

**CHECKLIST
CESSNA 172N
N4846G**



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

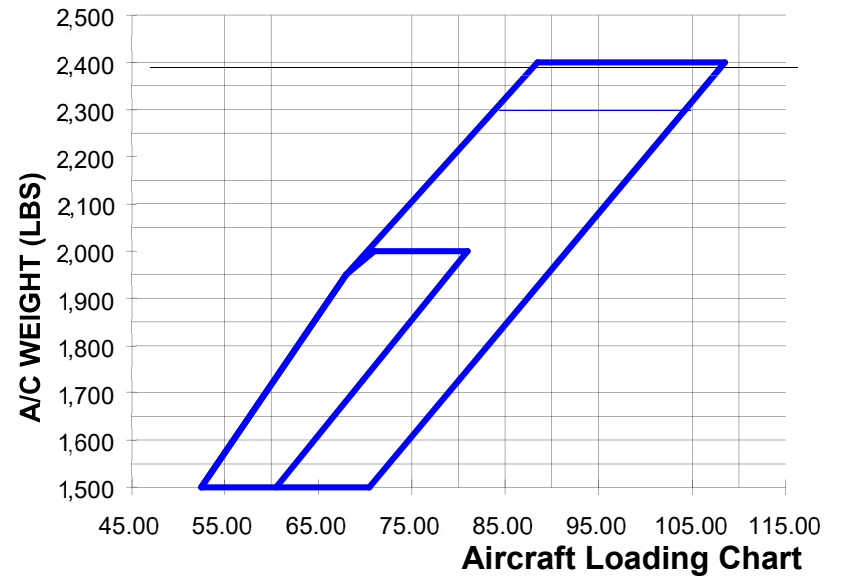
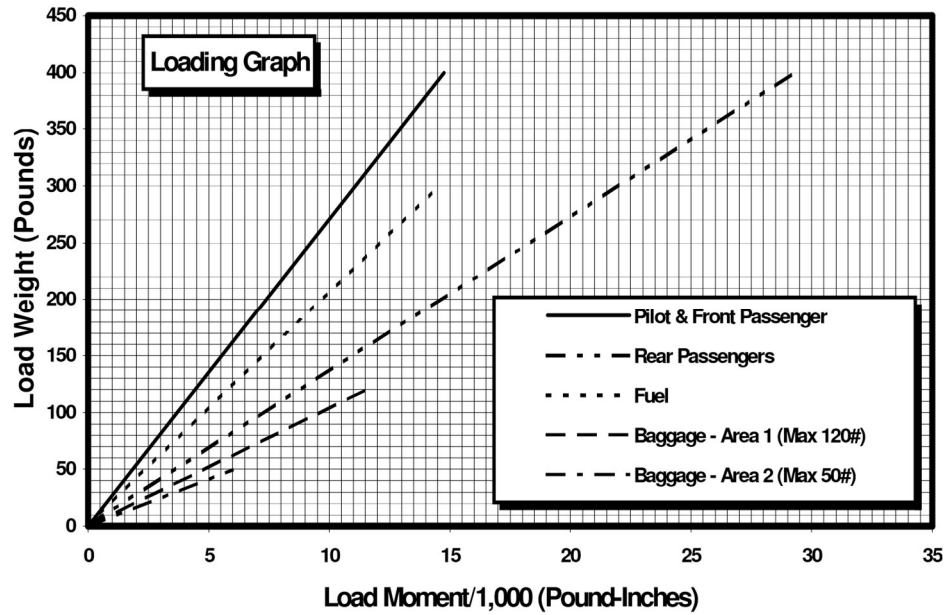
7500 Hijacked
7600 Lost Communications
7700 Emergency

AIRSPEEDS FOR SAFE OPERATION (KIAS)

V_{SO}	41		
V_{SI}	47		
V_R	55		
V_X	59		
V_Y	73		
V_F	85*		
V_A (MGW)	97		
V_{NO}	128		
V_{NE}	160		
V_{ref} (flaps up)	70	(flaps down)	55-60
V_G	65		

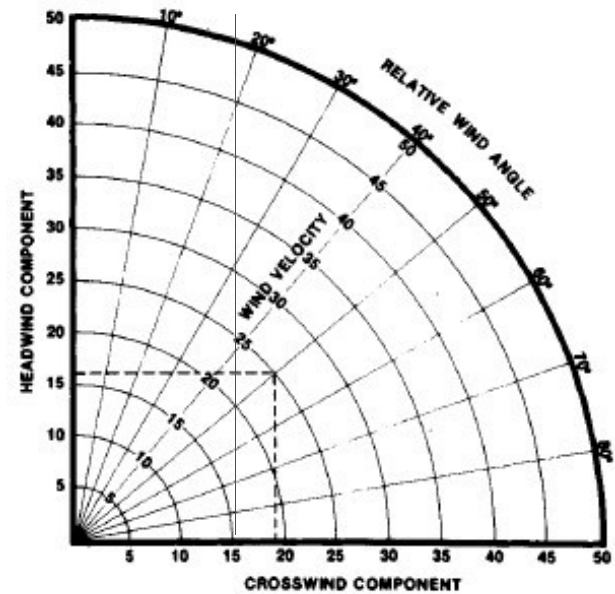
*10 degrees of flaps may be extended at airspeeds up to 110 KIAS.

Aircraft ID	Flight Rule	No. of Aircraft	Aircraft Type	Wake Turbulence	Aircraft Equipment
Departure	Departure Date & Time	Est Elapsed Time	Cruising Speed	Level	Surveillance Equipment
Route of Flight					
Destination	Persons on Board	Survival Equipment	Other Information (Optional)		
Fuel Endurance	Emergency Radios	Dinghies (Optional)	Alternate 1 (Optional)	Alternate 2 (Optional)	Airport Info
Pilot Contact Information					



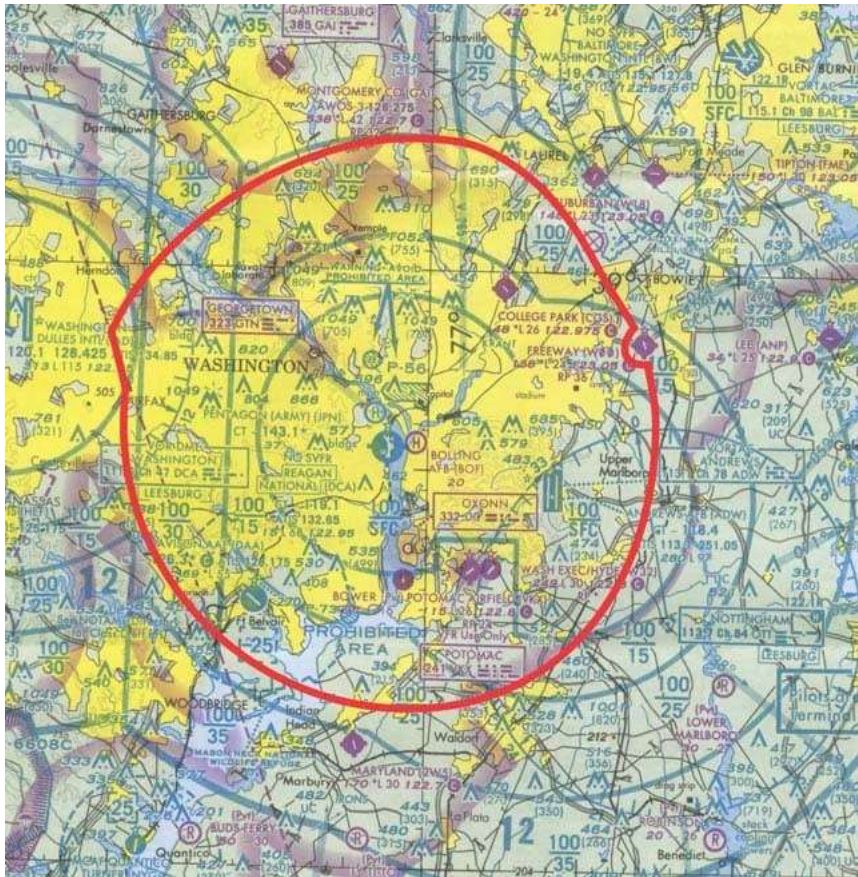
LOADED AIRCRAFT MOMENT (LB-IN/1000)

Crosswind Component Chart

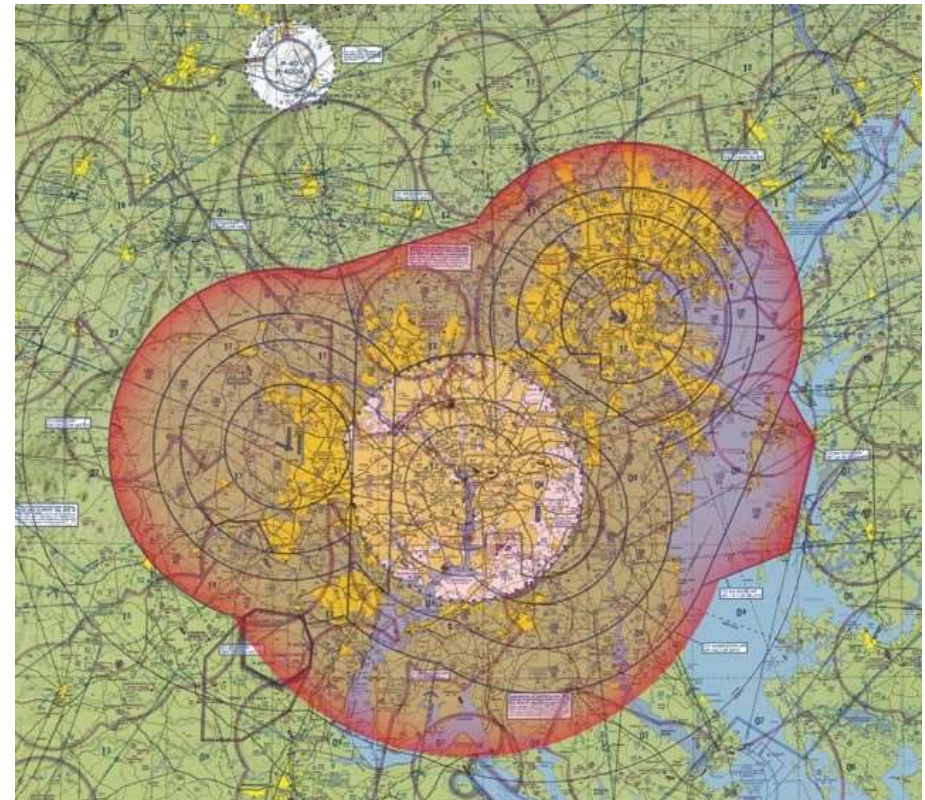


Maximum demonstrated crosswind component 15 kt

	Weight (lbs)	Moment (in-lbs)
Empty Weight		
Fuel (50 gal max)		
Pilot/Front Pass		
Rear Passengers		
Baggage Area 1		
Baggage Area 2		
TOTAL		



Washington TFR / FRZ
 NO PART 91 OR 135 OPERATIONS

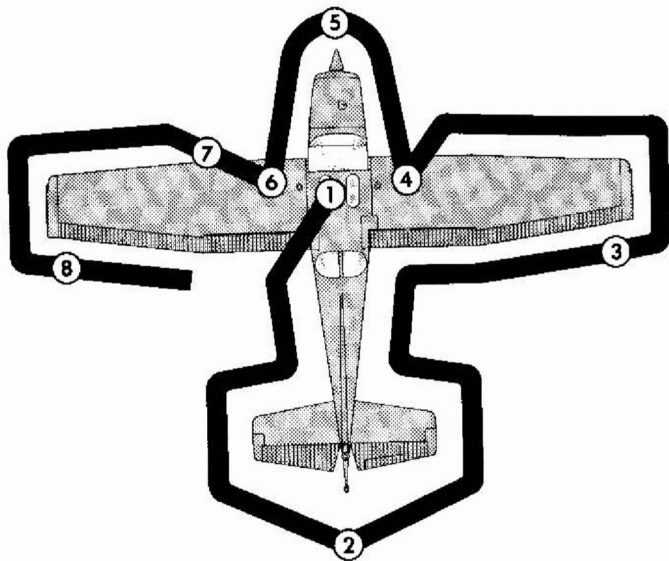


Washington SFRA

ATC COMMUNICATIONS AND SQUAWK CODE REQUIRED

FSS: 1-800-992-7433 (for SFRA flight plan)

Potomac App: 866-429-5882 (for squawk code)



PREFLIGHT INSPECTION

COCKPIT

- CoversREMOVE
- Ignition Key.....ON DASH
- Hobbs, Tach Times.....NOTE
- Publications (AROW).....CHECK
- Control LockREMOVE
- Fuel Selector Valve.....BOTH
- Trim TabsTAKEOFF RANGE
- Mixture.....FULL LEAN
- ThrottleCLOSED
- Carburetor Heat.....OFF
- Circuit Breakers.....CHECK
- Avionics MasterOFF
- Master Switch.....ON
- Fuel Gauges.....CHECK
- Lights.....CHECK
- Flaps.....DOWN
- Master Switch.....OFF

FUSELAGE

- Skin Condition.....CHECK
- Antennas.....CHECK
- Baggage Door.....CHECK

EMPENNAGE

- Control Surfaces.....CHECK
- Static WicksCHECK
- Trim Tab.....CHECK
- LightsCHECK
- Antennas.....CHECK
- TiedownREMOVED

RIGHT WING

- Flap and Aileron.....CHECK
- Static WicksCHECK
- Wing Tip, Light and Leading Edge.....CHECK
- Tiedown, ChocksREMOVE
- Wheel Strut, Tire, Brakes.....CHECK
- Fuel Sump.....DRAIN
- Fuel Quantity.....CHECK, THEN CAP SECURE

NOSE

- Oil (5 – 6 quarts)CHECK
- Fuel Strainer KnobDRAIN
- Engine Compartment.....CHECK
- Cowling,Intakes,Spinner,Propeller.....CHECK
- Landing LightCHECK
- Nosewheel Strut, Tire, Linkage.....CHECK
- Chocks, Towbar.....REMOVED

WindshieldCHECK
Static PortCHECK
Oil Sump HeaterDISCONNECT

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 FlapCHECK
Static Wicks.....CHECK

BEFORE ENGINE START

Doors and Windows.....SECURED
Seats, Belts, HarnessesSECURED
BrakesTEST AND SET
Fuel SelectorBOTH
Mixture.....RICH
ThrottleOPEN 1/8 INCH
Carburetor Heat.....OFF
BeaconON
Avionics Master Switch.....OFF
PrimerAS REQUIRED
KeysIGNITION
Battery Master Switch.....ON
Propeller Area.....CLEAR
Review Type of Start
Checklist.....COMPLETE

ENGINE START

Prime.....3-4 STROKES
PrimerIN AND LOCKED
ThrottleOPEN 1/8 INCH
Mixture.....RICH
Starter.....ENGAGE
*None if engine is warm

ENGINE START (FLOODED)

PrimerIN AND LOCKED
Throttle.....FULL OPEN
Mixture.....IDLE CUT-OFF
Starter.....ENGAGE
Mixture.....ADVANCE AS ENGINE FIRES
Throttle.....RETARD

AFTER START/BEFORE TAXI

Throttle.....800-1000 RPM
Oil Pressure.....CHECK
Alternator Switch.....ON
Avionics Master SwitchON
Mixture.....LEAN FOR TAXI
Flaps.....UP
Transponder Code.....SET/ALT
GPS/Radios.....PROGRAM/SET
LightsAS REQUIRED
Control Position for WindAS REQUIRED
Brakes.....TEST ON PAVEMENT

ENGINE RUN-UP

Nosewheel.....CENTERED
Brakes.....SET/HELD
Mixture.....FULL RICH
Throttle.....1700 RPM
Suction Gauge.....CHECK
Engine Instruments.....CHECK
AmmeterCHECK
PrimerIN AND LOCKED
Magnetos.....CHECK (125 MAX DROP, 50 DIFF)
Circuit BreakersCHECK IN
Carburetor Heat.....CHECK
Mixture.....CHECK, THEN FULL RICH
ThrottleIDLE, THEN 1000 RPM
Flight ControlsFREE, CORRECT
Flight Instruments.....CHECK AND SET

BEFORE TAKEOFF

Doors and Windows.....CLOSED
Seats, Belts and HarnessesSECURE
Fuel.....BOTH
TrimSET
Carburetor Heat.....OFF
Mixture.....RICH
Throttle Friction Lock.....ADJUST
Lights.....AS REQUIRED
Transponder Code/ALT.....VERIFIED
RadiosSET/CHECKED
Emergency BriefingCOMPLETE
Review Type of TakeoffCOMPLETE

NORMAL TAKEOFF

ThrottleFULL OPEN
Engine Instruments.....CHECK
Rotation Speed.....55 KIAS (VR)
Climb Speed.....73 KIAS (VY)
BrakesRELEASE

SHORT FIELD TAKEOFF

Flaps10 DEGREES
Brakes.....SET
Throttle.....FULL OPEN
Engine Instruments.....CHECK
Brakes.....RELEASE
Rotation Speed.....50 KIAS
Climb Speed53 KIAS until obstacles cleared
Climb Speed73 KIAS (VY)
Flapsabove 65 KIAS RETRACT

SOFT FIELD TAKEOFF

Flaps10 DEGREES
Elevator.....FULL NOSE UP
Throttle.....FULL OPEN
Engine Instruments.....CHECK
Flyoff Speed.....45-50 KIAS
Climb Speed55 KIAS until obstacles cleared
Climb Speed73 KIAS (VY)
Flapsabove 65 KIAS RETRACT

CLIMB (1000 FEET)

Airspeed.....73-85 KIAS
 WingsCHECK
 LightsAS REQUIRED
 Flaps.....UP
 Flight Plan (If Filed).....ACTIVATE/SFRA

CRUISE

PowerAS REQUIRED
 TrimSET LEVEL FLIGHT
 Mixture.....LEAN 4000 FT MSL

DESCENT

Fuel SelectorBOTH
 Mixture.....ENRICH
 ATIS/AWOS.....CHECK
 AltimeterSET

BEFORE LANDING (GUMPSB)

Fuel SelectorBOTH
 Mixture.....RICH
 Carburetor Heat.....AS REQUIRED
 Seats, Belts, and HarnessesSECURE
 BrakesTEST
 LightsAS REQUIRED

NORMAL LANDING

Power1400 RPM
 FlapsFULL DOWN
 Airspeed70 KIAS CLEAN
 55-60 KIAS FLAP DN
 BrakesAS REQUIRED

SHORT FIELD LANDING

PowerAS REQUIRED
 FlapsFULL DOWN
 Airspeed55 KIAS
 BrakesAS REQUIRED
 FlapsRETRACT

AFTER LANDING

Flaps.....UP
 Mixture.....LEAN FOR TAXI
 Carburetor Heat.....OFF
 Trim.....SET TAKEOFF
 LightsAS REQUIRED

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 SwitchOFF
 Fuel Selector Valve.....LEFT OR RIGHT
 Control Lock.....INSTALL
 Hobbs/Tach Times, Fuel, SquawksNOTE
 Flight Plan (If Filed).....CLOSE
 Chocks and Tiedowns.....INSTALL
 Red Gear and Covers.....INSTALL
 Oil Sump Heater (Winter Operation).....CONNECT

EMERGENCY PROCEDURES

ENGINE FIRE DURING START

Starter.....CRANK ENGINE

If engine starts:

Power1700 RPM
Engine (after several minutes).....SHUT DOWN &
INSPECT

If engine fails to start:

ThrottleFULL OPEN
Mixture.....IDLE CUT-OFF
Cranking.....CONTINUE
Master Switch.....OFF
Ignition SwitchOFF
Fuel SelectorOFF
Aircraft.....ABANDON
FireEXTINGUISH

ENGINE FIRE IN FLIGHT

Mixture.....IDLE CUT-OFF
Fuel SelectorOFF
Master Switch.....OFF
Heater and Defroster.....OFF
Airspeed100 KIAS

Proceed with power off landing procedure

ELECTRICAL FIRE (SMOKE IN CABIN)

Master SwitchOFF
Electrical Switches.....OFF
Vents.....CLOSED
Cabin Heat.....OFF
Fire.....EXTINGUISH

Land as soon as practicable

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 SwitchOFF

ENGINE FAILURE DURING INITIAL CLIMB

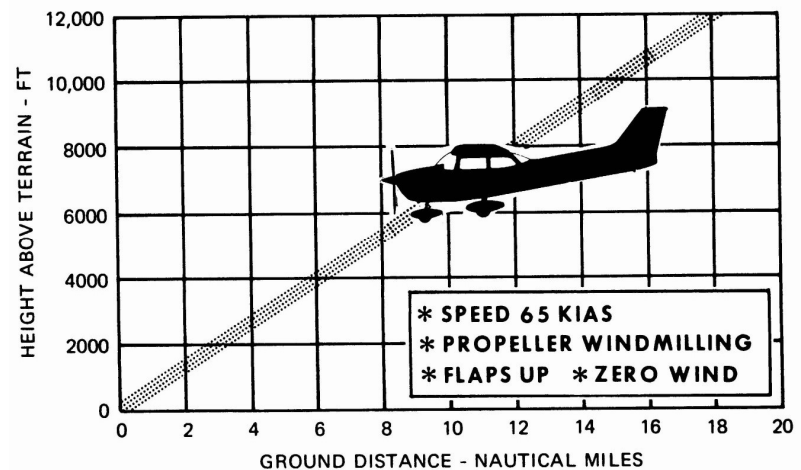
Airspeed.....65 KIAS (FL UP)
60 KIAS (FL DN)
Mixture.....IDLE CUT-OFF
Fuel Selector.....OFF
IgnitionOFF
Flaps.....AS REQUIRED
Master SwitchOFF

ENGINE FAILURE IN FLIGHT

Airspeed65 KIAS
Carburetor Heat.....ON
Fuel SelectorBOTH
Mixture.....FULL RICH
Ignition.....BOTH
Starter.....ENGAGE
If unable to restart engine, proceed with power off
landing procedure

POWER OFF LANDING

Airspeed65 KIAS (FL UP)
60 KIAS (FL DN)
Mixture.....IDLE CUT-OFF
ThrottleCLOSED
Fuel SelectorOFF
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)

AmmeterCONFIRM
Avionics.....OFF
Master Switch (ALT an BAT).....OFF
Master SwitchON
Low Voltage LightCHECK OFF
Avionics.....ON

If low-voltage light illuminates again:

AlternatorOFF
Nonessential Electric EquipmentOFF

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 2300 LBS

SHORT FIELD

CONDITIONS:

Flaps Up
Full Throttle Prior to Brake Release
Paved, Level, Dry Runway
Zero Wind

NOTES:

1. Short field technique as specified in Section 4.
2. Prior to takeoff from fields above 3000 feet elevation, the mixture should be leaned to give maximum RPM in a full throttle, static runup.
3. Decrease distances 10% for each 8 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
4. 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	
	LIFT OFF	AT 50 FT		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
2300	52	59	S.L.	720	1300	775	1390	835	1490	895	1590	960	1700
			1000	790	1420	850	1525	915	1630	980	1745	1050	1865
			2000	865	1555	930	1670	1000	1790	1075	1915	1155	2055
			3000	950	1710	1025	1835	1100	1970	1185	2115	1270	2265
			4000	1045	1880	1125	2025	1210	2175	1300	2335	1400	2510
			5000	1150	2075	1240	2240	1335	2410	1435	2595	1540	2795
			6000	1265	2305	1365	2485	1475	2680	1585	2895	1705	3125
			7000	1400	2565	1510	2770	1630	3000	1755	3245	1890	3515
8000	1550	2870	1675	3110	1805	3375	1945	3670	2095	3990			

CRUISE PERFORMANCE

CONDITIONS:
2300 Pounds
Recommended Lean Mixture

PRESSURE ALTITUDE FT	RPM	20°C BELOW STANDARD TEMP			STANDARD TEMPERATURE			20°C ABOVE STANDARD TEMP		
		% BHP	KTAS	GPH	% BHP	KTAS	GPH	% BHP	KTAS	GPH
2000	2500	---	---	---	75	116	8.4	71	115	7.9
	2400	72	111	8.0	67	111	7.5	63	110	7.1
	2300	64	106	7.1	60	105	6.7	56	105	6.3
	2200	56	101	6.3	53	100	6.1	50	99	5.8
	2100	50	95	5.8	47	94	5.6	45	93	5.4
<u>4000</u>	2550	---	---	---	75	118	8.4	71	118	7.9
	2500	76	116	8.5	71	115	8.0	67	115	7.5
	2400	68	111	7.6	64	110	7.1	60	109	6.7
	2300	60	105	6.8	57	105	6.4	54	104	6.1
	2200	54	100	6.1	51	99	5.9	48	98	5.7
2100	48	94	5.6	46	93	5.5	44	92	5.3	
<u>6000</u>	2600	---	---	---	75	120	8.4	71	120	7.9
	2500	72	116	8.1	67	<u>115</u>	<u>7.6</u>	64	114	7.1
	2400	64	110	7.2	60	109	6.8	57	109	6.4
	2300	57	105	6.5	54	104	6.2	52	103	5.9
	2200	51	99	5.9	49	98	5.7	47	97	5.5
2100	46	93	5.5	44	92	5.4	42	91	5.2	
8000	2650	---	---	---	75	122	8.4	71	122	7.9
	2600	76	120	8.6	71	120	8.0	67	119	7.5
	2500	68	115	7.7	64	114	7.2	60	113	6.8
	2400	61	110	6.9	58	109	6.5	55	108	6.2
	2300	55	104	6.2	52	103	6.0	50	102	5.8
2200	49	98	5.7	47	97	5.5	45	96	5.4	
10,000	2650	76	122	8.5	71	122	8.0	67	121	7.5
	2600	72	120	8.1	68	119	7.6	64	118	7.1
	2500	65	114	7.3	61	114	6.8	58	112	6.5
	2400	58	109	6.5	55	108	6.2	52	107	6.0
	2300	52	103	6.0	50	102	5.8	48	101	5.6
2200	47	97	5.6	45	96	5.4	44	95	5.3	
12,000	2600	68	119	7.7	64	118	7.2	61	117	6.8
	2500	62	114	6.9	58	113	6.5	55	111	6.2
	2400	56	108	6.3	53	107	6.0	51	106	5.8
	2300	50	102	5.8	48	101	5.6	46	100	5.5
	2200	46	96	5.5	44	95	5.4	43	94	5.3

LANDING DISTANCE

SHORT FIELD

CONDITIONS:

Flaps 40°
 Power Off
 Maximum Braking
 Paved, Level, Dry Runway
 Zero Wind

NOTES:

1. Short field technique as specified in Section 4.
2. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots
3. 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
2300	60	S.L.	495	1205	510	1235	530	1265	545	1295	565	1330
		1000	510	1235	530	1265	550	1300	565	1330	585	1365
		2000	530	1265	550	1300	570	1335	590	1370	610	1405
		3000	550	1300	570	1335	590	1370	610	1405	630	1440
		4000	570	1335	590	1370	615	1410	635	1445	655	1480
		5000	590	1370	615	1415	635	1450	655	1485	680	1525
		6000	615	1415	640	1455	660	1490	685	1535	705	1570
		7000	640	1455	660	1495	685	1535	710	1575	730	1615
8000	665	1500	690	1540	710	1580	735	1620	760	1665		