



N419LK

C172N Skyhawk

ATIS 126.9 **Ground** 118.22 **Tower** 119.2 (125.7 28R)
 KMYF: TPA 1,400' | Elev. 427'

Air-to-Air 122.75
Crown Air 123.5

PREFLIGHT (REFER TO POH)

Lights.....CHECK
 Oil..... Min. 4.5 qts, Check Quality
 Fuel Quantity/Quality
 A.R.O.W, all caps, drains, vents, belt, prop,
 intakes, antennas, pitot & static ports, gear,
 tires, brakes, surfaces & controlsCHECK

ENGINE START

Cold / Hot / Flooded? Refer to POH

Chocks, tie-downs, baggage doorCHECK
 Seat Belts/Harnesses ON
 Passenger Brief.....COMPLETE
 Carb Heat.....OFF/COLD
 Fuel Selector BOTH
 ThrottleOPEN 1/8 in.
 Master Switch..... ON
 Circuit BreakersCHECK
 Beacon ON
 MixtureFULL RICH
 Primer (Cold Start Only) IN & LOCKED
 Propeller Area.....“CLEAR”
 Brakes HOLD
 Magneto Switch..... START (then BOTH)
 Throttle800 RPM
 Oil Pressure.....CHECK
 Flaps..... RETRACT & VISUALLY CHECK
 Ammeter.....CHECK
 Mixture LEAN FOR TAXI

BEFORE TAXI

Engine Gauges CHECKED
 Avionics..... ON
 Transponder ALT / SET
 Nav Lights/ADS-B..... ON
 JPI Fuel Scan.....SET
 ATIS..... COPIED
 Altimeter.....SET
 Taxi Brief.....COMPLETE
 BrakesTEST

RUN-UP

Fuel Selector..... BOTH
 Flight Instruments CHECKED/SET
 Flight Controls FREE & CORRECT
 Elevator Trim SET for T/O
 Autopilot..... OFF
 Mixture.....RICH
 Throttle..... 1,700 RPM
 Carb Heat.....CHECK then OFF
 Magnetos (125/50)..... CHECK then BOTH
 Vacuum (5.0” Hg. ±.5)CHECK
 Amps/VoltsCHECK
 Engine Gauges..... GREEN
 Throttle..... 800 RPM
 Mixture LEAN FOR TAXI
 Comm/Nav Radios.....SET
 Doors/WindowsLATCHED
 Takeoff Brief..... COMPLETE
 Takeoff Time..... NOTE

Runway Items

Mixture RICH (or as required)
 Landing Light ON
 Wing Strobes ON

TAKEOFF (NORMAL)

Engine Gauges “GREEN”
 Airspeed “ALIVE”
 Rotate 55 KTS
 Climb..... 73 KTS (Vy) / 59 KTS (Vx)

CLIMB

Landing Light OFF
 Mixture As Required
 Enroute Climb..... 85 KTS

CRUISE

Throttle SET (2,300 RPM or per POH)
Mixture LEAN
Fuel MANAGE
H.I..... Set to Compass (Every 15 min)

DESCENT & LANDING

Landing Brief.....COMPLETE
Landing Light..... ON
Fuel Selector BOTH
Mixture As Required
Carb Heat..... As Required
(On < 2,000 RPM)
Altimeter.....SET
Seatbelts/Harnesses ON
Flaps.....Call out "110" for 10°
Call out "White Arc" for > 10°
Approach 70 KTS / 60 KTS (Final)
Final ChecksFuel Selector, Mixture
Landing Light

AFTER LANDING

Trim..... NEUTRAL
Carb Heat.....OFF/COLD
Flaps.....RETRACT
Mixture LEAN FOR TAXI
Landing Light..... OFF (or as required)
Wing Strokes OFF
Transponder1200 (or as required)

SHUTDOWN

Avionics Master OFF
Throttle 1,000 RPM
Mixture CUT-OFF
Magnetos..... OFF
Master Switch..... OFF
Lights..... OFF
Control Lock..... INSTALL

Seats fully back, seat belts latched

All trash removed

Chains, chocks, cover, keys, checklists

LIMITATIONS & INFORMATION

Vso 41 (KIAS)
Vs 47
Vx 59
Vy 73
Vfe 85
Vfe (10°)..... 110
Vno 128
Vne 160
Va..... 97 (2300 lbs), 89 (1950 lbs)
Approach 55-65
Best Glide 65
Demonstrated Crosswind..... 15

Weights

Max Gross Weight 2,300 lbs
Empty Weight (N419LK) 1,559.0
Useful Load..... 741
Max Weight Baggage Area 1 120
Max Weight Baggage Area 2 50

General Info

Fuel Capacity 40 gal (Usable)
Oil Capacity.....Max 6 qts, Min 4 qts
Oil Level LTFSD > 4.5 qts
Oil Type..... Phillips 100AW
or Aeroshell W100
Tire Pressure....Nose: 26-31 PSI, Mains: 29 PSI
Hydraulic Brake Fluid..... MIL-H-5606
Electrical System 24V Battery
28V, 60A Alternator

Engine Lycoming O-320-H2AD
Horsepower 160 HP @ 2700 RPM
Positive Load 3.8G (4.4G Utility)
Negative Load..... -1.52G (-1.76G Utility)

EMERGENCIES

CESSNA SKYHAWK

ENGINE FAILURE

Fly the plane!

Airspeed 65 KTS

Best Field Turn Toward

Checks:

Mixture RICH (or as required)

Fuel Selector BOTH

Carb Heat ON

Primer IN & LOCKED

Magnetos BOTH (or best)

Declare 121.5 / 7700

Execute Landing (When no other options):

Mixture CUT-OFF

Fuel Selector OFF

Magnetos OFF

Wing Flaps As Required
(40° Recommended)

Avionics Master OFF

Battery Master OFF

Door UNLATCHED

Seat Belts TIGHT

ENGINE ROUGHNESS

Mixture RICH (or as required)

Carb Heat ON

Primer IN & LOCKED

Magnetos BOTH (or best)

Fuel Selector BOTH (or fullest tank)

Divert As Necessary

ENGINE FIRE

Mixture CUT-OFF

Fuel Selector OFF

Master Switch OFF

Cabin Heat & Air OFF

Airspeed 100 KTS or higher
then 65 KTS

Proceed with forced landing

ELECTRICAL FIRE

Battery Master OFF

Avionics Master OFF

All Switches (except ignition) OFF

Vents/Cabin Air/Heat CLOSED

Fire Extinguisher ACTIVATE
(Then ventilate cabin)

Land as soon as practicable

ELECTRICAL – DISCHARGE

Alternator OFF

Electrical Load REDUCE

Flight TERMINATE
(as soon as practical)

ELECTRICAL – OVER-VOLT. LIGHT

Avionics Master OFF

Battery Master OFF (both sides)

Battery Master ON

Over-Voltage Light OFF

Avionics Master ON

If over-voltage light illuminates again
..... TERMINATE FLIGHT

LOSS OF OIL PRESSURE

Land as soon as possible

Prepare for power off landing

No unnecessary power changes

HIGH OIL TEMPERATURE

Land at nearest airport and investigate the problem. Prepare for power off landing.

OPEN DOOR

Airspeed TRIM FOR 75 KTS

Door Push door out
then forcefully close and lock

See POH for additional emergencies and details

MANEUVERS

CESSNA SKYHAWK

C – Clearing turns/Calls (Air-to-Air)

H – Heading (Reference point)

A – Altitude (Minimum 1,500')

P – Place to Land

S – Stabilized

***All Maneuvers – Carb Heat on
Below 2,100 RPM (Green Arc)***

SLOW FLIGHT

Throttle 1,500 RPM

Flaps Extend (Below 85 kts)

Airspeed Above 1st Stall Indication

Maintain Heading & Altitude

Pitch for airspeed, power for altitude

Recovery

Throttle FULL

Flaps 30°

Airspeed > 59 KTS

Flaps Retract in increments

Return to level cruise

POWER OFF STALL

Throttle 1,500 RPM

Flaps Extend (Below 85 kts)

Maintain Heading & Altitude

Descend 500 FPM

Recovery

Aviate Pitch Down (Relax Pressure)

THEN Level Wings

Throttle FULL

Flaps 30°

VSI + Rate at Vx

Airspeed Vy

Flaps Retract in increments

Return to level cruise

*Perform in various configurations of flaps, descending (as if to land), and descending turns (turning base to final)

POWER ON STALL

Throttle 1,500 RPM

Flaps Retracted

Maintain Heading & Altitude

Slow Vr (55 KTS)

Throttle FULL

Pitch UP (for excessive AOA)

Rudder Coordinate

Recovery

Aviate Pitch Down (Relax Pressure)

THEN Level Wings

Throttle MAINTAIN FULL

VSI + Rate at Vx

Airspeed Vy

Flaps Retract in increments

Return to level cruise

*Perform in various configurations of flaps (going around) and turns (turning crosswind)

STEEP TURNS

Throttle 2,200 RPM

Airspeed 90 KTS (or below Va)

Pick visual reference point

Note heading & altitude

Roll coordinated into bank

Passing through 30 degrees add 200-

300 RPM and increase back pressure

Reduce power and back pressure upon rollout

Rudder in the direction of the roll

GO-AROUND (REJECTED LANDING)

Throttle FULL

Flaps 20° (Immediately)

Pitch LEVEL, and then 55 KTS climb

Flaps 10° (Until obstacles cleared)

Flaps Retract > 60 KTS

Climb Speed Accelerate to Vy or Vx

Side step As Necessary

Communicate As Necessary

Flaps Retract in increments

DIVERSION

Circle and locate position if lost

Estimate magnetic heading

Turn to heading (Note airspace & terrain)

Check heading indicator to compass

Note Time

Pick appropriate VFR altitude

Measure distance

Compute ETA & fuel burn

EMERGENCY DESCENT

Throttle Idle "CHOP"
Pitch Down "DROP"
Bank Left 30°
Airspeed 128 KTS Vno
Recover approximately 200 feet prior to level off altitude (10% descent rate)

GROUND REFERENCE

Reference(s) Choose as appropriate
Setup Upwind of reference(s)
Altitude Approx. 1,000' AGL*
Throttle Set 2,200 RPM
Trim Set
Entry Heading Downwind
Higher GS = Steeper Bank
Lower GS = Shallower Bank
Exit Downwind

*Due to congestion/noise abatement 1,200' AGL is acceptable.

FORWARD SLIP

Avoid Slips with Flaps

Flaps UP (or $\leq 20^\circ$)
Throttle IDLE
Ailerons INTO WIND
Rudder OPPOSITE AILERON
Pitch 70 KTS (or faster for more slip)

*Airspeed indicator will be inaccurate

SHORT FIELD TAKEOFF

Flaps Up
Line Up All available runway
Brakes HOLD
Throttle FULL
Gauges "GREEN"
Brakes RELEASE
Airspeed "ALIVE"
Rotate 55 KTS
Accelerate to 59 KTS (Vx)
Obstacle "CLEAR"
Flaps RETRACT
Accelerate to 73 KTS (Vy)

SOFT FIELD TAKEOFF

Flaps 10°
Yoke FULL BACK
Brakes AVOID USE
Throttle FULL
Gauges GREEN
Airspeed "ALIVE"
As nose rises, release back pressure to maintain nose high attitude
As aircraft lifts off, pitch forward to remain in ground effect
Accelerate to 55 KTS (Vx)
Begin climb out of ground effect
Flaps RETRACT
Accelerate to 73 KTS (Vy)

SHORT FIELD LANDING

Same as normal landing until final.
Adjust aiming point based on wind
Flaps 40°
Airspeed 60 KTS Short Final
Throttle IDLE
Touchdown
Aerodynamic Braking AFT YOKE
Brakes SIMULATED MAXIMUM
Flaps RETRACT (if necessary)

SOFT FIELD LANDING

Same as normal landing until final.
Flaps 40°
Airspeed 60 KTS Short Final
Throttle Idle
Throttle Add 100-200 RPM
Touchdown Softly
Yoke BACK (until off runway)

MANEUVERS

COMMERCIAL / CFI

CHANDELLES

Reference Point Choose 90°
Throttle 2,300 RPM
Airspeed Below Va
Bank 30°
Throttle FULL
1st 90° Constant Bank / Increasing Pitch
2nd 90° ... Constant Pitch / Decreasing Bank
Rudder Remain Coordinated
At 180° Just above stall, wings level
Return to level cruise

LAZY EIGHTS

Reference Points Choose
Throttle 2,300 RPM
Airspeed 100 KTS
Rudder Remain Coordinated

STEEP SPIRAL

Altitude sufficient for 3 full spirals and remain > 1,500'
Reference Point Choose
Throttle Idle
Airspeed 75 KTS (Vglide + 10)
Bank Maximum 60°
Throttle Clear each turn on upwind

EIGHTS ON PYLONS

Pivotal Altitude $GS^2 \div 11.3$
Approx. 800 - 900 AGL
Reference Points Choose 2
Throttle 2,200 RPM
Airspeed 100 KTS Approx.
Rudder Remain coordinated
Bank 30° - 40°
Approx. 5-7 seconds between each pylon

ACCELERATED STALLS

Altitude > 3,000' AGL
Airspeed < Va
Roll into 45 bank
Throttle Reduce
Pitch Firmly pull back to induce stall indication

Recovery

Pitch Reduce AOA
Bank Level (Coordinated)
Throttle Increase as necessary
Return to level flight

POWER-OFF 180° APPROACH

From traffic pattern altitude downwind, when abeam landing runway numbers:

Throttle Idle
Flaps Delay extension until landing assured*
*Typically no sooner than base leg
Base Leg Turn Early
Glidepath Stay slightly high
If short/low Fly direct to the numbers
Delay extending flaps
If long/high Square base, S-turns
flaps, slip

CROSS CONTROLLED STALL (CFI)

Flaps Up
Throttle Idle
Airspeed 73 KTS
Trim Set
Bank Simulate turn to final
Rudder Apply in direction of turn
Ailerons Use to hold bank angle
Pitch Increase to induce stall
Hold inputs until stall

Recovery

Pitch Lower AOA
Rudder Remove excess inputs
Aileron Level wings
Throttle Increase as needed

TRIM STALL (CFI)

Flaps..... Extend to 40°
Throttle..... Idle
Airspeed..... 73 KTS
Trim..... Set for approach attitude
Throttle..... Increase to full
Nose should pitch up to stall indications

Recovery

Pitch..... Lower AOA
Rudder..... Coordinate
Aileron..... Level wings
Resume normal climb attitude
Trim..... Re-set

SECONDARY STALL (CFI)

Simulate by performing stall, and then try to level off too quickly or not lower nose sufficiently.

Recovery

Pitch..... Lower AOA
Throttle..... Remains Full
Ailerons..... Level wings
Rudder..... Coordinate

SPINS (CFI)

W&B must be in utility category
Baggage & Rear Pax NOT APPROVED
Intentional spins with flaps extended are PROHIBITED

***ONLY spin-approved LTFSD
Instructors may conduct spin training***

Altitude..... > 5,000'
Configure..... For Power-Off Stall
Throttle..... Leave in some power
Elevator..... SMOOTHLY FULL AFT
At Stall "Break"..... FULL RUDDER
Throttle..... IDLE
Hold elevator & rudder inputs

Recovery

Power - Throttle..... IDLE
Ailerons..... NEUTRAL
Rudder..... OPPOSITE SPIN (Refer to TC)
Elevator..... Briskly FORWARD
Hold inputs until spin stops
Recover smoothly from dive

If spin develops into spiral, recover promptly.

LOCAL AREA INFO

Montgomery (MYF)	Elev. 427'
ATIS: 126.9	TPA: 1,400
Ground: 118.22	Runways: 28R/L
Tower: 119.2 (28L)	10R/L
Tower: 125.7 (28R)	23/5

Ramona (RNM)	Elev. 1,393'
ATIS: 132.025	TPA: 2,400
Tower: 119.875	Runways: 27/9
Ground: 121.65	

Brown (SDM)	Elev. 526'
ATIS: 132.35	TPA: 1,500 (26R)
Tower: 128.25	1,100 (26L)
Ground: 124.4	Runways: 26R/L
	8R/L

Gillespie (SEE)	Elev. 387'
ATIS: 125.45	TPA*: 1,400 (27L)
Tower: 120.7	1,600 (27R)
Tower: 123.8	*Day
Ground: 121.7	Runways: 27R/L
	9R/L
	35/17

Palomar (CRQ)	Elev. 331'
ATIS: 120.15	TPA: 1,500
Tower: 118.6	Runways: 24 / 6
Ground: 121.8	

Oceanside (OKB)	Elev. 28'
ASOS: 127.8	TPA: 1,000
CTAF: 122.72	Runways: 25 / 7

Fallbrook (L18)	Elev. 1,350'
AWOS: 118.425	TPA: 1,700
CTAF: 123.05	Runways: 18 / 36

VORs
MZB 117.8
OCN 115.3
PGY 116.45
JLI 114.0

JPI FUEL SCAN FS-450

Start Up Fuel: After the FS-450 boots, press **AUTO** button to select 1 of 3 fill options (usually option 1 or 2). Press **STEP** to choose the option. If you choose **Fill Add**, hold **AUTO** button to count up, tap the **AUTO** button to count down. Press **STEP** to submit.

F I L L
P n

= Did not add any fuel since last shutdown

Fill 40 = Topped off tanks

Fill Add = Added fuel but not topped