N3001T

Learn To Fly San Diego

PA28-181 Archer II

ATIS 126.9 **Ground** 118.22 **Tower** 119.2 (125.7 28R) **Air-to-Air** 122.75

KMYF: TPA 1,400' | Elev. 427' **Crown Air** 123.5

PREFLIGHT (REFER TO POH)

Lights / Stall Horn ..... CHECK
Oil ..... Min. 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 & controls ..... CHECK

ENGINE START

Cold / Hot / Flooded? Refer to POH

Chocks, tie-downs, baggage door ..... CHECK
Flaps ..... Verify RETRACTED
Seat Belts/Harnesses ..... ON
Passenger Brief ..... COMPLETE
Carb Heat ..... OFF/COLD
Fuel Selector ..... FULLEST TANK
Throttle ... OPEN 1/4 in. (Cold), 1/2 in. (Hot)
Master Switch ..... ON
Circuit Breakers ..... CHECK
Beacon (Fin) ..... ON
Mixture ..... FULL RICH
Primer (Cold Start Only) ..... IN & LOCKED
Fuel Pump ..... ON
Propeller Area ..... "CLEAR"
Brakes ..... HOLD
Magneto Switch ..... START (then BOTH)
Throttle ..... Below 1,000 RPM
Oil Pressure ..... CHECK
Ammeter ..... CHECK
Fuel Pump ..... OFF (Check Pressure)
Mixture ..... LEAN FOR TAXI

BEFORE TAXI

Avionics ..... ON
Transponder ..... ALT / SET
Nav Lights/ADS-B ..... ON
Garmin 430W ..... CHECKS
ATIS ..... COPIED
Altimeter ..... SET
Taxi Brief ..... COMPLETE
Brakes ..... TEST

RUN-UP

Flight Instruments ..... CHECKED/SET
Flight Controls ..... FREE & CORRECT
Elevator Trim ..... SET for T/O
Mixture ..... RICH
Throttle ..... 2,000 RPM
Carb Heat ..... CHECK then OFF
Magnetos (175/50) ..... CHECK then BOTH
Vacuum (5.0" Hg. ±.1) ..... CHECK
Ammeter ..... CHECK
Engine Gauges ..... GREEN
Annunciator Lights ..... CHECK
Throttle ..... 1,000 RPM
Mixture ..... LEAN FOR TAXI
Comm/Nav Radios ..... SET
Door/Window ..... LATCHED
Takeoff Brief ..... COMPLETE
Takeoff Time ..... NOTE (Start Fuel Timer)

Runway Items

Mixture ..... RICH (or as required)
Fuel Pump ..... ON
Landing Light & Wing Strobes ..... ON

TAKEOFF (NORMAL)

Engine Gauges ..... "GREEN"
Airspeed ..... "ALIVE"
Rotate ..... 55 KTS
Climb ..... 76 KTS (Vy) / 64 KTS (Vx)

CLIMB

Landing Light ..... OFF
Fuel Pump ..... OFF (Check Pressure)
Enroute Climb ..... 87 KTS

CRUISE

Throttle ..... SET (2,300 RPM or per POH)
Mixture ..... LEAN (JPI Approx. 1,400)
Fuel ..... MANAGE
Switch tanks every 30 minutes with fuel pump ON, and check pressure
H.I..... Set to Compass (Every 15 min)

DESCENT & LANDING

Landing Brief.....COMPLETE
Landing Light.....ON
Fuel Selector ..... FULLEST TANK
Fuel Pump.....ON
Mixture .....As Required
Carburetor Heat.....As Required
Altimeter.....SET
Seatbelts/Harnesses ..... ON
Approach ..... 75 KTS / 70 KTS (Final)
Final Checks .....Fuel Selector, Mixture
Fuel Pump, Landing Light

AFTER LANDING

Trim..... NEUTRAL
Flaps.....RETRACT
Mixture ..... LEAN FOR TAXI
Fuel Pump.....OFF
Landing Light..... OFF (or as required)
Wing Strobes .....OFF
Transponder .....1200 (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.....49 (KIAS)
Vs..... 55
Vx..... 64
Vy..... 76
Vfe 102
Vno 125
Vne 154
Va.....113 (2550 lbs), 89 (1634 lbs)
Approach 65-70
Best Glide 76
Demonstrated Crosswind..... 17

Weights

Max Gross Weight .....2,550 lbs
Empty Weight (N3001T)..... 1,560.65
Useful Load..... 989
Max Weight Baggage..... 200

General Info

Fuel Capacity .....48 gal (Usable)
Oil Capacity.....Max 8 qts, Min 2 qts
Oil Level LTFSD .....> 5 qts
Oil Type..... Phillips 100AW
or Aeroshell W100
Tire Pressure Nose: 18 PSI, Mains: 24 PSI
Hydraulic Brake Fluid..... MIL-H-5606
Electrical System ..... 12V Battery
14V, 60A Alternator

Engine..... Lycoming O-360-A4M
Horsepower.....180 HP @ 2700 RPM
Positive Load ..... 3.8G (4.4G Utility)
Negative Load.....**NOT APPROVED**

EMERGENCIES
PIPER ARCHER II

ENGINE FAILURE

Fly the plane!

Airspeed ..... 76 KTS
Best Field .....Turn Toward
Checks:
Fuel Pump.....ON
Mixture .....RICH (or as required)
Carb Heat.....ON
Primer ..... IN & LOCKED
Magnetos.....BOTH (or best)
Fuel Selector .....SWITCH TANKS

Declare .....121.5 / 7700

Execute Landing (When no other options):
Mixture ..... CUT-OFF
Magnetos.....OFF
Fuel Selector .....OFF
Avionics Master .....OFF
Battery Master.....OFF
Door ..... CRACKED
Seat Belts ..... TIGHT

ENGINE ROUGHNESS

Fuel Pump.....ON
Mixture .....RICH (or as required)
Carb Heat.....ON
Primer ..... IN & LOCKED
Magnetos.....BOTH (or best)
Fuel Selector .....SWITCH TANKS
Divert ..... As Necessary

ENGINE FIRE

Throttle.....CLOSED
Mixture ..... CUT-OFF
Fuel Selector .....OFF
Fuel Pump.....OFF
Heater & Defroster .....OFF
Airspeed..... Increase if fire not out
then 76 KTS
Proceed with power off landing

ELECTRICAL FIRE

Battery Master ..... OFF
Fresh Air Vents ..... OPEN
Cabin Heat ..... OFF
Land as soon as practicable

ALTERNATOR FAILURE

Failure..... VERIFY
Electrical Load ..... REDUCE
Alternator Circuit Breakers.....CHECK
Alt Switch..... OFF (for 1 second),
then ON

If no output:
Alt Switch..... OFF
Reduce electrical load and land as soon as practical.

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.

LOSS OF FUEL PRESSURE

Electric Fuel Pump..... ON
Fuel Selector..... FULLEST TANK

OPEN DOOR

Slow .....87 KTS
Cabin Vents ..... CLOSE
Storm Window ..... OPEN
Upper Latch ..... LATCH
Slip .....In Direction of Open Door
(If needed)

MANEUVERS

PIPER ARCHER II

C – Clearing turns/Calls (Air-to-Air)
H – Heading (Reference point)
A – Altitude (Minimum 1,500')
P – Place to Land
S – Stabilized

SLOW FLIGHT

Throttle ..... 1,500 RPM
Flaps ..... Extend (Below 102 kts)
Airspeed ..... Above 1st Stall Indication
Maintain Heading & Altitude
Pitch for airspeed, power for altitude

Recovery

Throttle ..... FULL
Flaps ..... 25°
Airspeed ..... > 64 KTS
Flaps ..... Retract
Return to level cruise

POWER OFF STALL

Throttle ..... 1,500 RPM
Flaps ..... Extend (Below 102 kts)
Maintain Heading & Altitude
Descend ..... 500 FPM

Recovery

Aviate ..... Pitch Down (Relax Pressure)
THEN Level Wings
Throttle ..... FULL
Flaps ..... 25°
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 (52-65 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 ..... 25°
Pitch ..... LEVEL, and then Vx or Vy
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 ..... 125 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

Flaps ..... As Required
Throttle ..... IDLE
Ailerons ..... INTO WIND
Rudder ..... OPPOSITE AILERON
Pitch ..... 75 KTS (or faster for more slip)
*Airspeed indicator will be inaccurate

SHORT FIELD TAKEOFF

Flaps ..... 25°
Line Up ..... All available runway
Brakes ..... HOLD
Throttle ..... FULL
Gauges ..... "GREEN"
Brakes ..... RELEASE
Airspeed ..... "ALIVE"
Rotate ..... 49 KTS
Accelerate ..... to 64 KTS (Vx)
Obstacle ..... "CLEAR"
Flaps ..... Retract in Increments
Accelerate ..... to 76 KTS (Vy)

SOFT FIELD TAKEOFF

Flaps ..... 25°
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 64 KTS (Vx)
Begin climb out of ground effect
Flaps ..... Retract in Increments
Accelerate ..... to 76 KTS (Vy)

SHORT FIELD LANDING

Same as normal landing until final.
Adjust aiming point based on wind
Flaps ..... 40°
Airspeed ..... 66 KTS Short Final
Throttle ..... IDLE
Touchdown
Aerodynamic Braking ..... AFT YOKE
Flaps ..... RETRACT (if necessary)
Brakes ..... SIMULATED MAXIMUM

SOFT FIELD LANDING

Same as normal landing until final.
Flaps ..... 40°
Airspeed ..... 66 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 ..... 105 KTS
Rudder ..... Remain Coordinated

STEEP SPIRAL

Altitude sufficient for 3 full spirals and remain > 1,500'
Reference Point ..... Choose
Throttle ..... Idle
Airspeed ..... 86 KTS (Vglide + 10)
Bank ..... Maximum 60°
Throttle ..... Clear each turn on upwind

EIGHTS ON PYLONS

Pivotal Altitude ..... GS squared ÷ 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 ..... 76 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..... 76 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)

*****NOT APPROVED*****

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