

# Cessna 172N Skyhawk

N75765

## Speeds for Safe Operation

Rotate (Vr)		55 kts
Best Angle (Vx)		59 kts
Best Rate (Vy)		73 kts
Climb Out		70 - 80 kts
Enroute Climb		75 - 85 kts
Maneuvering Speed (Va)	2300 Lbs	97 kts
	1950 Lbs	89 kts
	1600 Lbs	80 kts
Landing Approach	Flaps Up	60 - 70 kts
	Flaps Down	55 - 65 kts
	Short Field	60 kts
Max Demonstrated Crosswind Component		15 kts
Best Glide		65 kts



(For Reference Only - Consult the POH)

	<u>Cabin</u>		Fuel Vent	CLEAR
Control Lock		REMOVE	Stall Warning Opening	CLEAR
Hobbs and Tach Meters		RECORDED	Pitot Tube	CLEAR
Documents		CHECK	Fuel Level	CHECK
Avionics Switch		OFF		<u>Nose</u>
Master Switch		ON	Windshield	CHECK
Fuel Gauges		CHECK	Static Source	CLEAR
Wing Flaps		DOWN	Propeller and Spinner	NO CRACKS
Lights		CHECK	Alternator Belt	TIGHT
Alternate Static Source		OFF	Air Filter	CLEAR
Master Switch		OFF	Nose Wheel and Strut	CONDITION
Magnetos		OFF	Engine Oil	CHECK
Throttle		IDLE	Fuel Strainer	CHECK
Mixture		IDLE - CUTOFF		<u>Right Wing</u>
Fuel Selector Valve		BOTH	Fuel Level	CHECK
	<u>Left Wing</u>		Tie Down	REMOVE
Fuel Drain		CHECK	Aileron	CHECK
Strut, Tire, Brake		CHECK	Wing Flap	CHECK
Wing Flap		CHECK	Strut, Tire, Brake	CHECK
Aileron		CHECK	Fuel Drain	CHECK
Tie Down		REMOVE		

<u>Empennage</u>			<u>Engine Start</u>	
Elevator and Rudder		CHECK	Magneto Switch	START
Tie Down		REMOVE	Oil Pressure	CHECK
Baggage Door		SECURE	Engine Warm Up	1000 RPM
Antennas		CHECK	Engine Instruments	CHECK
			Avionics Switch	ON
	<u>Before Starting</u>		Radios and Navs	SET
Seat and Seat Belts		SET AND ON	Transponder	1200, TEST, STBY
Passenger Briefing		COMPLETE		
Parking Brake		SET		
Avionics Switch		OFF		
			<u>Before Taxi / Taxi</u>	
Circuit Breakers		CHECK	Mixture	LEAN FOR TAXI
Lights		OFF	Wing Flaps	UP
Fuel Selector Valve		BOTH	ATIS and Clearance	COPIED
Mixture		RICH	Lights	AS REQUIRED
Throttle		1/4" OPEN	Brakes	CHECK
Rotating Beacon		ON	Flight Instruments	CHECK
Prime	3 shots	AS REQUIRED		
Master Switch		ON		
Propeller Area		CLEAR		

Before Takeoff

Before Takeoff Continued

Brakes		SET	Heading Indicator	CHECK
Radios		SET	Mixture	ADJUST
Flight Instruments		CHECK	Transponder	ALT
Engine Instruments		CHECK	Wing Flaps	AS REQUIRED
Flight Controls		FREE	Trim	SET
 Fuel Selector Valve	Run Up	BOTH	Time Off	open flight plan NOTED
Mixture		FULL RICH		<u>Takeoff</u>
Throttle		1700 RPM	Throttle	FULL
Engine Instruments		CHECK	Engine Instruments	CHECK
Magnetos	max 125 rpm drop	CHECK	Airspeed Indicator	CHECK
Carburetor Heat		CHECK	Rotate	55 kts
Suction and Ammeter		CHECK	After Liftoff	TAP BRAKES
Throttle		IDLE	Climb Speed	Vy or Vx
Carburetor Heat	engine won't die	CHECK	Safe Altitude and Airspeed	FLAPS UP
Engine Instruments		CHECK		<u>Climb</u>
 Throttle	Run Up Complete	1000 RPM	Throttle	FULL
Seat Belts		FASTENED	Airspeed	70 - 85 kts
Doors and Windows		SECURE	Engine Instruments	CHECK
Pre-takeoff Briefing		COMPLETE	Mixture	LEAN AS REQUIRED
Lights	Rich Bates, CFI pulse lights on	AS REQUIRED	Temperature	MONITOR

Cruise

Power		SET
Mixture		LEAN
Heading Indicator		CHECK
Lights	pulse lights off	AS REQUIRED

Descent

Seats and Seat Belts		CHECK
Altimeter		SET
Power		AS REQUIRED
Mixture		ADJUST
Carb Heat		AS REQUIRED

Before Landing

Seat Belts		FASTENED
Fuel Selector Valve		BOTH
Mixture		RICH
Lights	pulse lights on	AS REQUIRED
Airspeed and Power		SET FOR APPROACH
Carb Heat		ON
Wing Flaps		SET AS REQUIRED

Go Around

Throttle		FULL
Carb Heat		OFF
Flaps	immediately	20°
Airspeed		55 kts
Flaps	60 kts and safe altitude	10° then UP

After Landing

Lights	pulse lights off	AS REQUIRED
Carb Heat		OFF
Mixture		LEAN FOR TAXI
Transponder		STBY, 1200
Wing Flaps		UP
Time On	close flight plan	NOTED

Parking and Shutdown

Avionics Switch		OFF
Electrical Equipment		OFF
Throttle		1000 RPM
Magneto Ground Check		COMPLETE
Mixture		IDLE - CUTOFF
Magnetos		OFF
Master Switch		OFF
Rotating Beacon		OFF

Engine Failure in Flight

**Airspeed** 65 kts  
**Carb Heat** ON  
**Fuel Selector** BOTH  
Mixture RICH  
Magnetos BOTH  
Primer IN & LOCKED

No Restart

Mixture IDLE-CUTOFF  
Fuel Selector OFF  
Magnetos OFF  
Wing Flaps AS REQUIRED  
Master Switch OFF  
Seat Belts SECURE  
Doors UNLATCH

Precautionary Landing

Selected Field inspect area FLY OVER  
Flaps / Airspeed 20° / 60kts  
All Electrical Switches OFF  
Doors UNLATCH  
Flaps / Airspeed On Final Full / 60 kts  
Master Switch OFF  
Magnetos OFF

Engine Fire - Ground

Cranking CONTINUE  
Engine Starts  
Power 1700 RPM  
Engine SHUTDOWN  
No Start  
Throttle FULL OPEN  
Mixture IDLE-CUTOFF  
Cranking CONTINUE  
Fuel Selector OFF  
Master Switch OFF  
Magnetos OFF  
Fire Extinguisher USE

Engine Fire - Flight

**Fuel Selector** OFF  
**Mixture** IDLE-CUTOFF  
Cabin Heat and Air OFF  
Airspeed altitude permitting 100 kts  
Magneto OFF  
Master Switch OFF  
Forced Landing EXECUTE

Electrical Fire

Master Switch	OFF
Avionics Switch	OFF
All Electric Equip.	OFF
Cabin Air / Heat Control	CLOSE
Cabin	VENTILATE

When Fire is Out

Master Switch	ON
Circuit Breakers	CHECK
Radios	OFF
Avionics Switch	ON
Electric Equip. (one at a time)	ON

Cabin Fire

Master Switch	OFF
Avionics Switch	OFF
All Electric Equip.	OFF
Cabin Air / Heat Control	CLOSE
Cabin	VENTILATE
Land	ASAP

Wing Fire

Navigation Lights	OFF
Strobe Lights	OFF
Pitot Heat	OFF
Sideslip	EXECUTE
Land	ASAP

Icing

Pitot Heat	ON
Defroster	ON
Carb Heat	AS REQUIRED
Throttle	INCREASE
Altitude	ADJUST
Land	ASAP
Forward Slip (visibility)	AS REQUIRED
Wing Flaps	UP
Airspeed	65 - 75 kts

Excessive Ammeter Charge

Alternator Switch	OFF
Alternator Circuit Breaker	PULL
Nonessential Elect. Equip.	OFF
Land	ASAP

Alternator Low Voltage (Discharge)

Alternator Switch	OFF
Alternator Circuit Breaker	CHECK IN
Master Switch	OFF then ON
Alternator Switch	ON
Low Voltage Light	CHECK OFF
If Low Volt Light is On	
Alternator Switch	OFF
Nonessential Elect. Equip.	OFF
Land	ASAP