

RAM Aviation Piper Archer II

SPEEDS (KIAS)

Vso.....	47
Vs1.....	54
Vr.....	52-65
Vx	64
Vy	76
Vfe.....	102
Vno.....	125
Vne.....	154
Va (2550#).....	110
Va (2000#).....	97
Best Glide.....	76
Max. Demon. X-Wind.....	17
Approach (Flaps DN).....	66
Short Field Approach.....	62
Enroute Climb.....	87
Max Gross Weight.....	2550
Basic Empty Weight.....	1630
Useful Load.....	920
Cruise Speed.....	115
Fuel Consumption.....	10.5

PREFLIGHT

Weather.....	CHECK
Weight & Balance.....	COMPLETE
Inspection/AD status.....	CHECK
Fuel Level.....	CHECK Left & Right Call for fuel if required
Hobbs.....	RECORD
Documents (AROW).....	CHECK
Avionics Master.....	OFF
Ignition.....	OFF
Master.....	ON
Fuel Quantity.....	CHECK
Lights/Stall Horn.....	ON/INSPECT
Master.....	OFF
Flight Controls..	FREE&CORRECT
Flaps.....	EXTEND

EXTERIOR INSPECTION

Right Wing	
Flap & Aileron.....	CHECK
Tip&Leading Edge.....	CHECK
Tie Down.....	REMOVE
Fuel Quantity.....	CHECK
Fuel Tank Vent.....	CHECK
Fuel Sump.....	CHECK
Strut/Tire/Brake.....	CHECK
Nose	
RT Windshield/Cowling.....	CHECK
Oil Quantity (6-7 qts).....	CHECK
Prop/Spinner.....	CHECK
Air Inlet.....	CHECK
Alternator Belt.....	CHECK
Nose Strut/Tire.....	CHECK
Fuel Sump.....	CHECK
LT Windshield/Cowling.....	CHECK
Left Wing	
Strut/Tire/Brake.....	CHECK
Fuel Sump.....	CHECK
Fuel Quantity.....	CHECK
Tie Down.....	REMOVE
Fuel Tank Vent.....	CHECK
Pitot / Static Mast.....	CHECK
Leading Edge&Tip.....	CHECK
Aileron & Flap.....	CHECK
Aft Fuselage & Empennage	
Fuselage.....	CHECK
Antennas.....	CHECK
Stabilator.....	CHECK
Vertical Stabilizer.....	CHECK
Rudder.....	CHECK
Tie Down.....	REMOVE
Baggage Door	
.....	CLOSED&SECURE

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BEFORE ENGINE START

Preflight Inspection..	COMPLETE
Passenger Briefing..	COMPLETE
Seats and Belts.....	SECURE

ENGINE START

Avionics Masters (two).....	OFF
Beacon.....	ON
Circuit breakers.....	CHECK IN
Fuel Selector.....	DESIRED TANK
Seatbelts.....	SECURE
Door.....	CLOSED & LATCHED
Brakes	HOLD
Carb Heat	COLD / OFF
Mixture	RICH / FORWARD
Primer.....	3 (warm) to 5 (cold)
Master Switch.....	ON
Fuel Pump	ON
Throttle	¼ INCH OPEN
Prop Area	CLEAR
Starter.....	TURN AND PUSH
Throttle	1000 to 1200 RPM
Oil Pressure	CHECK
Fuel Pump off...CHK	PRESSURE
Mixture.....	LEAN ["URE"]
Strobe lights	ON
Other lights	AS REQUIRED

BEFORE TAXI CHECK

Avionics Master (one).....	ON
ATIS/AWOS/ASOS.....	RECORD
Altimeter	SET
Transponder.....	ALT
GTN750.....	
CONFIRM CURRENT DATABASE	
SET CURRENT FUEL LEVEL	
Ammeter	CHECK CHARGING
Brakes	CHECK ON TAXI

RUNUP CHECK

Fuel Selector.....	DESIRED TANK
Oil Temperature.....	GREEN ARC
Mixture.....	RICH / FORWARD
HOLD BRAKES	
Throttle.....	2000 RPM
Magnetos.....	
.....check (max drop 175 / diff 50)	
Engine Instruments.....	GREEN
Fuel Pressure.....	CHECK
Annunciator Panel.....	CHECK
Suction gauge.....	4" to 6"
Carb Heat.....	CHECK
Throttle.....	1000 RPM
Flight controls.....	
.....FREE & CORRECT	
Attitude Indicator.....	
.....STRAIGHT & LEVEL	
HSI.....	CONFIRM WITHIN
±10° OF COMPASS HEADING	
Altimeter	WITHIN 75' OF
FIELD ELEVATION	
Radios / transponder.....	
.....SET UP FOR FLIGHT	
Doors / Windows.....	
.....CLOSED & LOCKED	
Passenger Briefing.....	COMPLETE
Takeoff Briefing.....	COMPLETE

BEFORE TAKEOFF CHECK

FLAPS.....	UP (HANDLE DOWN)
TRIM.....	SET
MIXTURE.....	RICH / FORWARD
LANDING LIGHT.....	ON
FUEL PUMP.....	ON
Emerg. Procedures.....	REVIEW
Time Up.....	START

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NORMAL TAKEOFF

Throttle.....Full OPEN
Engine Instruments.....CHECK
Rotate.....52-64 KTS
Climb.....76 KTS

SHORT-FIELD TAKEOFF

Flaps.....2nd NOTCH
Brakes.....APPLY
Throttle.....Full OPEN
Engine Instruments.....CHECK
Brakes.....RELEASE
Rotate.....50 KIAS
Climb.....64 KIAS
(until clear of obstacle)
Climb.....76 KIAS
Flaps.....RETRACT

SOFT FIELD TAKEOFF

Flaps.....2nd NOTCH
Elevator.....Full AFT
Throttle.....OPEN GRADUALLY
Liftoff.....Slowest Poss. Airspeed
Accelerate while in ground effect
Climb.....76 KIAS
Flaps.....RETRACT

CLIMB CHECK (1000AGL)

Pitch.....85 KIAS
Mixture.....SET
Fuel Pump.....OFF
Fuel Pressure.....VERIFY
Transponder.....CONFIRM ALT
Check CHT.....NO ALARM

CRUISE CHECK

Throttle.....SET
Mixture.....RICH BELOW 4000
Mixture.....LEAN ABOVE 4000
Find Peak.....SET 100 RICH
Engine Gauges.....NO ALARMS
Trim.....SET

DESCENT CHECK

ATIS/AWOS/ASOS.....RECORD
Altimeter.....SET
Carb Heat.....AS REQUIRED
Fuel Pump.....ON
Fuel Pressure.....VERIFY
Landing Light.....CONFIRM ON
Mixture.....RICH
Fuel Selector.....FULLEST TANK
Seats/Belts.....SECURE

FINAL LANDING CHECK

Airspeed.....66 KIAS
Mixture.....RICH

PRE-MANEUVER CHECK

Clearing Turns.....DO
Fuel Pump/Press.....ON/CHECK
Landing Light.....ON
Mixture.....RICH
Fuel Selector.....FULLEST TANK
Power.....AS REQUIRED
Emergency Field.....Pick

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NORMAL LANDING

Airspeed.....66 (Flaps DN)
Crosswind.....INPUT

SOFT FIELD LANDING

Airspeed.....66 KIAS
Flaps.....Down (40°)
Touchdown.....MAINS first
Add power to keep nose-wheel
off the ground, hold elevator aft
Brakes.....MINIMAL

SHORT-FIELD LANDING

Airspeed.....62 KIAS
Flaps.....Down (40°)
Power.....IDLE
Touchdown.....MAINS first
Flaps.....RETRACT
Brakes.....APPLY
Elevator.....FULL AFT

GO-AROUND

Throttle.....FULL POWER
Pitch.....LEVEL
Flaps.....RETRACT 1/2
Climb.....76 KIAS
Flaps.....RETRACT
Offset.....RIGHT/LEFT

AFTER LANDING CHECK

Flaps.....RETRACT
Transponder.....CONFIRM ALT
Fuel Pump.....OFF
Landing Light.....OFF
Mixture.....LEAN ["URE"]

SHUTDOWN

Throttle.....1500 RPM
All Lights Except Beacon.....OFF
Avionics Master.....OFF
Mixture.....IDLE cutoff
Ignition.....OFF
Master Switch (Red).....OFF
Hobbs.....RECORD
Trash.....REMOVE
Doors/Windows.....LOCKED
Tie-Downs.....SECURE
Flight Plan.....CLOSE

****DO NOT BUCKLE SEAT BELTS****

HOT START

Brakes.....HOLD
Throttle.....1/2" OPEN
Master.....ON
Fuel Pump.....ON
Mixture.....FULL RICH
Ignition.....ENGAGE
Oil Pressure.....CHECK

FLOODED START

Brakes.....HOLD
Throttle.....FULL OPEN
Master.....ON
Fuel Pump.....OFF
Mixture.....IDLE
Starter.....ENGAGE
*When engine fires, advance
mixture and retard throttle*
Oil Pressure.....CHECK

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EMERGENCY PROCEDURES ENGINE FAILURE DURING TAKEOFF ROLL

Throttle.....IDLE
Brakes.....APPLY
Flaps.....RETRACT
Mixture.....IDLE CUTOFF
Ignition.....OFF
Master.....OFF

ENGINE FAILURE AFTER TAKEOFF BELOW 1000 AGL

Airspeed.....76 KTS
Mixture.....IDLE CUTOFF
Ignition.....OFF
Master.....OFF
Cabin Door.....UNLATCH
Land.....STRAIGHT AHEAD

ENGINE FAILURE DURING FLIGHT (RESTART)

Airspeed/Trim.....76 KTS
Landing Site.....LOCATE
Fuel Selector.....FULLEST TANK
Fuel Pump.....ON
Mixture.....RICH
Carb Heat.....ON
Primer.....CHECK LOCKED
Ignition.....L,R, BOTH
Engine Gauges.....CHECK

IF POWER IS RESTORED

Carb Heat.....OFF
Fuel Pump.....OFF

***IF POWER IS NOT RESTORED
PREPARE FOR FORCED
LANDING***

EMERGENCY PROCEDURES EMERGENCY LANDING WITHOUT POWER

Seat Backs.....UPRIGHT
Seats/Belts.....SECURE
Airspeed.....76 KTS
Mixture.....IDLE CUTOFF
Ignition.....OFF
Fuel Selector.....OFF
Master.....OFF
Flaps.....AS REQUIRED
Final Approach Speed....66 KIAS
Doors.....UNLATCH
Touchdown.....TAIL LOW

PROPELLER OVERSPEED

Throttle.....RETARD
Oil Pressure.....CHECK
Airspeed.....REDUCE
Throttle.....AS REQUIRED
TO REMAIN BELOW 2700 RPM
Flaps.....AS REQUIRED

ROUGH ENGINE / ENGINE OUT

Pitch & Trim for.....76KIAS
Landing Site.....HEAD FOR
FLOW:
Carb Heat.....ON
Mixture.....RICH
Fuel Pump.....ON
Primer.....LOCKED
MAGS.....L/R/BOTH
Fuel Valve.....SWITCH
Squawk.....7700
Talk.....121.50
Crack.....DOORS

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EXCESSIVE LOAD ON ALTERNATOR GAUGE

Alternator.....ON
Battery Switch.....OFF
Non-Essential Equipment....OFF
IF LOADS ARE NOT REDUCED
Alternator.....OFF
Battery Switch.....AS REQUIRED
**Terminate flight as soon as
Practical.**

ALTERNATOR FAILURE

Electrical Equipment.....OFF
Alt. Switch.....OFF for 30 secs.
Circuit Breaker.....CHECK/RESET
Alternator Switch.....ON
Alternator Gauge.....CHECK
Electrical Equipment.....ON
***IF AMMETER RETURNS TO
ZERO***
Alternator.....OFF
Non-Essential Equipment....OFF
LAND AS SOON AS PRACTICAL

FIRE DURING ENGINE START

Cranking.....CONTINUE
Mixture.....IDLE CUTOFF
Throttle.....FULL OPEN
Fuel Pump.....OFF
Fuel Selector.....OFF
IF ENGINE FAILS TO START
Cranking.....CONTINUE
Fire Extinguisher.....OBTAIN
Master.....OFF
Ignition.....OFF
ABANDON IF FIRE CONTINUES

EMERGENCY PROCEDURES ENGINE FIRE IN FLIGHT

Fuel Selector.....OFF
Throttle.....CLOSED
Mixture.....IDLE CUTOFF
Fuel Pump.....OFF
Heater/Defroster.....OFF
Airspeed.....76 KIAS
Power OFF landing.....EXECUTE

ELECTRICAL FIRE

Master.....OFF
Vents.....OPEN
Heat.....OFF
*If fire is out and electrical is
necessary for flight*
Master.....ON
Circuit Breakers.....CHECK
do not reset!
Radios.....OFF
Avionics Master.....ON
Radios/Electrical.....ON, one at a
time