Preflight	
Flui	
Brakes	AS NEEDED
Magnetos	OFF
	CHECK VISUALLY
Fuel sumps	DRAIN
5 on each wi	ng, 3 on bottom.
	ontamination.
Fuel filler caps	SECURE
Engine oil level	CHECK
	linimum 5 quarts
Dipstick	SECURE
Cab	
Pitot cover	REMOVE
POH	ACCESSIBLE
G1000 reference	ACCESSIBLE
Avionics (BUS 1 ar	
Master	ON
When the master	
treat propeller as	
on. Do not stand	
PFD	VERIFY ON
	CHECK QUANTITY
	RIFY NOT SHOWN
OIL PRESSURE	VERIFY SHOWN
LOW VACUUM	VERIFY SHOWN
Avionics fans	CHECK
Avionics bus 1 (
-	F. Avionics bus 2
-	eard, bus 2 OFF.
Lights	CHECK
Flaps	EXTEND
Tach time	RECORD
Pitot heat	ON
	ithin 30 seconds
Pitot heat	OFF
LOW VOLTS	VERIFY SHOWN
Master	OFF
Elevator trim	TAKEOFF
Fuel selector	BOTH
Alt static air	OFF
Fire extinguisher	CHECK
Control lock	REMOVE

Preflight (continued)	
Empennage	
Autopilot static VERIFY CL	EAR
Rudder gust lock REM	OVE
Control surfaces CH	ECK
Freedom of movement, secu	ırity
Trim tab CHECK SEC	URE
Antennas CHECK CONDIT	ION
Right	
Flap CHECK SECURE, CONDIT	ION
Aileron CHECK FREE, SEC	URE
Main wheel tire CHECK INFLAT	ION
Nose	
Cooling inlets VERIFY CL	EAR
Propeller CHECK FOR NI	CKS
Spinner VERIFY SEC	URE
Air filter CHECK CL	EAR
Nosewheel strut, tire CH	ECK
Static source CHECK CL	EAR
Left	
Main wheel tire CHECK INFLAT	ION
Fuel vent VERIFY CL	EAR
Pitot tube VERIFY CL	EAR
Stall warning T	EST
Landing, taxi lights CHECK CLI	EAN
Aileron CHECK FREE, SEC	URE
Flap CHECK SECURE, CONDIT	ION
Final	
Weight and balance CHEC	KED
Flight Circle DISPA	TCH
Tach, Hobbs times RECO	ORD
Baggage door LO	CK
Chocks REM	OVE
Tie-downs REM	OVE

Securing	
Control lock	INSTALL
Tie-downs, chocks	APPLY
Vents, windows	CLOSE
Pitot cover	APPLY
Fuel selector	LEFT or RIGHT
Tach, Hobbs times	RECORD
Flight Circle	CHECK IN
Doors	LOCK

Operating Checklists

Clark	
Start	
Before St	
Preflight inspection	COMPLETE
Passenger briefing	COMPLETE
Brakes	TEST, SET
Seats, belts, harnesses	SECURE
Circuit breakers	CHECK IN
Electrical equipment	OFF
Avionics (BUS 1 and BU	S 2) OFF
Beacon switch	ON
Fuel selector	BOTH
Fuel shutoff valve	ON
Engine Start (Wi	th Battery)
Throttle	OPEN 1/4 INCH
Mixture	CUT-OFF
Standby battery	TEST
Hold TEST position 2	
TEST light stays on	
Standby battery	ARM
	erify PFD turns on
Engine instruments	CHECK
	X on engine page
BUS E Volts	VERIFY ≥ 24V
M BUS Volts	VERIFY ≤ 1.5V
BATT S Amps	
	VERIFY negative
STBY BATT Annunciator	
Master	ON
	NGINE NOT WARM
Fuel pump ON, mixtur	
flow stable (3-5 secon	ids), mixture CUI-
OFF, fuel pump OFF	
Propeller area	CLEAR
Ignition switch	START
	hen engine starts
	hen engine starts
If engine flooded, mixt	ture CUT-OFF,
open throttle 1/2 to fu	
When engine starts, m	nixture FULL,
retard throttle prompt	
Oil pressureVERIFY GRE	EN WITHIN 60
SECONDS	
Mixture	GROUND LEAN
Before To	axi
Amps (M BATT, BATT S)	
•	RIFY NOT SHOWN
Annunciator	1 1101 51101111
Avionics	ON
Headset	ON
Navigation, strobe, taxi	
Flaps	RETRACT
Weather	
	OBTAIN
Altimeters (PFD, standb	
EFB Setup	IF DESIRED

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Engine Failures

Engine Failure During Roll	Takeoff
Throttle	IDLE
Brakes	APPLY
Flaps	RETRACT
Mixture	CUT-OFF
Magnetos	OFF
Standby battery	OFF
Master (ALT and BAT)	OFF

Engine Failure Immediately After Takeoff

Arter lake	ОП	
Airspeed	Flaps	up: 70 KIAS
	Flaps	10°-FULL: 65 KIAS
Mixture		CUT-OFF
Fuel shutoff	valve	OFF (pull full out)
Magnetos		OFF
FlapsAS RE	QUIRED	(FULL
recom	mende	d)
Standby ba	ttery	OFF
Master (ALT	and B	AT) OFF
Door		UNLATCH
Land		STRAIGHT AHEAD

Engine Failure During Flight (Restart Procedures)

(Restart Procedur	es <i>)</i>
Airspeed 68 KIAS (best glide speed)
Fuel shutoff valve	ON (push full in)
Fuel selector valve	BOTH
Fuel pump	ON
MixtureRICH (if resta	art has not
occurred)	
Magnetos	BOTH
If propeller stopped: START, advance	
throttle slowly, lean mixture as	
required	
Fuel pump	OFF
If fuel flow drops	to zero, turn fuel
pump back on	

Instrument Failures, High CO Level

Red X - PFD Airspeed Indicator

ADC/AHRS circuit breakers CHECK IN (ESS BUS and AVN BUS 1)

If open, reset circuit breaker. If circuit breaker opens again, do not reset

Standby airspeed USE for airspeed indicator information

Red X - PFD Altitude Indicator

ADC/AHRS circuit breakers CHECK IN (ESS BUS and AVN BUS 1)

If open, reset circuit breaker. If circuit breaker opens again, do not reset

Standby altimeterCHECK current

barometric pressure SET. USE for altitude information

Red X - PFD Attitude Indicator

ADC/AHRS circuit breakers CHECK IN (ESS BUS and AVN BUS 1)

If open, reset circuit breaker. If circuit breaker opens again, do not reset

Standby attitude USE for attitude indicator information

Red X - Horizontal Situation Indicator

ADC/AHRS circuit breakers CHECK IN (ESS BUS and AVN BUS 1)

If open, reset circuit breaker. If circuit breaker opens again, do not reset

Magnetic USE for heading compass information

PFD1 COOLING or MFD1 COOLING Annunciator(s)

Cabin heatREDUCE (minimum preferred)

Forward avionics CHECK (feel for airflow from screen on glareshield)

If forward avionics fan failed:

Standby batteryOFF unless needed for emergency power

If PFD1 COOLING or MFD1 COOLING annunciator does not go off within 3 minutes or if both annunciators come on:

Standby batteryOFF (land as soon as practical)

LOW VACUUM Annunciator Comes On

Vacuum indicatorCHECK EIS ENGINE page to make sure vacuum pointer is within green arc

If vacuum pointer not in green arc or gyro flag shows on standby attitude indicator, do not use standby attitude indicator

High Carbon Monoxide (CO) Level

Cabin heat OFF (push full in)
Cabin air ON (pull full out)
Cabin vents OPEN
WindowsOPEN (163 KIAS maximum windows open speed)
If high CO level remains:

Land AS SOON AS PRACTICAL

Electrical Malfunctions

HIGH VOLIS or M Bat Amps >	· 40
Master (ALT only)	OFF
Avionics (BUS 1)	OFF
Pitot heat	OFF
Beacon, taxi, nav, strobe lights	OFF
Landing lightOFF (use as req'd fo	or
landing)	

Cabin power 12V OFF Note: When M bus volts drops below 20V, the standby battery will supply power to the essential bus for at least 30 minutes

COM1, NAV1 TUNE
COM1 MIC and NAV1 SELECT
If COM2 MIC and NAV2 are selected
when avionics bus 2 is off, the radios
cannot be tuned

Avionics (BUS 2)OFF if clear of clouds

The following items will not operate: autopilot, COM2, transponder, audio panel, NAV2, MFD

Land AS SOON AS PRACTICAL Make sure a successful landing is possible before extending flaps. Flap motor is a large electrical load.

LOW VOLTS Annunciator Comes On < 1000 RPM

Throttle 1000 RPM Low voltage annunciator VERIFY OFF If annunciator remains on, run "LOW VOLTS Annunciator On ≥ 1000 RPM" checklist, and have electrical system inspected before next flight

LOW VOLTS Annunciator On ≥ 1000 RPM

Master (ALT only) OFF
ALT FIELD breaker CHECK IN
Master (ALT and BAT) ON
LOW VOLTS annunciator) VERIFY OFF
M Bus volts VERIFY 27.5V minimum
M Bat amps VERIFY POSITIVE
If LOW VOLTS annunciator remains
on:

Avionics (BUS 1) OFF
Pitot heat OFF
Beacon, taxi, nav, strobe lights OFF
Landing lightOFF (use as req'd for landing)

Cabin power 12V OFF

Note: When M bus volts drops below 20V, the standby battery will supply power to the essential bus for at least 30 minutes

COM1, NAV1 TUNE
COM1 MIC and NAV1 SELECT
If COM2 MIC and NAV2 are selected
when avionics bus 2 is off, the radios
cannot be tuned

Avionics (BUS 2)OFF if clear of clouds

The following items will not operate: autopilot, COM2, transponder, audio panel, NAV2, MFD

Land AS SOON AS PRACTICAL Make sure a successful landing is possible before extending flaps. Flap motor is a large electrical load.

Forced Landings

Emergency Landing Without Engine Power

Seats, seatbelts UPRIGHT, SECURE Airspeed Flaps up: 70 KIAS Flaps 10°-FULL: 65 KIAS Mixture **CUT-OFF** Fuel shutoff valve OFF (pull) Magnetos **OFF** FlapsAS REOUIRED (FULL recommended) Standby battery OFF Master (ALT and OFF (when BAT) landing is assured)

DoorsUNLATCH BEFORE TOUCHDOWN

Touchdown SLIGHTLY TAIL LOW Brakes APPLY HEAVILY

Precautionary Landing With Engine Power

Seats, seatbelts UPRIGHT, SECURE Airspeed 65 KIAS Flaps 20°

Selected fieldFLY OVER, noting terrain and obstructions

obstructions
Flaps FULL (on final approach)
Airspeed 65 KIAS
Standby battery OFF
Master (ALT and OFF (when
BAT) landing assured)
DoorsUNLATCH BEFORE
TOUCHDOWN

Touchdown SLIGHTLY TAIL LOW
Mixture CUT-OFF
Magnetos OFF

Brakes

APPLY HEAVILY

DitchingRadio N

location, intentions)

Transponder SQUAWK 7700

Heavy objects (in SECURE or baggage area) JETTISON (if possible)

MAYDAY on 121.5 MHz (Give

Seats, seatbelts UPRIGHT, SECURE Flaps 20°-FULL

Power 300 FT/MIN DESCENT AT 55 KIAS

If no power available, approach flaps up 70 KIAS or flaps 10° 65 KIAS

Strong wind, heavy seas: LAND INTO WIND

Light wind, heavy swells: LAND

PARALLEL TO SWELLS
Doors U

Doors UNLATCH TouchdownLEVEL ATTITUDE at

established rate of descent

FaceCUSHION at touchdown with folded coat

ELT ACTIVATE
AirplaneEVACUATE THROUGH CABIN
DOORS

If necessary, open window and flood cabin to equalize pressure so doors can be opened.

Life vests, raftINFLATE WHEN CLEAR
OF AIRPLANE

Fires

Fire During Start on Ground

Magnetos switchSTART (continue cranking to start the engine)

If engine starts:

Power 1800 RPM for a few minutes Engine **SHUTDOWN**

If engine fails to start:

Throttle **FULL** Mixture **CUT-OFF** START (continue Magnetos switch cranking)

Fuel shutoff valve (Ilug) 77O Fuel pump **OFF** Magnetos OFF Standby battery **OFF** Master (ALT and BAT) OFF **SECURE** Engine

Parking brake **RELEASE** Fire extinguisher **OBTAIN Airplane EVACUATE**

FireEXTINGUISH via fire

extinguisher, wool blanket, or dirt

Both cases: inspect and repair damage before conducting another flight.

Engine Fire in Flight

Mixture CUT-OFF Fuel shutoff valve OFF (pull) Fuel pump OFF Master (ALT and BAT) OFF Cabin heat and airOFF (except overhead vents) Airspeed **100 KIAS** If fire not extinguished, increase speed to find an airspeed, within airspeed limitations, which provides

an incombustible mixture Forced landing EXECUTE Refer to Emergency Landing Without **Engine Power checklist**

Electrical Fire in Flight

OFF Standby battery OFF Master (ALT and BAT) Vents/cabin air/heat **CLOSE** Fire extinguisher USE Avionics (BUS 1 and BUS 2) OFF All switches (except magnetos) OFF Vents/cabin air/heat **OPEN** When sure fire is completely extinguished If fire extinguished and electrical power necessary to continue flight: Circuit breakersCHECK. do not reset Master (ALT and BAT) ON Standby battery ON Avionics (BUS 1) ON Avionics (BUS 2) ON

Cabin Fire

Standby battery OFF Master (ALT and BAT) OFF Vents/cabin air/ CLOSE (to avoid heat drafts) Fire extinguisher USE Vents/cabin air/heat OPEN When sure fire is completely extinguished ASAP to inspect for damage Land

Wing Fire

Landing, taxi lights	OFF	
Nav, strobe lights	OFF	
Pitot heat	OFF	
NOTE: Sideslip to keep flames as	way	
from fuel tanks and cabin. Land		
ASAP using flaps only as required for		
final approach and touchdown.		

Icing, Fuel Vapor, Abnormal Landings

ON

Inadvertent Icing Encounter During Flight

Pitot heat

Turn or change altitude to obtain an OAT less conducive to icing. Cabin heat **FULL ON OPEN** Defrosters Cabin air **ADJUST** Maximize defroster heat and airflow MONITOR Induction icina Adjust throttle to hold RPM. Adjust mixture as needed for any change in power settings

Land **NEAREST AIRPORT** With an extremely rapid ice build-up. select suitable off-airport landing site

With $\geq 1/4$ inch of ice on the leading edges, prepare for significantly higher stall speed

Flaps LEAVE RETRACTED Open left window and scrape ice from windshield, if necessary for visibility

Forward slip if necessary for visibility Approach speed 65-75 KIAS Depending on level of accumulation Landing Perform in level attitude Avoid missed approaches if possible Missed approaches should be avoided whenever possible

Static Source Blockage (Erroneous Instrument Reading Suspected)

PULL ON Alternate static Cabin heat/air **PULL ON** Vents CLOSED Consult calibration table Airspeed Section 5, Figure 5-1 of POH

Excessive Fuel Vapor (Fuel Flow Stabilization Procedures)

If flow fluctuates ≥ 1 GPH or power surges occur Fuel pump ON Mixture **ADIUST**

as necessary for smooth operation Fuel selector **SELECT OTHER** valve TANK (if

> symptoms continue)

Fuel pumpOFF (after fuel flow stabilized)

Landing With a Flat Main Tire

Approach NORMAL Flaps **FULL** Touchdown GOOD MAIN TIRE FIRST Keep flat tire in air as long as possible with aileron control Directional controlMAINTAIN using brake on good wheel as required

Landing With a Flat Nose Tire

Approach **NORMAL** Flaps AS REQUIRED Touchdown ON MAINS Hold nosewheel off ground as long as possible, maintain full up elevator as airplane slows to stop