
- 2. VMC.....MAINTAIN

IF IMC:

- 1. A/I AND H/I.....COVER
- 2. EMERGENCY.....DECLARE

ELEC PWR SUPPLY SYSTEM MALFUNCTION

AMMETER SHOWS CHG RATE (FULL SCALE DEF)

- 1. ALTERNATOR.....OFF
- 2. ALTERNATOR C/B.....PULL
- 3. NON-ESSENTIAL ELEC SWS.....OFF
- 4. LAND.....AS SOON AS PRACTICAL

LOW VOLT LIGHT ILLUMINATES (AMMETER DISCH)

- 1. AVIONICS MASTER.....OFF
- 2. ALTERNATOR C/B.....CHECK IN
- 3. MASTER.....OFF
- 4. MASTER.....ON
- 5. LOW VOLTAGE LIGHT.....CHECK OFF
- 6. AVIONICS MASTER.....ON

IF LOW VOLTAGE LIGHT ILLUMINATES AGAIN

- 1. ALTERNATOR.....OFF
- 2. NON-ESSENTIAL ELECTRICAL SWITCHES.....OFF
- 3. LAND.....AS SOON AS PRACTICAL