

1972/3 Piper PA-28 200R Arrow

PREFLIGHT INSPECTION

CABIN

Pilot Operating Handbook and Documents	AVAILABLE
Magneto/Ignition Switch	OFF
Avionics/Electrical Switches	OFF
MASTER Switch	ON
Landing Gear Lights	3 GREEN
Anti Collision Light	CHECK
Fuel Quantity Gauges	CHECK
MASTER Switch	OFF
Flaps	DOWN

RIGHT WING

Flap	Linkages intact/movement
Control Surfaces	Linkages intact/movement
Wing Tip and Lights	CHECK
Leading Edge and Wing Surface	CHECK
Tie Down	REMOVE
Fuel Tank	CHECK VISUALLY
Fuel Cap	SECURE
Fuel Vent	CLEAR
Fuel Drain	CHECK SEDIMENT/COLOR
Wheel Well	INSPECT/UNOBSTRUCTED
Main Tire	INFLATION (24 psi)
Main Gear Strut Extension	(2" strut exposed)
Chocks	REMOVE
Fresh Air Inlet	CHECK CLEAR

RH ENGINE COWL

Oil Level	CHECK 6-8 QTS
Dipstick	PROPERLY SEATED
General Condition	No loose wires/damage
Engine Cowl Cover	SECURE - 2 LATCHES
COWL AIR SCOOP	CLEAR

PA-28-200 Arrow

NOSE

Propeller and Spinner	CHECK
Cylinder Air Inlets	CLEAR
Alternator Belt	CHECK TENSION
Landing Light	CHECK
Wheel Well	INSPECT/UNOBSTRUCTED
Main Tire	INFLATION (24 psi)
Main Gear Strut Extension	(2.75" strut exposed)
Nose Chocks	REMOVE
LH Engine Cowl Cover	OPEN, CHECK, SECURE
Fuel Drain/Strainer	CHECK SEDIMENT/COLOR

LEFT WING

Fresh Air Inlet	CLEAR
Fuel Sump Drain	CHECK SEDIMENT/COLOR
Main Gear Strut	(4.5" strut exposed)
Wheel Well	INSPECT/UNOBSTRUCTED
Main Tire	INFLATION (24 psi)
Main Gear Strut Extension	(2" strut exposed)
Chocks	REMOVE
SQUAT SWITCH	POSITION CHECK
Fuel Tank	CHECK VISUALLY
Fuel Cap	SECURE
Fuel Vent	CLEAR
Tie Down	REMOVE
Pitot Cover	REMOVE, HOLES CLEAR
Stall Warning Sensor	CHECK
Leading Edge and Wing Surface	CHECK
Wing Tip and Lights	CHECK
Control Surfaces	Linkages intact/movement
Flap	Linkages intact/movement

FUSELAGE/TAIL

Stabilator	CHECK LINKAGES/MOVEMENT
Rudder	CHECK LINKAGES
Rotating Beacon	INTACT
VOR Antennas	INTACT
Tie Down	REMOVE
Fuselage Right	CHECK
Baggage Door	CLOSE, SECURE

START

Preflight Inspection	Complete
Passenger Briefing	SEAT BELT USE/COMPLETE
Brakes	TEST AND SET
Fuel Selector	DESIRED TANK
Avionics and Avionics Master	OFF
Circuit Breakers	CHECK IN
Throttle	1/4"-1/2" OPEN
Mixture	FULL AFT (CUTOFF)
PROP	Forward - HI RPM
MASTER Switch	ON
Anti-Collision Light	ON
Electric Fuel Pump	(COLD) ON, WAIT FOR PRESSURE
MIXTURE	(COLD) RICH 3 SECONDS THEN CUTOFF
Propeller Area	LOOK / ANNOUNCE "CLEAR"
Starter	START - FULL RICH THEN LEAN
Oil Pressure	CHECK IN GREEN
Ammeter	SHOWING LOAD
NAV Lights	ON AS REQUIRED (NIGHT ON)
Avionics/ Avionics MASTER	ON & TUNED
Transponder	STBY or ALT/1200
Brakes	RELEASE

BEFORE TAKEOFF

Parking Brake	SET
Seat Locked, Seat Belts	SECURE
Controls	CORRECT/FREE
Doors	LATCH TOP AND BOTTOM
Flight Instruments	ART. HORIZON, DIR GYRO, ALTIMETER SET
Fuel Selector	PROPER TANK
Trim Tab	SET 1/8" AFT OF T.O. MARK
Mixture	RICH
Throttle	2000 RPM
MAGNETOS	175 DROP / 50 DIFF
Prop	CYCLE (MAP,oil Press,RPM)
Suction	5 +/- 0.1" HG
Oil Temp/Pressure	PRESS IN GREEN ARC
Electric Fuel Pump	ON/OFF/ON - CHECK PRESSURE
Alternator	CYCLE BREAKER TO CHECK OPS
Throttle	1200 RPM
Flaps	SET IF NEEDED
Alternate AIR	CLOSED
AUTOPILOT	OFF
Transponder	Move to 1200/ALT
WIND CHECK	PROPER CONTROL POSITION
SAFE ALTITUDE	500+100 NOTE
Radio	TRANSMIT INTENTIONS
Brakes	RELEASE

Fold here

AFTER TAKEOFF

Climb Power	25 " MAP, 2500 RPM
GEAR	UP-LEAVE HAND ON HANDLE TILL UP
FLAPS	IF USED UP IN INCREMENTS
Electric Fuel Pump	OFF

BEFORE LANDING

GAS Fuel Selector	PROPER TANK
Electric Fuel Pump	ON
UNDERCARRIAGE/GEAR	DOWN & HOLD TILL 3 GREEN LIGHTS
Mixture	SET
Prop	Forward- HI RPM
Throttle	15-20" MAP
Approach Speed	100MPH DW / 90MPH BASE and FINAL

PA28-200R Speeds		Calibrated Airspeed	
		Knots	MPH
V _r	Rotation Speed	52	60
V _X (gr dwn/up)	Best Angle of Climb (25 flps)	74 / 83	85 / 96
V _Y (gr dwn/up)	Best Rate of Climb	83 / 87	95 / 100
V _S	Stalling Speed (0 Bank)	62	71
V _{SO}	Stalling Speed (Full Flaps)	56	64
V _g	Gliding Speed	91	105
V _{ne}	Velocity Never Exceed	185	214
V _{no}	Max Structural Cruising Speed	148	170
V _{fe}	Flap Extension Speed	109	125
V _{lo}	Gear Extension Speed	109	125
V _a	Max Design Manuevering	114	131
Pattern	No Flaps	87	100
Pattern	25 deg Flaps (2 Notches)	70	90
V _{Climb}	Best Enroute Climb	96	110
Max Crosswind	Component	17	20

SOFT / SHORT FIELD / OBSTACLE CLEARANCE

Flaps FOR BOTH 25 degrees (2nd NOTCH)

(SHORT FIELD)

FULL POWER BEFORE BRAKE RELEASE
 ROTATE AT 55MPH
 ACCELERATE TO 85MPH THEN GEAR UP
 ACCELERATE TO 100MPH THEN Flaps RETRACT SLOWLY

(SOFT FIELD)

FULL POWER - ROTATE AT BEST POSSIBLE SPEED
 ACCELERATE TO 85MPH THEN GEAR UP
 ACCELERATE TO 100MPH THEN Flaps RETRACT SLOWLY

Power Settings 5000ft
55% 19.3"/ 2400R/ 8 GPH
65% 22"/ 2400R/ 9.2 GPH
75% FT / 2400R/ 10.2 GPH

Takeoff Landing	Roll	50' Clear
	770	1600
780	1380	