SKYHAWK – Analog Panel – CHECKLIST

Preflight Exterior

Cockpit
A.R.O.W. documents – On board
Control lock – Out
Pitot Tube Cover – OFF
Fuel Selector – BOTH
Fuel Shutoff – IN
Master switch – ON
Avionics Fan – ON
Flaps – Fully extended
Fuel gauge – Check level
All lights – Check
Pitot Heat – Check if necessary
All switches – OFF

Empennage
Baggage Door – Locked
Vertical stabilizer – Undamaged
Horizontal stabilizer – Undamaged
Elevator – Free and secure
Rudder cables – Good condition
Trim tab – Cotter pin secure
Tie-down – Remove

Antennas
Comm antennas – Secure
Transponder antenna – Attached
ELT antenna – Secure
GPS antenna – Secure
VOR antenna – Secure

Right Gear
Tire – Inflated, no bald spots
Wheel chocks - Remove
Brakes – No fluid leaks
Brake pads – Thickness sufficient
Gear leg – Good condition

Right Wing
Flap – Down & secure
Aileron – Free & secure
Light fixture – Secure
Wing tip – Undamaged
Wing leading edge – Undamaged
Tie down – Remove
Fuel in tank – Sufficient for flight
Cabin air vents – Not blocked
Fuel – Test quality (5)

Cowling
Oil – Check Level (6 - 7qt)
Fuel – Test Quality (3)
Prop blades – Good condition
Alternator Belt – Good condition
Air Intakes – Not blocked
Cowlings – Secure
Static Port - Clear

Nose Gear
Tire – Inflated, tread
Cotter pins – Check
Gear strut – Inflated

Left Wing
Fuel in tank – Sufficient for flight
Cabin air vents – Not blocked
Pitot tube – Clear & secure
Tie down – Remove
Fuel vent – Clear
Wing leading edge – Undamaged
Wing tip – Undamaged
Light fixture – Secure
Aileron – Free & secure
Flap – Down & secure
Fuel – Test quality (5)

Left Gear
Tire – Inflated, no bald spots
Wheel chocks – Remove
Brakes – No fluid leaks
Brake pads – Thickness sufficient
Gear leg – Good condition
360° Walk around, tie downs and chocks/ Tow Bar

Preflight Interior

Passenger Briefing
Seatbelt use • Exit procedure
Com use • Motion sickness
Look for traffic
Fire extinguisher use

Alternate Static – Check
Parking brake – Set
Seat – Adjusted
Master – ON
Beacon – ON
Nav lights – ON (ADS-B)
Circuit breakers – IN
Fuel selector – BOTH
Insert key – Do not turn

Cold Engine Start

IF OIL TEMP NOT IN GREEN
Mixture – RICH
Throttle – Cracked
Fuel pump – ON (3-5 gph) then OFF
Mixture - LEAN
Check Surroundings
Shout – "CLEAR PROP!"
Starter – Engage (Max 10 Sec.)
Mixture – ENRICHEN
Oil pressure – Green
Throttle – 1200 RPM
Mixture – Lean for max RPM
Throttle – 900 RPM
Avionics – ON • Headset – Check

Hot Engine Start

Throttle – Cracked
Check surroundings
Shout – "CLEAR PROP!"
Starter – Engage (Max 10 Seconds)
Mixture – ENRICHEN
Oil pressure – Green
Throttle – 1200 RPM
Mixture – Lean for max RPM
Throttle – 900 RPM
Avionics – ON • Headset – Check

Pre-taxi/ Taxi

Flaps – UP (visually verify)
Transponder – Alt 1200
GPS – ON • ATIS – Copy
Altimeter – Set and verified
Contact ground control
Taxi Light - ON • Brakes - Test
Gyro Instruments – Check

KSMO ATIS	119.15
KSMO Ground	121.90
KSMO Tower	120.10
SOCAL Approach	125.20 or 124.30

Run-Up

Parking brake – Set
Fuel selector- BOTH
Trim – Set for takeoff

Pilot Briefing
Positive exchange of controls
Plan for power loss on takeoff (see "Power Loss on Takeoff")
Route of flight (GPS Set)

Run-Up
Flight Controls – Free & Correct
Annunciator Lights – Check
Instruments – Check
Oil Temperature – 100° F
Mixture – Best Power
Power – 1800 RPM
Magneto left – Check *
Magneto right – Check *
(*RPM Max drop 150/Max diff 50)
Vacuum – Check
Amps/ Volts – 28v
Oil Temperature – Green
Oil Pressure – Green
Power – Idle check (575 - 625 rpm)
Power – 900 RPM
Mixture – Lean for taxi
Throttle friction
Transponder – Set
Contact ground control

Holding Short

Doors & Windows - Locked
Flaps – Set for takeoff
Trim - Set for takeoff
Fuel pump - OFF
Contact tower (KSMO 120.10)

SKYHAWK – Analog Panel – CHECKLIST

Taking the Active Runway

The following items should be done by memory every time pilots taxi onto a runway.

Landing Light – ON
Strobe Light – ON
Check final – Clear
Check runway – Clear
Check doors & windows – Locked
Fuel Selector – BOTH
Mixture – RICH
Engine Gauges – Green

Power Loss on Takeoff

On Ground
Throttle – Idle
Brakes – Apply
Flaps – Up
Aircraft – Stop
Ignition – OFF

Below 800 Feet AGL
Lower nose abruptly - Pitch 68kts
Fuel Shutoff Valve – OFF
Mixture – Cutoff
Ignition – OFF
Flaps – Full
Master – OFF
Land straight ahead
Do not attempt to return to Runway

Above 800 Feet AGL
Note winds/ MSL altitude
Land on runway or golf course

Climb

Pitch for airspeed (75 - 85kts)
Power – FULL
Trim – Relieve control pressure
Engine Instruments – Monitor
Passing 3000MSL – Lean

Cruise

Power – 2200 – 2400
Trim – Relieve control pressure
Temperatures and pressures – Monitor
Mixture – Lean
H.I. - Aligned with Compass

Descent

Power – Set for descent rate
Pitch – Constant airspeed
Strobe Lights – ON
Landing Light – ON
-within 10 miles of an airport
ATIS – Copy
Mixture -- Enrichen

Go-Around

Power – Full
Pitch for best climb (Vy) – 74 KTS
Flaps – Retract to 20° immediately
Then retract in stages
Announce – "Going around"

Pre-Landing

Fuel Selector – BOTH
Mixture – RICH
Landing Light - ON
Strobe Lights – ON
Power – 1500
Pitch – To slow to Vfe – 110 Kts for 10°
Flaps – As necessary
Pitch for approach speed of 75 Kts
Trim to relieve control pressures

Clear of Runway

Trim – Set for takeoff
Transponder – 1200
Flaps – Up
Mixture – LEAN for taxi
Landing Light – OFF
Taxi Lights– As required
Strobe Lights – OFF
Contact ground control

Shut Down

Avionics – OFF
Throttle – 1000RPM
Ignition – Cycle • Mixture – Cutoff
Mags – OFF • Key – OUT
Master/Lights-OFF EXCEPT Beacon
Fuel Selector – Right or Left
Hobbs & Tach record

Tie Down/Secure

Chocks – Replace
Tie downs – Attach
Controls – Secure
Pitot tube cover – ON

Pre-maneuver

Performed prior to every maneuver. Memorize this checklist.

C.E.R.R.C.A.

Clearing turn(s)
Emergency landing area
Radio – Announce position
Reference point -Airspeed, heading, altitude
Configure **A**ircraft – Appropriate for maneuver

V Speeds

Vso – 40
Vs1 – 48
Vr – Variable
Vx – 62
Vy – 74
Vfe – 110 (10°) • 85 (20° – 30°)
Va – Low weight (1900 lbs) – 92
Va – Max weight (2550 lbs) – 105
Vno – Max cruise – 129
Vne – 163
Best glide (max weight) – 68

Emergency Procedures

Power Loss in Flight

Airspeed – Best glide: 68 KIAS
Best Field – Choose, fly towards
plan approach (based on wind)
Checklist – 7 Up:
Fuel Selector – BOTH
Fuel Shutoff – IN
Mixture – As required
Throttle – Cracked
Fuel Pump – ON
Master – ON
Ignition – Attempt restart if prop stopped / Cycle mags
Declare:
Squawk – 7700 IDENT
Mayday – 121.50 or current frequency
Engine – Shutdown
Fuel shutoff valve – OUT
Mixture – Full Lean
Ignition – OFF
Flaps – As required
Get Ready
Seatbelts – Tighten
Sunglasses, headset – Remove
Passenger – Secure
Master switch – OFF (Final)
Warning: A, B, C **much** more important than D, E, F, G. Fly the Plane first. Always assume engine will not restart.

Electrical Fire

Master – OFF
All switches – OFF
Cabin heat – OFF
Air vents – Closed
Fire Extinguisher – As required
Land – As soon as practical
Cabin – Ventilate

Engine Fire

Fuel Shutoff Valve - OUT
Throttle – Full Open
Mixture – Full Lean
Ignition – OFF, when engine stops
Emergency descent Vne – Altitude and weather permitting

Comm Failure

Troubleshoot
Squawk – 7600 (If able)
Proceed to nearest airport
Enter pattern normally
Look for light gun signals
on final