

Challenge	Response
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AIRCRAFT ACCEPTANCE

Control Lock	REMOVE
Master Switch	ON
Flaps	DOWN
Fuel Quantity	CHECKED
Master Switch	OFF
Alternate Static Air	OFF
Maintenance Status / Tachometer	CHECKED
Hobbs	RECORDED
AR(R)OW	CHECKED

BEFORE STARTING ENGINE

Preflight Inspection	COMPLETE
Doors	CLOSED AND LATCHED
Passenger Briefing	COMPLETE
Seat Belts / Harnesses	ON
Circuit Breakers	CHECKED IN
Fuel Selector	BOTH
Electrical Equipment	OFF

STARTING ENGINE

Master Switch	ON
Beacon	ON
Mixture	RICH
Carb Heat	COLD
Throttle	OPEN 1/8 INCH
Primer	IF REQUIRED 2-4 PUMPS
Propeller Area	CLEAR
Ignition Switch	START
Throttle	1000 RPM
Oil Pressure	CHECKED
Avionics	ON
Flaps	UP
Mixture	AS REQUIRED

TAXI

Exterior Lights	AS REQUIRED
Brakes / Steering	CHECKED
Instruments	CHECKED
Transponder	VERIFY ALT

BEFORE TAKEOFF

Parking Brake	SET
Doors & Windows	CHECKED
Flight Controls & Trim	CHECKED
Fuel Quantity	CHECKED
Fuel Selector	BOTH
Mixture	RICH
Throttle	1700 RPM
Magnetos (Max. 150 RPM / 50 Difference)	CHECKED
Carb Heat	CHECKED
Suction Gauge (if Equipped)	CHECKED
Engine Instruments & Ammeter	CHECKED
Throttle	IDLE / 1000 RPM
Mixture	AS REQUIRED
Flaps	SET
Flight Instruments	SET
Departure Briefing / Avionics	COMPLETE / SET
Parking Brake	OFF

Challenge	Response
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LINE UP

Exterior Lights	ON
Pitot Heat	AS REQUIRED
Carb Heat	COLD
Mixture	RICH (below 3,000' pressure altitude)

CLIMB

Flaps	UP
Mixture	AS REQUIRED
Engine Gauges	CHECKED
Airspeed	V _y (73) until 1000' then 75-85 KIAS

CRUISE

Power	SET
Mixture	AS REQUIRED
Landing Light	AS REQUIRED
Heading Indicator / Compass	CHECKED

DESCENT

Weather	CHECKED
Power	AS DESIRED
Mixture	AS REQUIRED
Altimeter	SET
Fuel Selector	BOTH
Carb Heat	AS REQUIRED
Landing Light	AS REQUIRED
Approach Briefing	COMPLETE

BEFORE LANDING

Passenger Briefing	COMPLETE
Seat Belts / Harnesses	ON
Fuel Selector	BOTH
Mixture	AS REQUIRED
Carb Heat	ON
Flaps	SET
Landing Light	ON

AFTER LANDING

Landing Light / Anti-Collision Light	OFF
Trim	RESET
Mixture	AS REQUIRED
Flaps	UP
Carb Heat	OFF
Pitot Heat	OFF

SECURING

Brakes	HOLD
Avionics	OFF
Magnetos	GROUND CHECK
Mixture	IDLE CUT-OFF
Magnetos / Keys	OFF & OUT
Tach Time	CHECK
Electrical Equipment	OFF
Master Switch	OFF
Fuel Selector	LEFT or RIGHT
Hobbs / Tach Time	RECORD
Chocks / Control Lock & Tie Down	IN & SECURE

Challenge

Response

ENGINE FAILURE DURING TAKEOFF ROLL

Throttle..... **IDLE**
 Brakes..... **APPLY**
 Wing Flaps..... **RETRACT**
 Mixture..... **IDLE CUT-OFF**
 Fuel Selector..... **OFF**
 Magneto Switch..... **OFF**
 Master Switch..... **OFF**

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

Airspeed..... **(flaps up) 65 KIAS**
 Mixture..... **IDLE CUT-OFF**
 Fuel Selector..... **OFF**
 Magnetos..... **OFF**
 Wing Flaps..... **AS REQUIRED**
 Master Switch..... **OFF**

ENGINE FAILURE IN FLIGHT

Trim for Best Glide **65 KIAS**
 Pick Suitable Landing Site
 Fly Toward Landing Site
 Fuel Selector..... **BOTH**
 Mixture..... **AS REQUIRED**
 Carb Heat **ON**
 Magnetos..... **ON / BOTH**

IF NO RESTART OR AN OFF AIRPORT LANDING IS NECESSARY:

Squawk Code: 7700 (121.5)
 Passenger Briefing..... **COMPLETE**
 Mix, Mags, Fuel Selector **OFF**
 Flaps **AS REQUIRED**
 Master Switch..... **OFF**
 Seats / Seat Belts **SECURE**
 Sharp Objects..... **STOW**
 Doors **AJAR**

ENGINE FIRE DURING START UP

Cranking **CONTINUE**

IF ENGINE STARTS:

Throttle..... **1700 RPM**
 Engine..... **SHUTDOWN**
 Engine..... **INSPECT**

IF ENGINE FAILS TO START:

Throttle..... **FULL OPEN**
 Mixture..... **IDLE CUT-OFF**
 Cranking **CONTINUE**
 Fuel Selector..... **OFF**
 Fire Extinguisher **OBTAIN / ARM**
 Engine..... **SECURE**
 Magnetos..... **OFF**
 Master Switch..... **OFF**
 Engine..... **INSPECT**

Highlighted Items Should be Committed to Memory

Challenge

Response

ENGINE FIRE IN FLIGHT

Mixture..... **IDLE CUT-OFF**
 Fuel Selector..... **OFF**
 Vents Heat / Air..... **CLOSED**
 (except wing root vents)
 Airspeed..... **100 KIAS**
 (If fire is not extinguished, increase glide speed to find an
 airspeed which will provide an incombustible mixture.)
 Forced Landing..... **EXECUTE**
SEE ENGINE FAILURE IN FLIGHT: NO RESTART CHECKLIST

ELECTRICAL FIRE IN FLIGHT

Master Switch..... **OFF**
 All Other Switches Except Ignition **OFF**
 Vents Heat / Air..... **CLOSED**
 Fire Extinguisher **ACTIVATE**

**WARNING: AFTER DISCHARGING FIRE EXTINGUISHER WITHIN
 CLOSED CABIN, VENTILATE CABIN**

**IF FIRE APPEARS OUT AND ELECTRICAL POWER IS
 NECESSARY FOR CONTINUANCE OF FLIGHT**

Master Switch..... **ON**
 Circuit Breakers check for faulty circuit, do not reset
 Radio / Electrical Switches **ON**
 (One at a time, with delay after each until short circuit is localized.)
 Vents Heat / Air..... **OPEN**
 (When it is ascertained that fire is completely extinguished.)

LANDING WITH A FLAT MAIN TIRE

Wing Flaps..... **AS DESIRED**
 Approach **NORMAL**
 Touchdown..... **GOOD TIRE FIRST**
 (Hold airplane off flat tire as long as possible with aileron control.)

AMMETER SHOWS EXCESSIVE RATE OF CHARGE

Master..... **OFF**
 Alternator Circuit Breaker **PULL**
 Non-Essential Electrical Equip..... **OFF**
 Flight **LAND AS SOON AS PRACTICAL**

HIGH VOLTAGE LIGHT ILLUMINATES IN FLIGHT

Radios..... **OFF**
 Alternator Circuit Breaker **CHECK IN**
 Master Switch..... **OFF (both sides)**
 Master Switch..... **ON**
 High Voltage Light **CHECK OFF**
 Radios..... **ON**

IF HIGH VOLTAGE LIGHT ILLUMINATES AGAIN

Alternator **OFF**
 Non-Essential Radio / Electrical Equip..... **OFF**
 Flight **LAND AS SOON AS PRACTICAL**

Highlighted Items Should be Committed to Memory