



# N8401T

# 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  
Anti-Collision Lights ..... 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  
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 ..... 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  
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)  
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 (N8401T)..... 1,576.08  
Useful Load ..... 974  
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

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### 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 .....  $GS^2 \div 11.3$   
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 ..... 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

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

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

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

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

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

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

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

<b>VORs</b>
MZB 117.8
OCN 115.3
PGY 116.45
JLI 114.0

## APOLLO GX50 GPS & MX20 DISPLAY

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On initiation, follow prompts and tests to update nearest airport (**ENTER** or **SEL** multiple times). If it asks to select the closest airport, enter MYF as the code. **Enter airport codes without the K**, e.g. MYF, SEE, CRQ.

**The MX20 will not display a map unless the GPS has a route entered.** The easiest way to do this is using the DIRECT TO function. Once the GX50 has booted, press the DIRECT TO button and select either MYF or another airport.