

BEFORE STARTING

Preflight COMPLETE
Passenger Briefing
Seats ADJUSTED
Seatbelts FASTENED
Radio Master OFF
Circuit Breakers IN
Brakes TESTED/HOLD

STARTING

Gear Switch..... DOWN
Propeller.....HIGH RPM
Master Switch.....ON
Gear Ind. Lights....3 GREEN
Mixture.....RICH

COLD START

Throttle.....OPEN 1/2 INCH
Aux Fuel Pump.....ON UNTIL
RISE IN FUEL FLOW
Aux Fuel Pump.....OFF
Throttle—OPEN 1/4 INCH
Mixture..... IDLE CUT-OFF

HOT START

Mixture..... IDLE CUT-OFF
Throttle.....OPEN 1/2 INCH

ENGINE FLOODED START

Mixture—IDLE CUT-OFF
Throttle—FULL OPEN
Brakes TESTED/HOLD
Propeller..... CLEAR

When engine starts

Mixture. ADVANCE TO RICH
Throttle..... 1000 RPM
Oil Pressure.... GREEN ARC
Ammeter Indication – CHECK

Mixture..... LEAN FOR TAXI
Beacon..... ON

BEFORE TAXI

Flaps UP
Transponder 1200 & ALT
Radio Master ON
Audio Panel AUTO
Radios SET
ATIS/Wx CHECK
Flight Inst CHECK/SET
Flight controls CHECK
Area CLEAR
Contact Ground
BrakesRELEASE/TEST

TAXI

Flight Controls:
POSITION FOR WIND

BEFORE TAKEOFF

Brakes SET
Doors/Windows CLOSED
Mixture ENRICHED
Throttle 2100 RPM
Magnetos CHECK
(Max drop-175 RPM Max diff-
50 RPM)
Prop.....EXERCISE
(100 to 300 RPM drop)
Engine Inst.....GREEN ARC
Ammeter CHECK
Throttle 2000 RPM
Suction 5± 0.1
Throttle 1000 RPM
Trim TAKEOFF
Flaps.....AS REQUIRED
Autopilot.....OFF
Flight Inst SET

RadiosSET
Fuel Valve...FULLEST TANK
Aux Fuel Pump.....ON
MixtureAS REQUIRED
SeatbeltsFASTENED
Emer. Response.....BRIEF
Contact Tower or
Announce departure
Approach PathCLEAR
Takeoff timeNOTE
Initial Heading.....NOTE
R.E.A.C.T
RPM, Engine Inst. Airspeed,
Centerline, Take off point

NORMAL TAKEOFF

ThrottleFULL
Engine Inst..... GREEN ARC
Rotate56 KIAS
Landing gear.....RETRACT
With positive climb rate
Climb 83 KIAS

CRUISE CLIMB

Airspeed.....95-105 KIAS
Throttle25 INCHES
Propeller.....2500 RPM
Mixture..... AS REQUIRED
Engine Inst..... GREEN ARC

CRUISE

Pitch.....LEVEL
AirspeedCRUISE
Max Cruise24"/2450 RPM
Slow Cruise22"/2450 RPM
Trim.....ADJUST
Aux Fuel Pump.....OFF
Mixture.....LEAN
Engine Inst..... GREEN ARC

Cross check
Pitch -- Power – Trim
Heading Indicator
Altimeter Setting
Flight planOPEN
Flight Following.... REQUEST

DESCENT

Fuel Valve...FULLEST TANK
Mixture..... AS REQUIRED
Power AS REQUIRED
Engine Inst.....GREEN ARC
Airport Environment
Preparation

BEFORE LANDING

Fuel Valve...FULLEST TANK
Mixture AS REQUIRED
Aux Fuel Pump.....ON
Landing gear.....DOWN
Gear Ind. Lights....3 GREEN
Throttle..... AS REQUIRED
Propeller.....HIGH RPM
Seatbelts FASTENED
Lights AS REQUIRED
BGUMPS

NORMAL LANDING

Airspeed70 KIAS
Flaps..... AS REQUIRED
Trim AS REQUIRED
BrakesMINIMUM

GO AROUND

ThrottleFULL
MixtureRICH
Landing Gear.....UP
With positive climb rate
FlapsRETRACT TO 1st
Airspeed70 KIAS

ObstacleCLEAR
Airspeed83 KIAS
FlapsRETRACT
*Cram It, Climb It, Clean It,
Call It*

AFTER LANDING

Taxi. ...CLEAR OF RUNWAY
FlapsRETRACTED
Aux Fuel Pump.....OFF
LightsAS REQUIRED
MixtureLEAN
Contact ground or taxi to
ramp

SHUTDOWN

Propeller.....HIGH RPM
Throttle1200 RPM
Transponder.....1200
S SwitchesOFF
L Lean toCUTOFF
I IgnitionOFF
M MasterOFF
TrimTAKEOFF
Control LockINSTALL
Hobbs/TachRECORD
Pitot CoverON
Tie downsSECURE
Flight PlanCLOSE

MISCELLANEOUS

V-SPEEDS

V_{so}.....56 KIAS
V_{s1}.....61 KIAS
V_x gear down.....70 KIAS
V_x gear up.....79 KIAS
V_y83 KIAS
V_g91 KIAS
V_{fe}.....108 KIAS
V_{le}.....130 KIAS
V_a max.....117 KIAS
V_{lo} gear retraction .109 KIAS
V_{lo} gear extend.... 130 KIAS
V_{no}148 KIAS
V_{ne}186 KIAS

FREQUENCIES:

ATIS126.85
Ground128.70
Tower118.50
Center120.40
UNICOM.....122.95
Flight Service122.65
CFD123.00
RWV, LHB, 60R..... 122.90

EMERGENCY ENGINE FAILURES

TAKEOFF RUN

Throttle.....IDLE
BrakesAPPLY
FlapsRETRACT
MixtureCUTOFF
IgnitionOFF
Master.....OFF

CLIMB OUT

Airspeed91 KIAS
Fuel ValveOFF
Mixture..... CUTOFF
Throttle.....IDLE
Ignition.....OFF
Landing Gear AS REQUIRED
FlapsAS REQUIRED
MasterOFF

IN-FLIGHT: RESTART

Airspeed91 KIAS
SELECT A FIELD: FLY TO IT
Fuel Valve...FULLEST TANK
Alternate Air.....ON
MixtureRICH
Aux Fuel Pump.....ON
IGNITION:

Prop turningBOTH
Prop StoppedSTART

Transponder7700
Radio:121.5
MAYDAY

IN-FLIGHT: SECURE

Airspeed 91 KIAS
Fuel Valve OFF
Aux Fuel Pump.....OFF
Mixture CUTOFF
ThrottleIDLE
IgnitionOFF
Landing Gear AS REQUIRED
Flaps AS REQUIRED
MasterOFF
DoorsOPEN
Seatbelts..... FASTEN
Prep Passengers

ENGINE FIRE IN FLIGHT

MixtureCUTOFF
Fuel Valve.....OFF
Aux Fuel Pump.....OFF
Master Switch..... OFF
Vents/ Cabin Air/ Heat
CLOSED

Airspeed.....100 KIAS
or better to extinguish flames

PROCEED TO IN-FLIGHT
SECURE

ELECTRICAL FIRE

Master Switch.....OFF
Vents/Cabin/Heat/Air
CLOSED
Window: OPEN to clear
cabin.
LAND AS SOON AS
POSSIBLE