

N9153W Checklist

COCKPIT CHECK

POH	LOCATE
Crosswind Check	17KTS MAX
Pax Headset Battery Level	CHECK
Hobbs time/Flight Sheet	VERIFY
Squawk Sheets	REVIEW
Fire Extinguisher	CHECK PRESSURE
Flashlight for night flight	CHECK
Static System	DRAIN
Alternate Static System	CLOSED (DOWN)
Radio Switches (x2)	OFF
Fuel Selector	ENSURE TO OFF
Landing gear handle	DOWN
Battery Master Switch	ON, zero out fuel used, Check GPS Data date
Annunciator Panel	CHECK
Stall Warning	PRESS TO CHECK
Fuel Qty	CHECK
Flaps	DOWN TO 10°
Gear Lights/Horn	PRESS TO CHECK
(If no lights, check panel dimmer)	
Lights/Pitot Heat	TURN ALL ON
Get out and check:	
All Ext. Lights, Stall horn, Pitot Heat	
Battery Switch	OFF
Wing and nose fuel drain	SUMP

LEFT WING

Wing leading edge/tip/boots	CHECK
Pitot Tube	CLEAR
Tie-down/Chock	REMOVE
Fuel Vent – unobstructed	CHECK
Fuel Cap/Fuel Level	CHECK
Gear/Brakes/Lines	CHECK CONDITION
Tire (55 psi)/gear attachment	CHECK CONDITION
Side windows	CHECK FOR CRACKS
Flap/Aileron/Hinges	SECURE, AILERON FREE

EMPENNAGE

Entrance Door	CHECK
Antennas	CHECK
Horizontal Stabilizer/Elevator	CHECK, FREE
Vertical Stabilizer/Rudder	CHECK, FREE
Tiedown	REMOVE
Static Port Both Sides	CLEAR
Alternate Static/Press Ports	CLEAR

Pre-flight

Pre-flight/Start

RIGHT WING

Flap/Aileron/Hinges	SECURE, AILERON FREE
Fuel Cap/Fuel Level	CHECK
Wing tip/leading edge/boots	CHECK
Fuel Vent – unobstructed	CHECK
Tie-down/Chock	REMOVE
Gear/Brakes/Lines	CHECK CONDITION
Tire (55 psi)/gear attachment	CHECK CONDITION
Side windows	CHECK FOR CRACKS

NOSE CHECK

Windshield	CLEAN/CHECK FOR CRACKS
Propeller & Spinner	CHECK
Air Inlets	UNOBSTRUCTED
Gear Doors	CHECK CONDITION/SECURITY
Tire (50psi)/Strut	CHECK, REMOVE CHOCK
Engine Oil (9 qts min)	CHECK, SECURE
Oil type – Aeroshell W100	
Cowling Screws/Oil Door	CHECK SECURE
Nose Baggage Door	LOCKED

BEFORE STARTING

Passenger Brief	COMPLETE
Exit Window Shades	OPEN
Cabin Door	4 GREEN LATCH INDIC.
Alternate Induction Air	EXERCISE THEN UP
All Switches	OFF, ESPECIALLY AVIONICS
Seat and Seat Belts	SET AND CHECK
Fuel Selector	FULLEST TANK
Cabin Pressurization Control	
Cold Day - Full Out Until Pre-Takeoff	
Normal Day – Control Full In, Set Field + 500ft AGL	

STARTING (In case of fire; mixture off, throttle full, crank engine)

Battery Master Switch	ON
Mag/Alternator Switches	ON
Prop	CLEAR

Cold Start:

Throttle ½", Fuel Pump OFF, Mixture rich to 7gph then ½",
starter engage, mix. forward as engine starts

Hot/Flooded Start:

Same as cold start, but mixture at cut off after prime.

Ground Start – See AFM page 4-10

Check Engine Instruments

Mixture Lean for Taxi

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BEFORE TAXI/TAXI

Annunciator Panel	PUSH TO TEST
Circuit Breakers	IN
Panel lights	CHECK FOR NIGHT FLT.
Engine Gauges	CHECK
Engine Oil Warm-up to 100°	1000 – 1200 RPM

Cabin Environment

Pulling Cabin Heat knob passes cabin air over muffler
For hottest air, pull cabin dump valve and cabin heat knob
VENT/DEFOG BLWR must be ON for AUX HEAT to work
Pulling Defog Knob out shifts heat from cabin to windshield
BLWR mode on A/C switch will move any air around cabin
A/C Switch must be in A/C mode to engage compressor
BLWR HI/LOW Switch simply changes fan speed

Lights/Avionics Switches	AS REQUIRED
Voltage	CHECK ABOVE 24
iPad/Stratus 2	VERIFY CHARGING
Autopilot/Elec Trim	TEST THEN OFF
Flight Director	ON
ATIS/Taxi Clearance	OBTAIN IF AVAILABLE
Heading/Compass	CROSS CHECK
Heading Bug	SET TO RWY HDG
Cabin Pressure	CONTROL IN, +500ft AGL
Pitot/Prop/Stall/Windshield Heat	CK AMPS, ON AS REQ.
Flaps (10 norm, 20 short)	Set
C.I.G.A.R.	CHECK

Controls – Free and correct
Instruments – Alt, HSI, Art. Hor., Engine
Gas – Qty, pressure, fullest tank
Attitude – Trim set for takeoff
Radios – Set and ident if possible

Brakes	RELEASE & CHECK
Flight Instruments	CHECK DURING TURNS

Run-up

Oil Temp/Pressure	IN GREEN
Brakes	SET
Mixture, Prop	FULL
Throttle	2000 RPM
Engine Instruments	CHECK
Mag check drops	175RPM MAX 50RPM BTW MAGS
Propeller (Max 150 drop)	CYCLE ONCE BRIEFLY
Vacuum	CHECK, 4.8-5.2"
Auto Pilot	VERIFY OFF
Air Cond/Aux Heat	BLOWER ONLY

BEFORE TAKE-OFF

C.A.M.P

Clearance for Takeoff - Obtained
Aux Fuel Pump - ON
Mixture FULL
Prop FULL

NORMAL TAKE OFF

Check charts for anything less than 5,000ft runway

Throttle/Prop	42"max/FULL
Engine Instruments	CHECK
Airspeed @ 69KIAS (Vr)	ROTATION
Positive Rate	Gear Up
Climb Speed (Vy)	110 KIAS

SHORT-FIELD/OBSTACLE TAKE OFF

Flaps	20 Degrees
Throttle/Prop	42"max/FULL
Engine Instruments	CHECK
Brakes	HOLD TO FULL PWR
Airspeed @ 69KIAS (Vr)	ROTATION
Climb Speed - Vx	80KIAS UNTIL CLEAR
Climb Speed - Vy	110KIAS

****ENGINE FAILURE DURING TAKE OFF****

If sufficient runway remaining:

Throttle	IDLE
If Airborne	LAND

If insufficient runway remaining:

Pitch Attitude	PITCH FOR <u>90KIAS</u>
Fuel	SWITCH TANKS
Mixture	SLOWLY TO CUTOFF
Fuel Valve	OFF
Flaps/Gear	AS NECESSARY

CLIMB AND CRUISE CLIMB

Throttle/Propeller	35"/2500
Mixture	32gph
Airspeed	125 KIAS
Emg. Fuel Pump	OFF
Lights (Landing, Taxi)	OFF
Engine Instruments	CHECK
Pressurization	VERIFY HOLDING
iPad/Stratus 2	VERIFY CHARGING
CHT's under 400	Add fuel, lower nose

Taxi/Run-Up

Take-Off

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FIRE/SMOKE

Pressurization Dump Valve OPEN

Electrical:

Master switch/Electric. Switches OFF

Breakers CHECK, LEAVE OUT

Master Switch ON

Electrical Switches ON IN PRI. ORDER

Engine:

Fuel Pump OFF

Mixture IDLE CUT-OFF

Throttle FULL

Fuel Selector, Ignition OFF

Do not attempt to restart engine and LAND ASAP

Fire extinguisher AS NEEDED

Cruise

Leaving throttle alone (34"), reduce prop for %HP

Max cruise CHT is 435F, best to keep below 400F

Peak TIT is 1750F

100 Degree Rich of Peak Operations (1620F TIT)

Quickly lean to 25GPH

Slow lean to between 1600 and 1620 TIT

50 Degree Lean of Peak Operations

Quickly lean to 19GPH

Slow lean to between 1680 and 1700TIT

Lean of peak saves about 3gph at a cost of 15kts

IN CRUISE ENGINE TROUBLES

Airspeed TRIM FOR 90KIAS

Engine Controls, Instr. RIGHT TO LEFT

Fuel Pump ON

Find Airport (ATC or GPS) 2NM PER 1,000ft

See Emergency Checklist for additional actions

PRE-MANEUVER CHECK

Airspeed Remind - V_{S0} =58KIAS, V_s =69KIAS

Fuel Selector/Fuel Pump FULLEST TANK/AS REQ

Engine Instruments CHECK

Area CLEAR

Cruise/Maneuver

Decent

DESCENT

Compare ETE to Alt, start decent at altx2

Worst case landing distance is 2,700ft, use charts for runways that are any shorter.

Throttle (min for pressurization) 21"/2500RPM-25"/2200

Cabin Altitude SET TO 500FT AGL

Deice Systems AS NEEDED

Seat Belts FASTENED, CHECKED

A.I.R.B.A.G. ACCOMPLISHED

(ATIS, Instr., Radios, Approach Briefed, Gas Tank)

Fuel Selector FULLEST TANK

Mixture LEAVE ALONE

Gear (V_{LO} 165KIAS, V_{LE} 195) LOWER IF NEEDED

(130KIAS turbulent air)

Flaps (10°-165KIAS, 20°-130KIAS, 36°-116KIAS)

Yaw Damper OFF

Pattern speeds next page REVIEWED

NO GREEN GEAR LIGHT

Note: The aircraft is designed to take gear-up emergency landings without extensive damage to the structure of the airplane.

Approach ABORT&CLIMB

Check dimmer and night panel switch

Go to Detailed Emergency Checklist

ON APPROACH ENGINE FAILURE

Airspeed PITCH FOR 90KTS

Glide DO NOT TRY TO STRETCH

Fuel Tanks SWITCH TANKS

Throttle, Mixture FULL THEN MIXT. TO OFF

Fuel Pump ON THEN OFF

Oil on Windscreen SIDESLIP TO SEE

N9153W Checklist

VFR PATTERN POWER SETTINGS

Downwind (No Gear / 0° Flaps) -105KIAS

Downwind (Gear / 0° Flaps) 95kts – 16/FULL PROP

Base (Gear / 10° Flaps) - 85KIAS – 16/FULL

Final (Gear Full Flaps) - 80KIAS – 16/FULL

Threshold – 80KIAS – IDLE/FULL

Short-Field Threshold - 75MPH – IDLE/FULL

IFR APPROACH POWER SETTINGS

Precision Approach

1mi to Glideslope (0° Flaps) – 120KIAS – 23”/FULL

Glideslope (Gear / 10° Flaps/-500FPM) – 90KIAS - 15”/FULL

Non-Precision Approach

In decent (Gear/15° Flaps) (-700) - 90KIAS – 15”/FULL

MDA/Hold - Level off 90KIAS – 18”/FULL

Threshold – 80KIAS – IDLE/FULL

1”=5Kts or 100FPM

15° Flaps, add 1” MP

In Pattern/At IAF

IFR 5-T's

EXECUTE

G.U.M.P.S.

COMPLETE

Gas – Pump On, Fullest Tanks

Undercarriage – Gear(165kts), Flaps(165kts)

Mixture – Cruise Setting

Prop – Full

Switches – lights as required

BEFORE LANDING/AT MISSED APR. PT.

G.U.M.P.S.

VERIFY

Autopilot

DISCONNECT

Go-Around Plan(see below)

BRIEFED

Call out “Prop Full, Gear Green”

GO-AROUND – 3 C's

CRAM IT –Mixture/Throttle/Prop Full – 80KIAS

CLEAN IT – Gradual Flaps/Gear Up

CALL IT – Announce intention

RETURN FOR TAKE-OFF (touch and goes not recom.)

Flaps

10 DEGRESS

Trim Tab

SET TO T/O RANGE

Before Take-off Check List

COMPLETE

Mixture

FULL RICH

AFTER LANDING – Clear of Runway

Landing Time/Cancel IFR

NOTED/COMPLETE

F.L.A.R.E.S

Flaps – Up

Lights as required

Auxiliary Fuel Pump - Off

Radios – Change to ground, get clearance

Engine Instruments Checked

Set trim to “Take-Off” Range

Mixture

LEAN

PARKING & SHUTDOWN

FBO Fuel Call

CALL ON 122.95 CHO

Avionics

OFF

Throttle

IDLE ~1Min

TIT:

<850

Mixture

IDLE CUT OFF

Magnetos

OFF

Fuel Valve

OFF

Night panel and red lights

OFF

Prop/Pitot/Windshield De-ice

OFF

Master Switch

OFF

Lights

OFF

SECURING

Hobbs Time

RECORDED

Fuel Used on JPI

RECORDED, ZEROED

Flight Plan

CLOSED

iPad/Stratus 2

SHUT OFF

Maintenance Squawks

RECORDED/CALLED

Belongings and Trash

REMOVED

Tie-Downs/Chocks

SECURED

Post-Flight Inspection

COMPLETE

Cover

SECURED

Doors

LOCKED

Landmark Aviat.

434-978-1474

FSS (Leesburg)

1-866-225-7410

Maintenance Officer

434-466-3968

Pattern/Landing

After Landing