

CHECKLIST CESSNA 172P N783FM



Fort Meade Flight Activity, Inc.
7509 General Aviation Drive, Fort Meade, MD 20755
(410) 672-0080



**DO NOT REMOVE FROM
AIRCRAFT**

EMERGENCY CONTACT NUMBERS

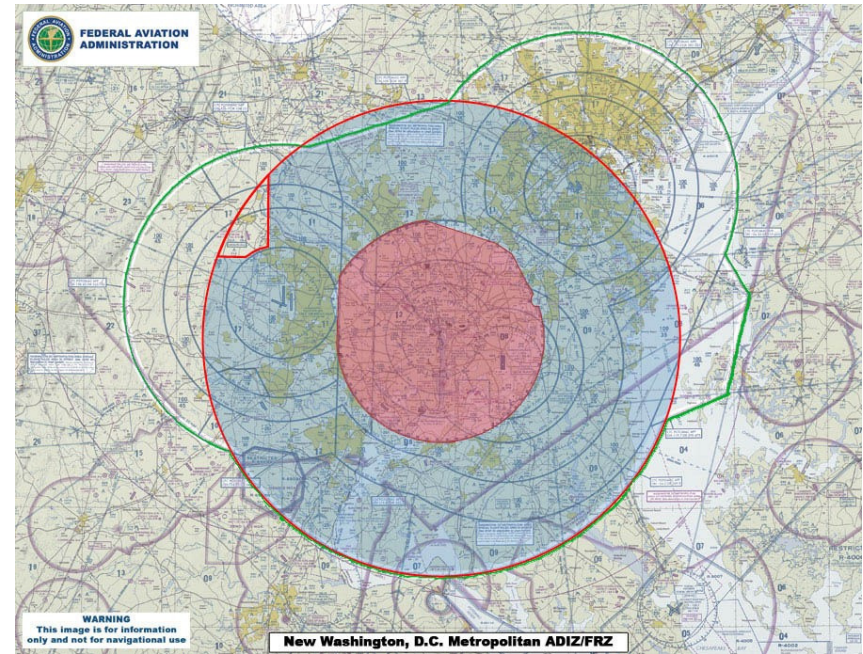
Sue Hall (443) 690-2627 (cell)
Co-manager

Frank Turney (443) 499-1287 (cell)
Co-manager

Transponder Codes

7500 Hijacked
7600 Lost Communications
7700 Emergency

Aircraft ID N783FM	Flight Rule IFR	Flight Type G	No. of Aircraft 1	Aircraft Type C172	Wake Turbulence L	Aircraft Equipment SG
Departure KFME	Airport Info Area Brief	Departure Date & Time 05/12/2020 1-120	Evaluate UTC	Cruising Speed N0110	Level VFR/013	Surveillance Equipment EB2
Route of Flight DCT	Map Plan		Other Information (Optional) RMK/DC SFRA			
Destination PALEO	Airport Info Area Brief	Est Elapsed Time 0020	Alternate 1 (Optional) Airport Info Area Brief		Alternate 2 (Optional) Airport Info Area Brief	
Fuel Endurance 0400	Persons on Board 2	Aircraft Color & Markings (Optional) W:O:BR	Supplemental Remarks (Optional)		Pilot in Command (Optional)	
Emergency Radios <input type="checkbox"/> UHF <input checked="" type="checkbox"/> VHF <input type="checkbox"/> ELBA	Survival Equipment <input type="checkbox"/> Polar <input type="checkbox"/> Desert <input type="checkbox"/> Maritime <input type="checkbox"/> Jungle	Jackets <input type="checkbox"/> Light <input type="checkbox"/> Fluorescent <input type="checkbox"/> UHF <input type="checkbox"/> VHF	Dinghies (Optional) Number Capacity Color Covered		Pilot Contact Information	



Washington SFRA

ATC COMMUNICATIONS AND SQUAWK CODE REQUIRED

**FSS: 1-800-WX-BRIEF (1-800-992-7433)
(SFRA flight plan & weather briefing)**

**Potomac TRACON: 1-866-429-5882
(squawk code & frequency)**

**Potomac TRACON: 1-540-351-6129
(close SFRA flight plan after pattern work)**

AIRSPEEDS FOR SAFE OPERATION (KIAS)

V_{SO}	40
V_{SI}	50
V_R	55
V_X	60
V_Y	76
V_F	85*
V_A (MGW)	99
V_{NO}	127
V_{NE}	158
V_{ref} (flaps up/down)	70/55-60
V_G	65

*10 degrees of flaps may be extended at airspeeds up to 110 KIAS.

Maximum demonstrated crosswind component 15 kt

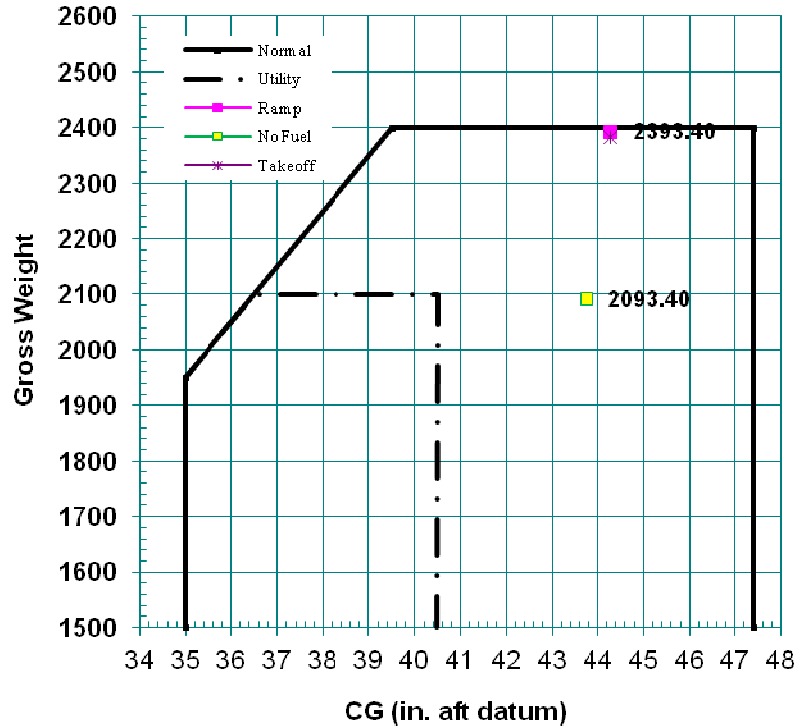
Sample Weight & Balance

FAA Tail No.	N783FM		Color	W/BR/O
Flight Plan Designator	C172/G		Useable Fuel	50.0
Year of Manufacture	1981		Make/Model	Cessna 172P-160
	±	Weight	Arm	Moment
Basic Empty	7-Apr-2017	1478.40	39.048	57728.07
Fuel (Gal):	50.0	300.00	48.000	14400.00
Pilot		170.00	37.000	6290.00
Copilot		170.00	37.000	6290.00
Passenger 1		140.00	73.000	10220.00
Passenger 2		100.00	73.000	7300.00
Baggage 1		20.00	95.000	1900.00
Baggage 2		15.00	123.000	1845.00
		Weight	Arm	Moment
Ramp		2393.40	44.277	105973.07
Takeoff		2382.40	44.276	105483.47
No Fuel		2093.40	43.744	91573.07

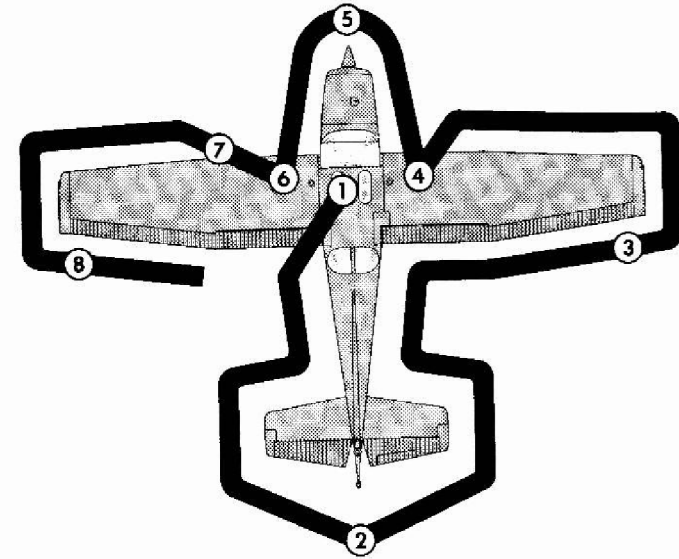
Notes: Source -- 1982 Cessna Model 172P AFM dtd 5/12/1981

1. MGW for Normal Operation is 2400 lbs.
1. MGW for Utility Operation is 2100 lbs.
1. BEW includes Unusable Gas of 3 gallons
2. Total Fuel Volume is 53 gallons
3. Usable Fuel all flight conditions is 50 gallons
4. Maximum Baggage Area 1 = 120 lbs
5. Maximum Baggage Area 2 = 50 bs

N738FM Center of Gravity Limits



PREFLIGHT INSPECTION



COCKPIT

- Cowl plugs REMOVE
- Ignition Key ON DASH
- Hobbs, Tach Times NOTE
- Publications (AROW) CHECK
- Control Lock REMOVE
- Fuel Selector Valve BOTH
- Trim Tab TAKEOFF RANGE
- Mixture FULL LEAN
- Throttle CLOSED
- Carburetor Heat OFF
- Circuit Breakers CHECK
- Avionics Master OFF
- Master Switch ON
- Fuel Gauges CHECK
- Lights CHECK
- Flaps DOWN

Master SwitchOFF

FUSELAGE

Skin Condition CHECK
Antennas CHECK
Baggage Door CHECK

EMPENNAGE

Control Surfaces CHECK
Static Wicks CHECK
Trim Tab CHECK
Lights CHECK
Antennas CHECK
Tiedown REMOVED

RIGHT WING

Flap and Aileron CHECK
Static Wicks CHECK
Wing Tip, Light and Leading Edge CHECK
Tiedown, Chocks REMOVE
Wheel Strut, Tire, Brakes CHECK
Fuel Sump DRAIN
Fuel Quantity CHECK, THEN CAP SECURE

NOSE

Oil (5–7quarts) CHECK
Fuel Strainer Knob DRAIN
Engine Compartment CHECK
Cowling, Intakes, Spinner, Propeller CHECK
Landing Light CHECK
Nosewheel Strut, Tire, Linkage CHECK
Chocks, Towbar REMOVED
Windshield CHECK
Static Port CHECK
Oil Sump Heater DISCONNECT

LEFT WING

Fuel Quantity CHECK, THEN CAP SECURE
Fuel Sump DRAIN
Wheel Strut, Tire, Brakes CHECK
Tiedown, Chocks REMOVE
Fuel Vent CLEAR
Pitot Tube CHECK
Stall Warning Opening CHECK
Leading Edge, Wing Tip and Light CHECK
Aileron and Flap CHECK
Static Wicks CHECK

BEFORE ENGINE START

Doors and Windows SECURED
Seats, Belts, Harnesses SECURED
Brakes TEST AND SET
Fuel Selector BOTH
Mixture RICH
Throttle OPEN 1/8 INCH
Carburetor Heat OFF
Beacon ON
Avionics Master Switch OFF
Keys IGNITION
Battery Master Switch ON
Review Type of Start Checklist COMPLETE

ENGINE START

Primer AS REQUIRED
Primer IN AND LOCKED
Throttle OPEN 1/8 INCH
Mixture RICH
Propeller Area CLEAR
Starter ENGAGE

ENGINE START (FLOODED)

Primer IN AND LOCKED

Throttle FULL OPEN
 Mixture IDLE CUT-OFF
 Propeller Area CLEAR
 Starter ENGAGE
 Mixture ADVANCE AS ENGINE FIRES
 Throttle RETARD

AFTER START/BEFORE TAXI

Throttle 1000 RPM
 Oil Pressure CHECK
 Alternator ON
 Avionics Master Switch ON
 Mixture LEAN FOR TAXI
 Flaps UP
 Transponder Code SET/ALT
 GPS/Radios PROGRAM/SET
 Lights AS REQUIRED
 Controls POSITION FOR WIND
 Brakes TEST

ENGINE RUN-UP

Nosewheel CENTERED
 Brakes SET/HELD
 Mixture FULL RICH
 Throttle 1700 RPM
 Suction Gauge CHECK
 Engine Instruments CHECK
 Ammeter CHECK
 Primer IN AND LOCKED
 Magnetos CHECK (125 MAX DROP, 50 DIFF)
 Circuit Breakers CHECK
 Carburetor Heat CHECK
 Mixture CHECK, THEN FULL RICH
 Throttle IDLE, THEN 1000 RPM
 Flight Controls FREE & CORRECT

Flight Instruments CHECK AND SET

BEFORE TAKEOFF

Doors and Windows CLOSED
 Seats, Belts and Harnesses SECURE
 Fuel BOTH
 Trim SET
 Carburetor Heat OFF
 Mixture RICH
 Throttle Friction Lock ADJUST
 Lights AS REQUIRED
 Transponder Code/ALT VERIFIED
 Radios SET/CHECKED
 Emergency Briefing COMPLETE
 Review Type of Takeoff COMPLETE

NORMAL TAKEOFF

Throttle FULL OPEN
 Engine Instruments CHECK
 Brakes RELEASE
 Rotation Speed 55 KIAS (Vr)
 Climb Speed 76 KIAS (Vy)

SHORT FIELD TAKEOFF

Flaps 10 DEGREES
 Brakes SET
 Throttle FULL OPEN
 Engine Instruments CHECK
 Brakes RELEASE
 Rotation Speed 50 KIAS
 Climb Speed 56 KIAS (Vx) until obstacles cleared
 Climb Speed 76 KIAS (Vy)
 Flaps (above 65 KIAS) RETRACT

SOFT FIELD TAKEOFF

Flaps 10 DEGREES

Elevator FULL NOSE UP
Throttle FULL OPEN
Engine Instruments CHECK
Liftoff Speed MINIMUM SPEED
Climb Speed 56 KIAS (V_x) until clear of obstacles
Climb Speed 76 KIAS (V_y)
Flaps (above 65 KIAS) RETRACT

CLIMB (1000 FEET)

Airspeed 76-85 KIAS
Lights AS REQUIRED
Flaps UP
Flight Plan (If Filed) ACTIVATE/SFRA

CRUISE

Power AS REQUIRED
Trim SET LEVEL FLIGHT
Mixture LEAN (≤75% power)

DESCENT

Fuel Selector BOTH
Mixture ENRICH
ATIS/AWOS CHECK
Altimeter SET

BEFORE LANDING (GUMPSB)

Fuel Selector BOTH
Mixture RICH
Carburetor Heat ON
Seats, Belts, and Harnesses SECURE
Brakes TEST
Lights AS REQUIRED

NORMAL LANDING

Power AS REQUIRED

Flaps FULL DOWN
Airspeed 65-75 KIAS CLEAN / 60-70 KIAS FLAP DN
Brakes AS REQUIRED

SHORT FIELD LANDING

Power AS REQUIRED
Flaps FULL DOWN
Airspeed 61 KIAS
Brakes AS REQUIRED
Flaps RETRACT

AFTER LANDING

Flaps UP
Mixture LEAN FOR TAXI
Carburetor Heat OFF
Trim SET TAKEOFF
Lights AS REQUIRED
Transponder ON/ALT

SECURING AIRCRAFT

Throttle 1000 RPM
Avionics Master OFF
Electrical Equipment (Except Beacon) OFF
Mixture IDLE CUT-OFF
Magnetos OFF
Ignition Key ON DASH/BINDER
Master Switch OFF
Fuel Selector Valve LEFT OR RIGHT
Control Lock INSTALL
Hobbs/Tach Times, Fuel, Squawks NOTE
Flight Plan (If Filed) CLOSE
Chocks and Tiedowns INSTALL
Cowl Plugs INSTALL

EMERGENCY PROCEDURES

ENGINE FIRE DURING START

StarterCRANK ENGINE
If engine starts:
Power 1700 RPM
Engine (after several minutes) SHUT DOWN & INSPECT
If engine fails to start:
Throttle FULL OPEN
Mixture IDLE CUT-OFF
Cranking CONTINUE
Master Switch OFF
Ignition Switch OFF
Fuel Selector OFF
Aircraft ABANDON
Fire EXTINGUISH

ENGINE FIRE IN FLIGHT

Mixture IDLE CUT-OFF
Fuel Selector OFF
Master Switch OFF
Heater and Defroster OFF
Airspeed 100 KIAS
Proceed with power off landing procedure

ELECTRICAL FIRE (SMOKE IN CABIN)

Master Switch OFF
Electrical Switches OFF
Vents CLOSED
Cabin Heat OFF
Fire EXTINGUISH
Land as soon as practical.

WING FIRE

Navigation/Strobe Lights OFF
Pitot Heat OFF
Sideslip to keep flames away from fuel tank and cabin.
Land as soon as possible; use flaps only as required.

ENGINE FAILURE DURING TAKEOFF RUN

Throttle CLOSED
Brakes APPLY
Wing Flaps RETRACT
Mixture IDLE CUT-OFF
Ignition Switch OFF
Master Switch OFF

ENGINE FAILURE DURING INITIAL CLIMB

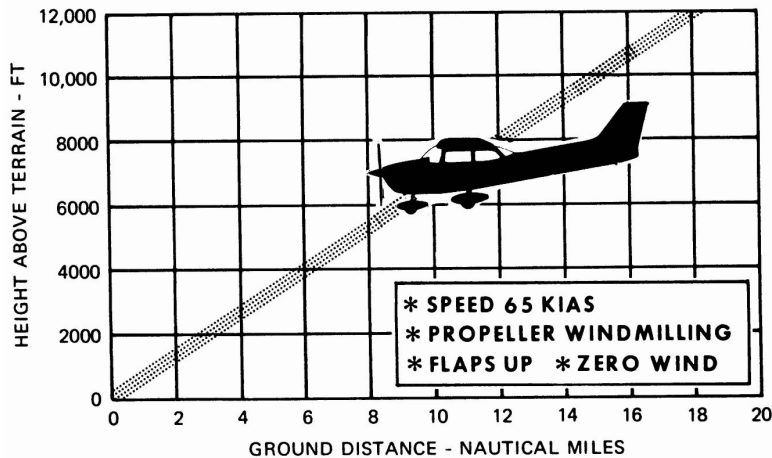
Airspeed 65 KIAS (FL UP) / 60 KIAS (FL DN)
Mixture IDLE CUT-OFF
Fuel Selector OFF
Ignition OFF
Flaps AS REQUIRED
Master Switch OFF

ENGINE FAILURE IN FLIGHT

Airspeed 65 KIAS
Carburetor Heat ON
Fuel Selector BOTH
Mixture FULL RICH
Ignition BOTH
Starter ENGAGE
If unable to restart engine, proceed with power off landing procedure.

POWER OFF LANDING

Airspeed 65 KIAS (FL UP) / 60 KIAS (FL DN)
Mixture IDLE CUT-OFF
Throttle CLOSED
Fuel Selector OFF
Ignition OFF
Seat belts and harnesses SECURE
Doors UNLATCH
Flaps AS REQUIRED
Master Switch OFF



LOSS OF OIL PRESSURE AND/OR HIGH OIL TEMPERATURE

Land as soon as possible. Prepare for power off landing.

ELECTRICAL FAILURE (LOW VOLTAGE LIGHT)

Ammeter CONFIRM
Avionics OFF
Master Switch (ALT and BAT) OFF
Master Switch ON
Low Voltage Light CHECK OFF
Avionics ON
If low-voltage light illuminates again:
Alternator OFF
Nonessential Electric Equipment OFF
Land as soon as practical.

SPIN RECOVERY

Throttle IDLE
Ailerons NEUTRAL
Rudder FULL OPPOSITE
Elevator FORWARD
Rudder (when rotation stops) NEUTRAL
Recover from dive.

TAKEOFF DISTANCE MAXIMUM WEIGHT 2400 LBS

SHORT FIELD

CONDITIONS:
Flaps 10°
Full Throttle Prior to Brake Release
Paved, Level, Dry Runway
Zero Wind

NOTES:

- Short field technique as specified in Section 4.
- Prior to takeoff from fields above 3000 feet elevation, the mixture should be leaned to give maximum RPM in a full throttle, static runup.
- Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
- For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

WEIGHT LBS	TAKEOFF SPEED KIAS	PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
			GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS
2400	51	56	795	1460	860	1570	925	1685	995	1810	1065	1945
			875	1605	940	1725	1015	1860	1090	2000	1170	2155
			960	1770	1035	1910	1115	2060	1200	2220	1290	2395
			1055	1960	1140	2120	1230	2295	1325	2480	1425	2685
			1165	2185	1260	2365	1355	2570	1465	2790	1575	3030
			1285	2445	1390	2660	1500	2895	1620	3160	1745	3455
			1425	2755	1540	3015	1665	3300	1800	3620	1940	3990
			1580	3140	1710	3450	1850	3805	2000	4220	---	---
1755	3615	1905	4015	2060	4480	---	---	---	---			

LANDING DISTANCE

SHORT FIELD

CONDITIONS:

Flaps 30°
Power Off
Maximum Braking
Paved, Level, Dry Runway
Zero Wind

NOTES:

- Short field technique as specified in Section 4.
- Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
- For operation on a dry, grass runway, increase distances by 45% of the "ground roll" figure.

WEIGHT LBS	SPEED AT 50 FT KIAS	PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
			GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS
2400	61	S.L.	510	1235	530	1265	550	1295	570	1325	590	1350
			1000	1265	550	1295	570	1325	590	1360	610	1390
			2000	1295	570	1330	590	1360	610	1390	630	1425
			3000	1330	590	1360	615	1395	635	1430	655	1460
			4000	1365	615	1400	635	1430	660	1470	680	1500
			5000	1400	640	1435	660	1470	685	1510	705	1540
			6000	1435	660	1470	685	1510	710	1550	730	1580
			7000	1475	690	1515	715	1555	740	1595	765	1635
8000	1515	715	1555	740	1595	765	1635	790	1675			