

SECTION V.

PERFORMANCE

TABLE OF CONTENTS

INTRODUCTION.....	5-3
RANGE ASSUMPTIONS.....	5-4
NOISE LIMITS.....	5-4
TEMPERATURE CONVERSION.	5-5
AIRSPPEED CALIBRATION	
PRIMARY STATIC SYSTEM, FLAPS AND GEAR UP, POWER ON.	5-6
PRIMARY STATIC SYSTEM, FLAPS AND GEAR DOWN	5-7
ALTERNATE STATIC SYSTEM.....	5-8
ALTIMETER CORRECTION	
PRIMARY STATIC SYSTEM, FLAPS AND GEAR UP AND POWER ON	5-9
PRIMARY STATIC SYSTEM, FLAPS AND GEAR DOWN	5-10
ALTERNATE STATIC SYSTEM	5-11
STALL SPEEDS vs ANGLE OF BANK	5-12
TAKEOFF DISTANCE	
NORMAL TAKEOFF DISTANCE	5-13
MAXIMUM PERFORMANCE TAKEOFF DISTANCE	5-14
NORMAL TAKEOFF DISTANCE - GRASS SURFACE.....	5-15
MAXIMUM PERFORMANCE TAKEOFF DISTANCE - GRASS SURFACE	5-16
RATE OF CLIMB	5-17
TIME, FUEL AND DISTANCE TO CLIMB	5-18
CRUISE POWER SCHEDULE	
AT 75%, 70% AND 65% POWER	5-20
AT 60%, 50% AND 45% POWER	5-21
SPEED POWER vs ALTITUDE	5-22

SECTION V
PERFORMANCE

TABLE OF CONTENTS (CONT.)

RANGE 2740 LBS (1243 KGS)	
RANGE 75% POWER	5-23
RANGE 65% POWER	5-24
RANGE 55% POWER	5-25
RANGE 45% POWER	5-26
ENDURANCE 2740 LBS (1243 KGS)	
ENDURANCE 75% POWER	5-27
ENDURANCE 65% POWER	5-28
ENDURANCE 55% POWER	5-29
ENDURANCE 45% POWER	5-30
LANDING DISTANCE	
NORMAL LANDING DISTANCE	5-31
MAXIMUM PERFORMANCE LANDING	
DISTANCE	5-32
NORMAL LANDING DISTANCE - GRASS	
SURFACE	5-33
MAXIMUM PERFORMANCE LANDING	
DISTANCE - GRASS SURFACE	5-34

INTRODUCTION

The purpose of this section is to present the owner or operator with information needed to facilitate planning of flights with reasonable accuracy.

The Performance Data and charts presented herein are calculated, based on actual flight tests with the airplane and engine in good condition, power control system properly set for critical altitude, using average pilot techniques.

The flight test data has been corrected to International Standard Atmosphere conditions and then expanded analytically to cover various airplane gross weights, operating altitudes, and outside air temperatures.

To obtain effect of altitude and OAT on aircraft performance:

1. Set altimeter to 29.92 and read "pressure altitude"
2. Using the OAT grid for the applicable chart read density corresponding effect of OAT on performance.

CAUTION

Be sure to return to local altimeter setting in calculating aircraft elevation above sea level.

VARIABLES

It is not possible to make allowances in the charts for varying levels of pilot technique or proficiency. Mechanical or aerodynamic changes are not authorized because they can affect the performance or flight characteristics of the airplane. The effect of such things as soft runways, winds aloft or airplane configuration changes must be evaluated by the pilot. However, the performance on the charts can be duplicated by following the stated procedures in a properly maintained standard M20J.

SECTION V PERFORMANCE

Examples are given to show how each chart is used.
The only charts with no example are those where such an example of use would be repetitive.

RANGE ASSUMPTIONS

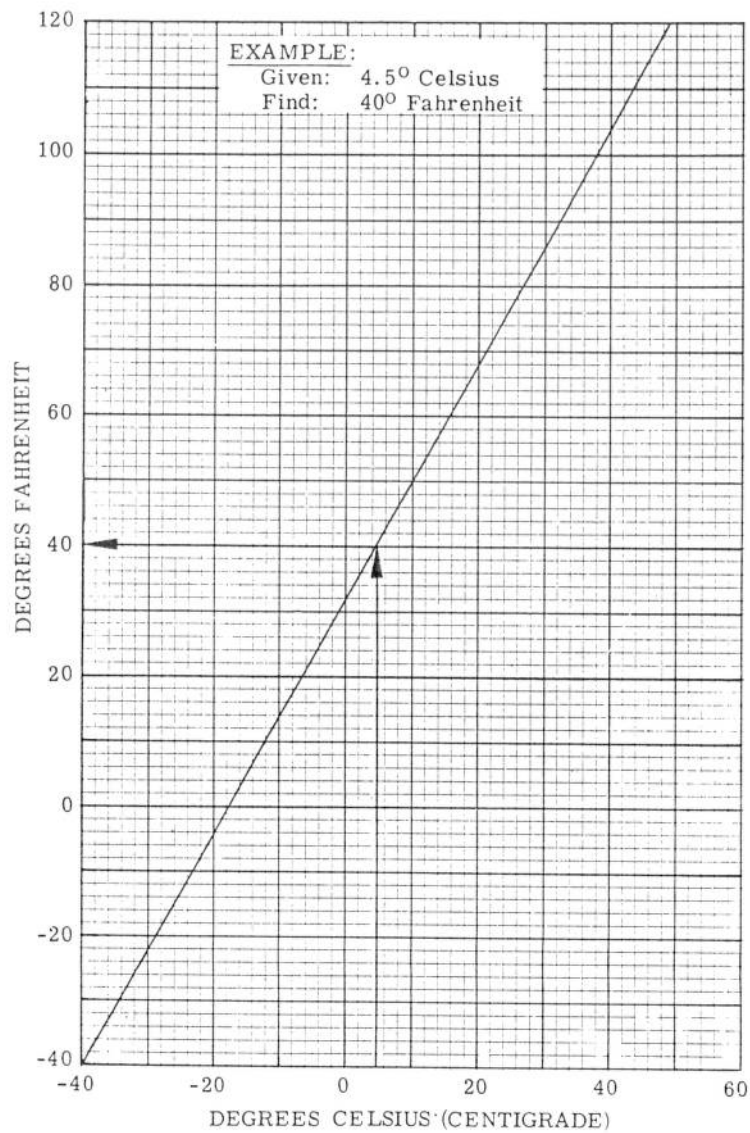
Range data climb allowance is based on climbing at maximum continuous power to cruise altitude.

No range increase due to descent from cruise altitude has been allowed in the range curves. Range reserves of 45 minutes at cruise power have been allowed on Range Data. Other conditions used in the Ranges shown are listed on each chart.

NOISE LIMITS

The certificated Noise Level for the Model M20J at 2740 pounds (1243 Kg.) maximum weight is 74 dB(A). No determination has been made by the Federal Aviation Administration that the noise levels of this airplane are or should be acceptable or unacceptable for operation at, into, or out of any airport.

TEMPERATURE CONVERSION



AIRSPEED CALIBRATION

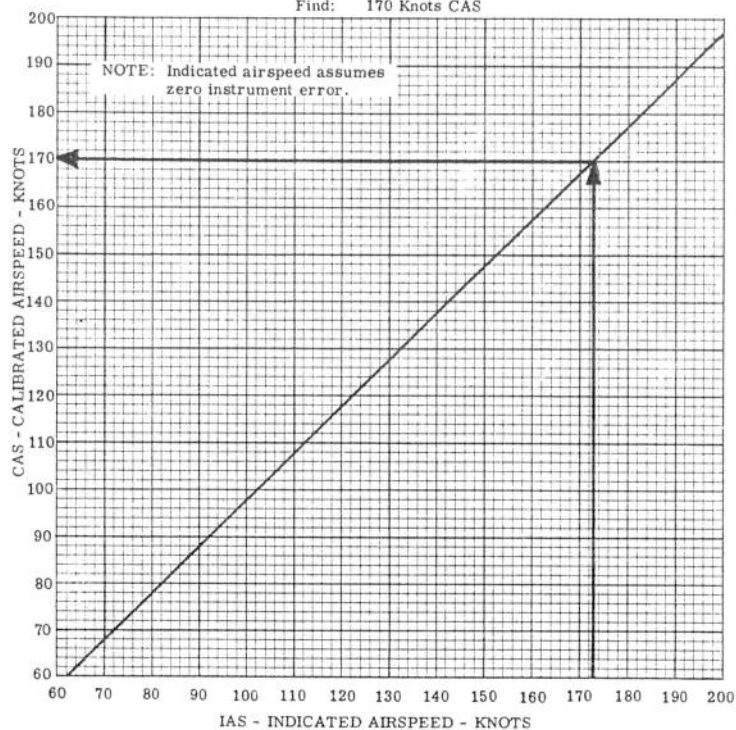
PRIMARY STATIC SYSTEM

FLAPS AND GEAR UP, POWER ON

EXAMPLE:

Given: 173 Knots IAS

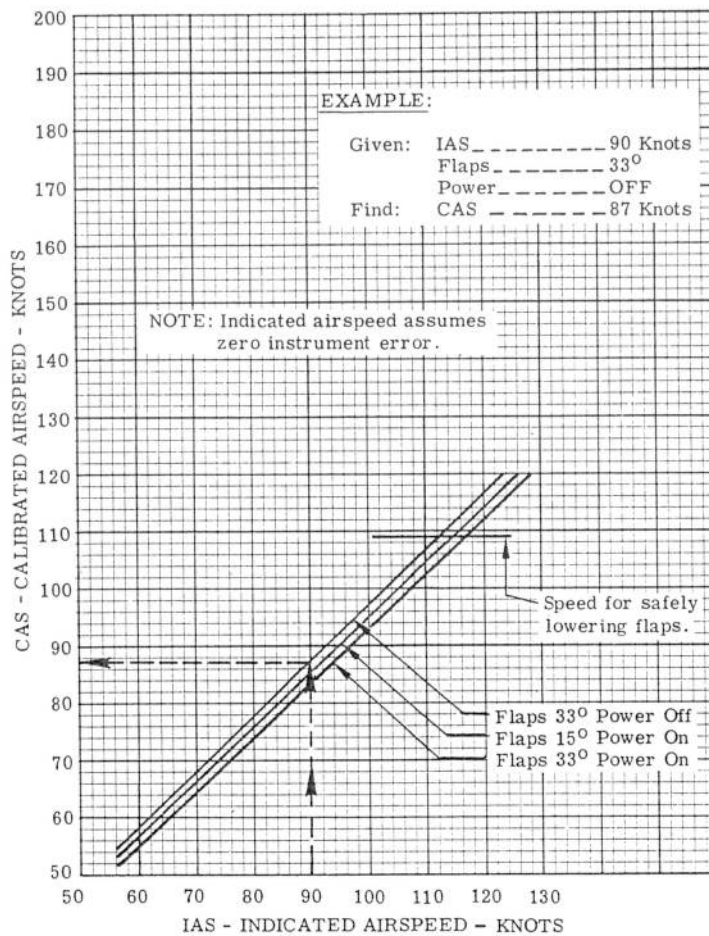
Find: 170 Knots CAS



AIRSPEED CALIBRATION

PRIMARY STATIC SYSTEM

FLAPS AND GEAR DOWN



REV A 9-23-82
 ISSUED 9-4-81

Mooney M20J

AIRSPEED CALIBRATION

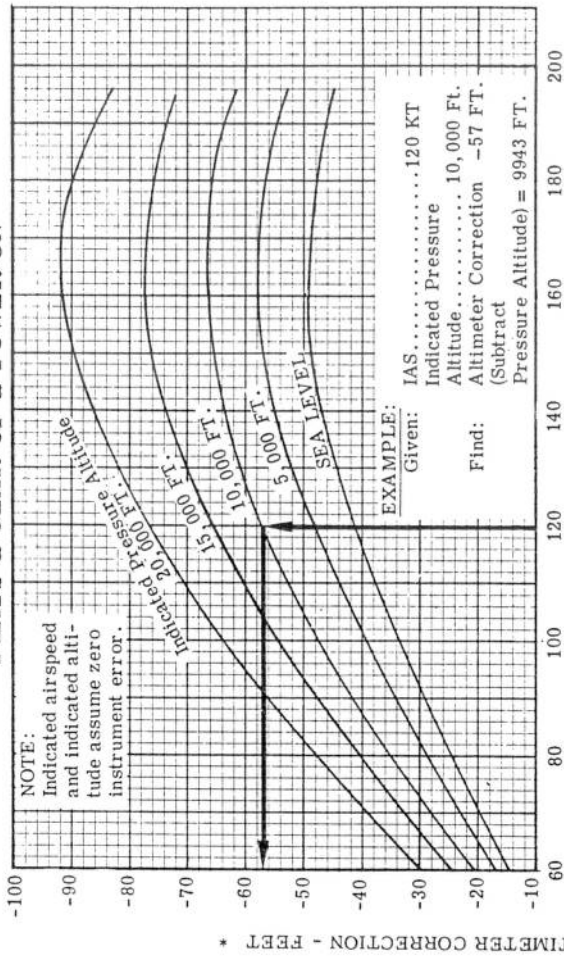
ALTERNATE STATIC SYSTEM

IAS KIAS	Gear & Flaps Up KIAS	Gear & Flaps Down (15°) KIAS	Gear & Flaps Down (33°) KIAS
61	--	-2	-3
70	-2	-3	-5
78	-3	-4	-7
87	-3	-6	-8
96	-4	-7	-10
104	-5	-7	-10
113	-5	-7	-10
122	-6	--	--
130	-6	--	--
139	-6	--	--
148	-6	--	--
156	-6	--	--
165	-3	--	--
174	-3	--	--
182	-4	--	--
191	-4	--	--
200	-5	--	--

The minus sign indicates subtraction of the given numbers from KIAS to obtain KCAS assuming zero instrument error

CONDITIONS: Storm Window and Vents: Closed
Defroster: ON
POWER: ON

ALTIMETER CORRECTION **PRIMARY STATIC SYSTEM** FLAPS & GEAR UP & POWER ON

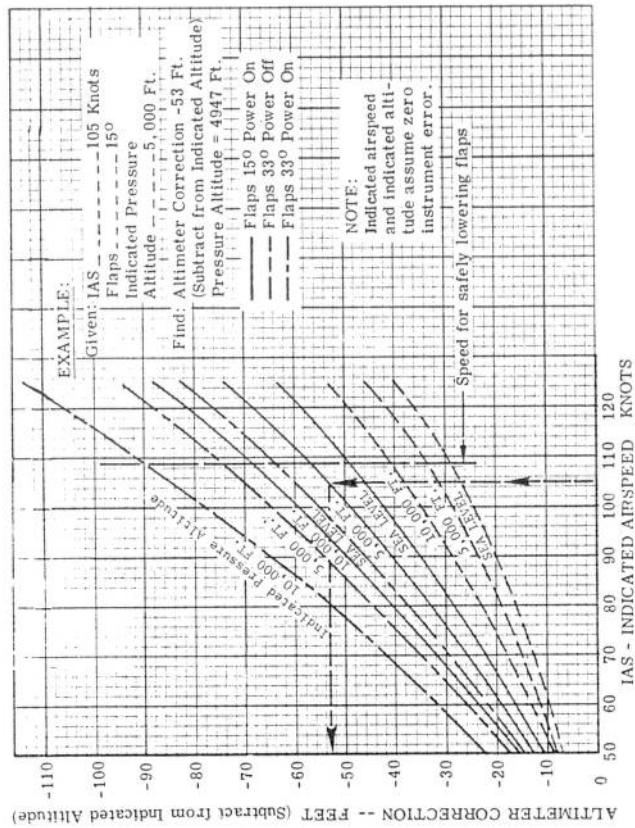


IAS - INDICATED AIRSPEED KNOTS
*The minus sign indicates subtraction of the altimeter correction
from indicated pressure to obtain corrected pressure altitude.

REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

ALTIMETER CORRECTION **PRIMARY STATIC SYSTEM** **FLAPS AND GEAR DOWN**



ALTIMETER CORRECTION ALTERNATE STATIC SYSTEM

CONDITIONS: Storm Window and Vents: Closed, Defroster: On, Power: On

KIAS	SEA LEVEL				10,000 FT.			
	Gear & Flaps Up		Gear & Flaps Down 150 330		Gear & Flaps Up		Gear & Flaps Down 150 330	
61	--	-10	-21	-4	-15	-28	-15	-28
70	-17	-20	-35	-21	--28	-39	--28	-39
78	-26	-37	-55	-36	-50	-76	-50	-76
87	-32	-54	-71	-43	-71	-99	-71	-99
96	-40	-55	-82	-55	-77	-102	-77	-102
104	-54	-63	-96	-73	-86	-130	-86	-130
113	-54	--	--	-84	--	--	--	--
122	-64	--	--	-87	--	--	--	--
130	-72	--	--	-99	--	--	--	--
139	-75	--	--	-101	--	--	--	--
148	-99	--	--	-134	--	--	--	--
156	-54	--	--	-73	--	--	--	--
165	-54	--	--	-73	--	--	--	--
174	-68	--	--	-94	--	--	--	--
182	-64	--	--	-83	--	--	--	--
191	-75	--	--	-103	--	--	--	--
200	-91	--	--	-125	--	--	--	--

NOTE: The minus sign indicates subtraction of the given numbers from the indicated pressure altitude to obtain pressure altitude assuming zero instrument error.

SECTION V
PERFORMANCE

REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

5-11

STALL SPEED vs ANGLE OF BANK

ASSOCIATED CONDITIONS:
Forward C.G.
Power Idle

GROSS WEIGHT	GEAR AND FLAP POSITION	ANGLE OF BANK								
		0°			30°			45°		
		KCAS	KLAS		KCAS	KLAS		KCAS	KLAS	
2740 LBS (1243 KGS)	GEAR UP, 0° Flaps 0°	59.0	61.0		63.5	65.5		70.0	72.0	
	GEAR DOWN, 0° Flaps 15°	56.5	60.0		60.5	64.0		67.0	71.0	
	GEAR DOWN, 0° Flaps 33°	53.0	54.0		57.0	59.0		63.0	65.0	
2500 LBS (1134 KGS)	GEAR UP, 0° Flaps 0°	56.5	58.5		60.5	62.5		67.0	69.0	
	GEAR DOWN, 0° Flaps 15°	54.0	57.0		58.0	61.5		64.0	68.0	
	GEAR DOWN, 0° Flaps 33°	50.5	51.5		54.5	55.5		60.0	61.5	
2300 LBS (1032 KGS)	GEAR UP, 0° Flaps 0°	54.0	56.0		58.0	60.0		64.5	66.5	
	GEAR DOWN, 0° Flaps 15°	52.0	55.0		55.5	58.5		61.5	65.0	
	GEAR DOWN, 0° Flaps 33°	48.5	49.0		52.0	52.5		57.5	60.0	

NOTE:

Up to 290 feet altitude loss may occur during stalls at maximum weight.

EXAMPLE:

Weight	2500 LBS (1134 KGS)
Landing Gear	Down
Flaps	15°
Angle of Bank	45°
Stall Speed	64.0 KCAS (68.0 KIAS)

SECTION V PERFORMANCE

NORMAL TAKEOFF DISTANCE

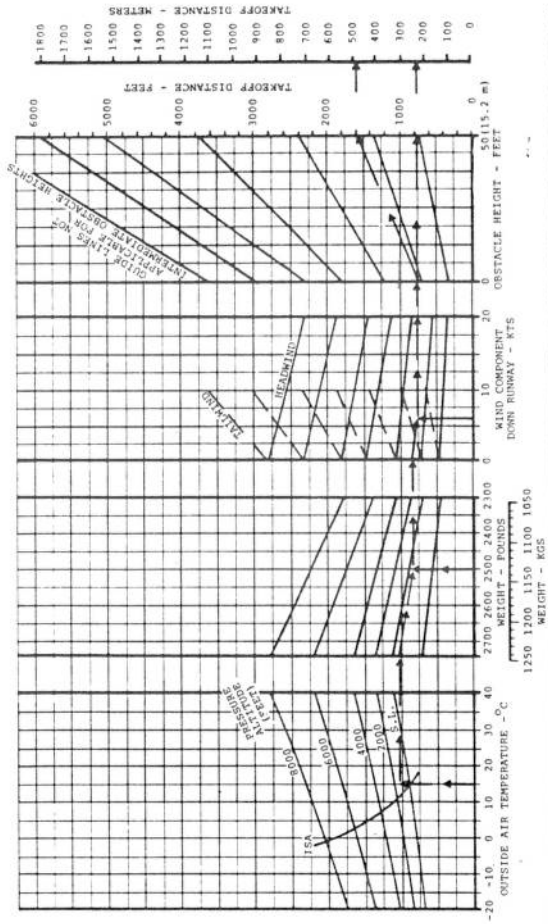
TAKEOFF WEIGHT - LBS (KGS)	TAKEOFF SPEED - KIAS	SPEED AT 50 FT - KIAS
2740 (1243)	63	71
2500 (1134)	58	66
2300 (1043)	54	62

- NOTE 1) MAXIMUM DEMONSTRATED GROSSMIND VELOCITY IS 11 KNOTS
2) CONDITIONS OF HIGH HUMIDITY CAN RESULT IN AN INCREASE OF
UP TO 10% TO THE TAKEOFF DISTANCE

ASSOCIATED CONDITIONS
POWER FULL THROTTLE,
2700 RPM (BEFORE
BRAKE RELEASE)
LANDING GEAR EXTENDED
UNTIL OBSTACLE CLEARED
WING FLAPS 15°
CONFL FLAPS FULL OPEN
RUNWAY SURFACE PAVED,
LEVEL & DRY
MIXTURE LEAN FOR
SMOOTH OPERATION

EXAMPLE: →

DAY 15°C
PRESSURE 1500 FT.
ALTITUDE 1500 FT.
WEIGHT 2500 LBS. (1134 KGS)
HEADWIND COMPONENT 6 KTS
GROUND ROLL 750 FT. (229 m)
TOTAL TAKEOFF DISTANCE
(150 FT. OBSTACLE) 1575 FT. (480 m)



REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

MAXIMUM PERFORMANCE TAKEOFF DISTANCE

TAKEOFF WEIGHT - LBS (KG)	TAKEOFF SPEED KIAS	SPEED AT 50 FT. - KIAS
2740 (1243)	42	56
2500 (1134)	60	53
2300 (1043)	57	49

- NOTE: 1) MAXIMUM DEMONSTRATED CROSSWIND VELOCITY IS 11 KNOTS.
2) CONDITIONS OF HIGH HUMIDITY CAN RESULT IN AN INCREASE OF UP TO 10% TO THE TAKEOFF DISTANCE.

ASSOCIATED CONDITIONS:

POWER: FULL THROTTLE
2500 RPM
(Before brake release)

LANDING GEAR: DOWN UNTIL
OBSTACLE CLEARED

WING FLAPS: 15°

CONTROL SURFACES: FULL OPEN

ENGINE: PITCH, LEAN, Mixture

MIXTURE: LEAN FOR
SMOOTH OPERATION

EXAMPLE: →

QAT: 15°C

PRESSURE ALTITUDE: 1500 FT.

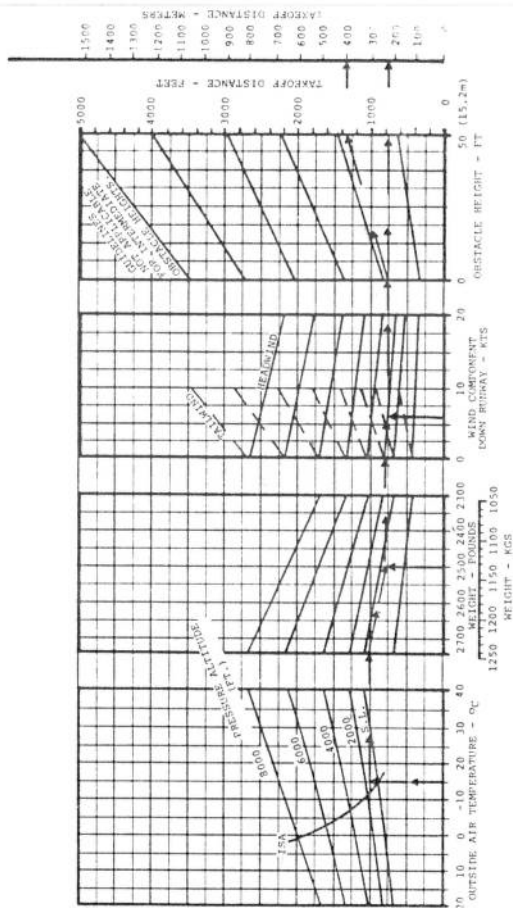
WEIGHT: 2500 LBS. (1134 KG)

HEADWIND COMPONENT: 6 KTS.

GROUND ROLL: 750 FT. (229 m)

TOTAL TAKEOFF DISTANCE: 1125 FT. (343 m)

150 FT. OBSTACLE

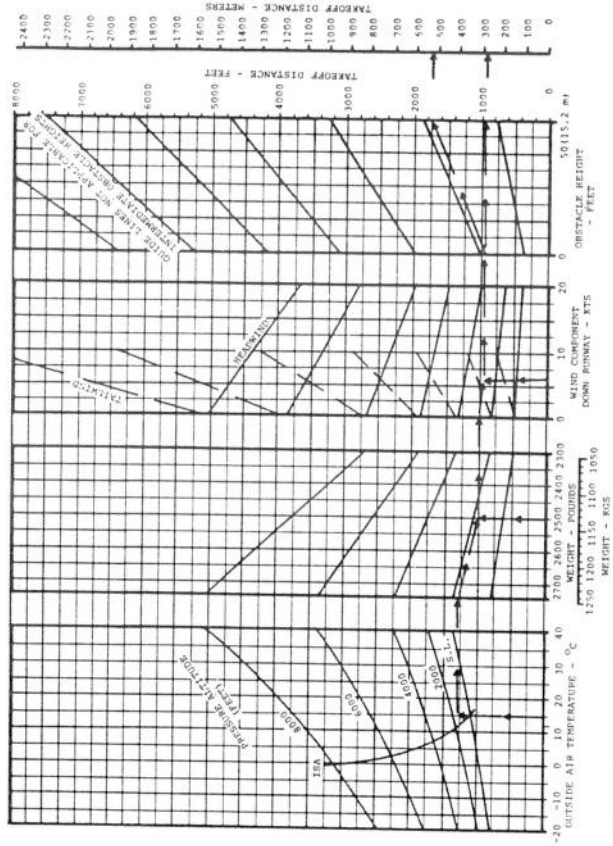


SECTION V PERFORMANCE

NORMAL TAKEOFF DISTANCE-GRASS SURFACE

TAKEOFF WEIGHT - LBS (KGS)	TAKEOFF SPEED 50 FT - KIAS	SPEED AT 100 FT - KIAS
2240 (1024)	63	71
2500 (1134)	60	68
2700 (1233)	58	65

NOTE: 1) MAXIMUM DEMONSTRATED CROSSWIND VELOCITY IS 11 KNOTS.
2) CONDITIONS OF HIGH HUMIDITY CAN RESULT IN AN INCREASE OF UP TO 10% TO THE TAKEOFF DISTANCE.



ASSOCIATED CONDITIONS

POWER: FULL THROTTLE
2700 RPM (BEFORE
BRAKE RELEASE)
LANDING: DOWN UNTIL
OBSTACLE CLEARED
WING FLAPS: 15°
COMB. FLAPS: FULL OPEN
RUNWAY: SHORT LEVEL
SURFACE
MIXTURE: LEAN FOR
SMOOTH OPERATION

EXAMPLE: → 15°C
PRESSURE: 1500 FT
ALTITUDE: 2500 LBS
WEIGHT: (1114 KGS)
HEADWIND: 8 KTS
COMPONENT: 925 FT
ROLL: (28.2m)
TOTAL TAKEOFF: 1750 FT
DISTANCE (50 FT (53m))

REV A 9-23-82
ISSUED 9-4-81

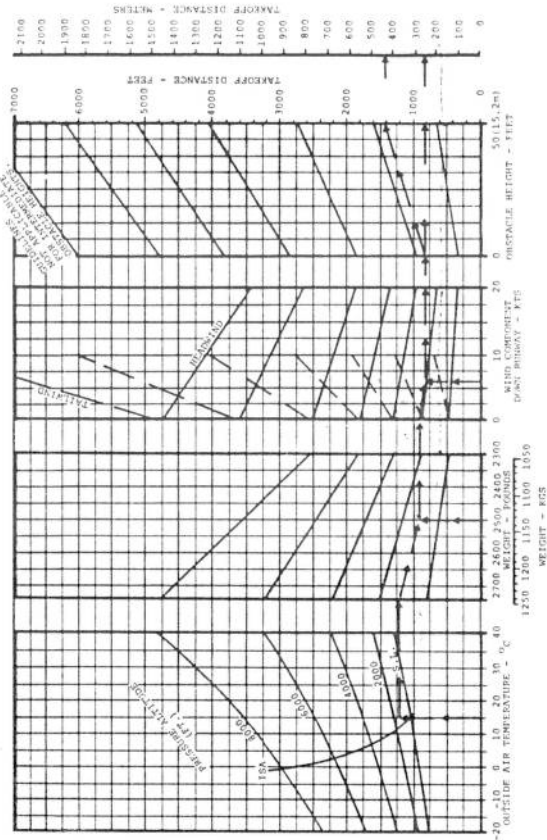
Mooney M20J

SECTION V PERFORMANCE

MAXIMUM PERFORMANCE TAKEOFF DISTANCE - GRASS SURFACE

TAKEOFF WEIGHT - LBS. (KGS.)	TAKEOFF SPEED IAS	SPEED AT 50 FT. - KIAS
2740 (1243)	62	66
2500 (1134)	57	60

NOTE: 1) MAXIMUM DEMONSTRATED CROSSWIND VELOCITY IS 11 KTS.
2) CONDITIONS OF HIGH HUMIDITY CAN RESULT IN AN INCREASE OF UP TO 10% TO THE TAKEOFF DISTANCE.



ASSOCIATED CONDITIONS:

POWER FULL THROTTLE 2700 RPM
(Before brake release)
LANDING GEAR DOWN UNTIL
OBSOLETE
WING FLAPS FULL OPEN
COOL FLAPS FULL OPEN
SURFACE DRY GRASS
MIXTURE SMOOTH OPERATION
LEAN FOR
SMOOTH OPERATION

EXAMPLE:

OAT 13°C
PRESSURE 1500 FT.
ALTITUDE 2500 LBS.
WEIGHT (1134 KGS)
HEADWIND 6 KTS.
GROUND POLL 820 FT.
(250 m)
TOTAL TAKEOFF
DISTANCE 1800 FT.
(549 m)
(150 FT. OBSTACLE) (427 m)

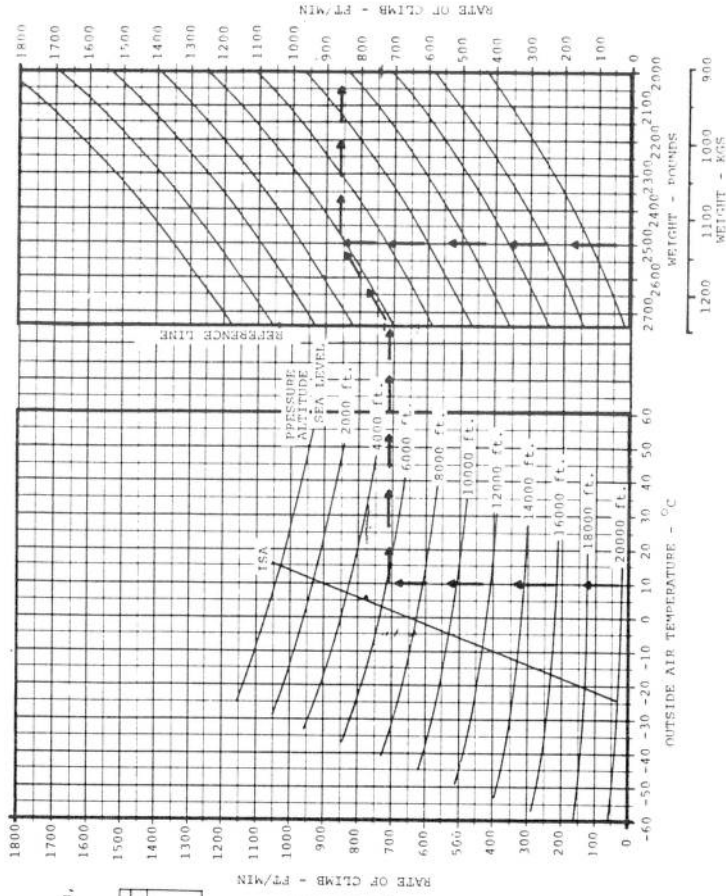
SECTION V PERFORMANCE

RATE OF CLIMB

GEAR UP, FLAPS UP, CONFL FLAPS OPEN, RAM AIR ON,
2700 rpm, FULL THROTTLE, FULL RICH

WEIGHT LBS. (KGS)	CLIMB SPEEDS - KIAS				
	S.L.	5000	10000	15000	20000
2740 (1243)	88	85	81	79	74
2300 (1043)	81	78	74	72	68
2000 (907)	76	73	69	67	64

EXAMPLE: →	Pressure Altitude	6000 FT
GWT	10°C	
Weight	2500 LBS (1134 KGS)	
Rate of Climb	860 FT/MIN	
Climb Speed	81 KIAS	



REV C 3-7-84
ISSUED 9-4-81

Mooney M20CJ

TIME, FUEL AND DISTANCE TO CLIMB

Associated Conditions for the Time, Fuel and
Distance to Climb graph on the following page:

Climb Speed: V_y from Climb Performance graph
on the preceeding page.

Power: 2700 RPM, Full Throttle

Mixture: Full Rich

Ram Air: On

Cowl Flaps: Full Open

Landing Gear: Up

Wing Flaps: Up

Fuel Density 6.0 Lbs./Gal. (.72 Kg/liter)

NOTE:

1. Distances shown are based on zero wind.
2. Add 9 LBS. of fuel for start, taxi and takeoff.

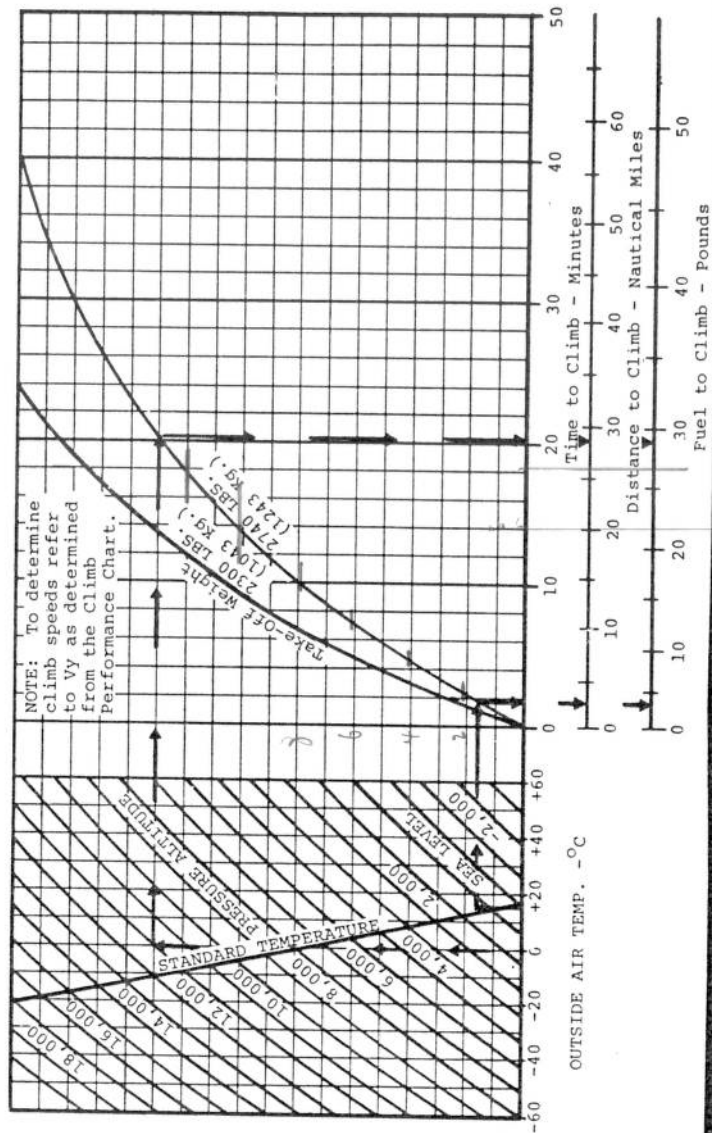
EXAMPLE:

Given: Initial Pressure Altitude/OAT 1500 Ft./15°C
Final Pressure Altitude/OAT 12000 Ft./0°C
Takeoff Weight - 2740 lbs./1243 Kg.

Find: Time to Climb (20.2 - 1.7) 18.3 Minutes
Distance to Climb (28.5 - 2.0) 26.5 Naut. Mi.
Fuel to Climb (29.0 - 3.0) 26.0 Lbs.

SECTION V PERFORMANCE

TIME, FUEL, & DISTANCE TO CLIMB



14 min
20 nmi
77 lbs

REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

CRUISE POWER SCHEDULE AT 75%, 70%, & 65% POWER

1. BEST POWER IS 100°F RICH OF PEAK EGT
2. ECONOMY CRUISE IS 25°F RICH OF PEAK EGT
- EXAMPLE:
CRUISE ALT. 6000 FT.
OAT 10°C
POWER 65%
RPM 2600
M.P. 22.0 (7°C correction)

Pressure Altitude Feet Std. Day	Fuel Flow	RPM Best Economy Best Power	75% POWER (150 BHP)				70% POWER (140 BHP)				65% POWER (130 BHP)			
			2400	2600	2700	2400	2600	2700	2400	2600	2700			
			10.3	10.5	10.8	9.7	9.9	10.2	9.2	9.4	9.6			
			12.0	12.3	12.5	11.3	11.7	11.9	10.5	11.0	11.2			
			MANIFOLD PRESSURE - INCHES OF MERCURY											
Standard Temperature														
S.L.	15°C	27.0	24.5	23.5	25.5	23.0	22.0	24.0	21.7	21.0				
2000	11°C	26.8	24.4	23.3	25.1	23.0	22.0	23.6	21.6	20.6				
4000	7°C	24.4	24.4	23.2	24.9	22.9	21.8	23.3	21.5	20.5				
6000	3°C	24.1	23.1	24.4	22.7	21.7	22.8	21.3	20.4					
8000	-1°C		23.6		22.7	21.7		21.2	20.4					
10000	-5°C					21.4		21.1	20.2					
12000	-9°C													
14000	-13°C													

NOTE: ADD .4" M.P. FOR EACH 10°C OAT ABOVE STANDARD DAY TEMPERATURE. SUBTRACT .4" M.P. FOR EACH 10°C OAT BELOW STANDARD DAY TEMPERATURE. IF OAT ABOVE STANDARD PRECLUDES OBTAINING THE DESIRED M.P., USE THE NEXT HIGHER RPM/M.P. WITH APPROPRIATE TEMPERATURE CORRECTION TO M.P.

CRUISE POWER SCHEDULE AT 60%, 55%, & 45% POWER

1. BEST POWER IS 100°F RICH OF PEAK EGT
2. ECONOMY CRUISE IS 25°F RICH OF PEAK EGT

		60% POWER (120 BHP)					55% POWER (110 BHP)					45% POWER (90 BHP)				
Pressure Altitude Feet Std Day	RPM	2200	2400	2600	2700		2200	2400	2600	2700		2200	2400	2600	2700	
	Best	8.4	8.6	8.8	9.1		7.8	8.1	8.3	8.6		6.5	6.8	7.0	7.3	
	Economy	9.8	10.0	10.4	10.7		9.2	9.4	9.8	10.0		7.7	8.0	8.3	8.6	
	Power															
MANIFOLD PRESSURE - INCHES OF MERCURY																
Standard Temperature		24.2	22.5	20.5	19.5		22.5	21.0	19.0	18.0		21.0	19.0	17.5	16.3	15.4
15°C																
11°C		24.0	22.0	20.2	19.3		22.2	20.4	18.8	18.0		20.5	18.7	17.2	16.0	15.3
7°C		23.7	21.7	20.1	19.2		22.0	20.2	18.7	17.9		20.4	18.6	17.1	15.8	15.3*
3°C		23.6	21.3	19.9	19.1		22.0	19.8	18.6	17.8		20.4	18.3	16.8	15.7	15.2
-1°C			21.3	19.8	19.0		22.0	19.8	18.6	17.8		20.3	18.2	16.5	15.7	15.1
-5°C			21.0	19.8	18.8			19.5	18.3	17.6		18.2	16.5	15.6	15.0	
-9°C				19.6	18.8			19.3	18.2	17.5		18.0	16.4	15.5	14.9	
-13°C									17.9	17.3		16.2	15.4	14.7		

NOTE: ADD .4" M.P. FOR EACH 10°C OAT ABOVE STANDARD DAY TEMPERATURE. SUBTRACT .4" M.P. FOR EACH 10°C OAT BELOW STANDARD DAY TEMPERATURE. IF OAT ABOVE STANDARD PRECLUDES OBTAINING THE DESIRED M.P., USE THE NEXT HIGHER RPM/M.P. WITH APPROPRIATE TEMPERATURE CORRECTION TO M.P.

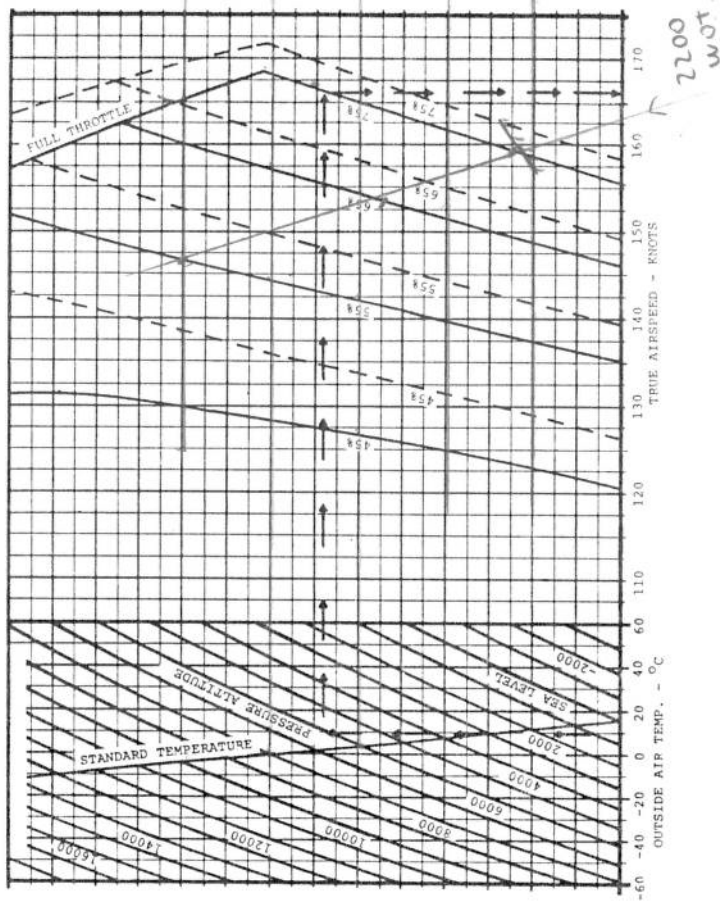
SECTION V PERFORMANCE

SPEED POWER vs ALTITUDE

GEAR UP, FLAPS UP,
COWL FLAPS CLOSED

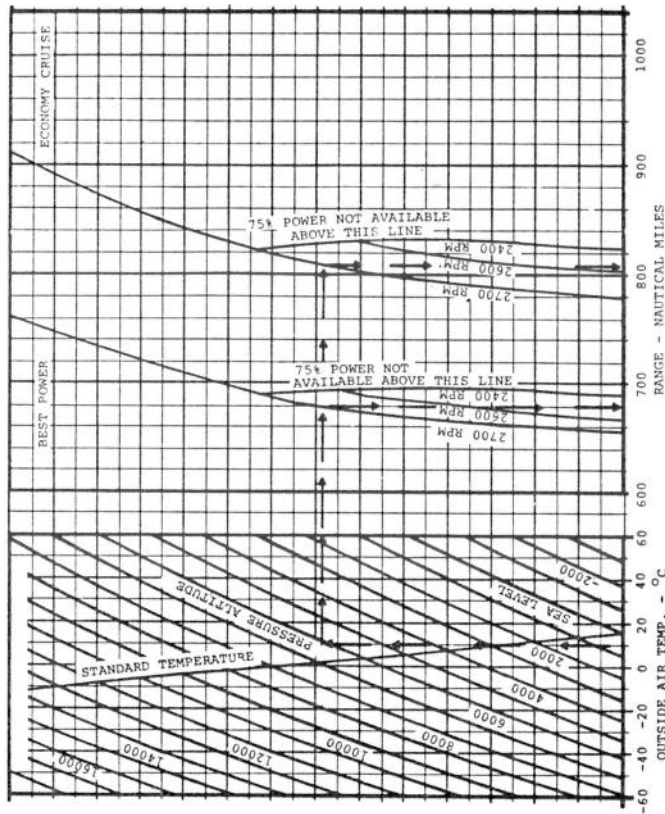
— 2740 LBS
(1243 KGS)
--- 2300 LBS
(1043 KGS)

EXAMPLE:
GROSS WEIGHT 2740 LBS
(1243 KGS)
CRUISE PRESSURE ALTITUDE 6000 FT.
CRUISE OAT 10°C
POWER 75%
TRUE AIRSPEED 166 KTS



SECTION V PERFORMANCE

RANGE 75% POWER - 2740 LBS (1243 KGS)



CLEAN CONFIGURATION
 0.00 GPM FUEL FLOW (53.3 IMP. GAL.)
 ZERO WIND/COM. FLAPS CLOSED
 RANGE INCLUDES WARMUP, TAXI,
 TAKEOFF, CLIMB, PLUS 45 MIN.
 RESERVE @ CRUISE POWER.

EXAMPLE: → 6000 FT.
 CRUISE PRESS. ALT. 10°C
 CRUISE OUT 75%
 *POWER 2700 RPM
 *RPM 660 N.M.
 RANGE, BEST POWER 810 N.M.
 RANGE, ECON. CRUISE

*MP FOR 2700 RPM @ 75% POWER FROM
 CRUISE POWER SCHEDULE.

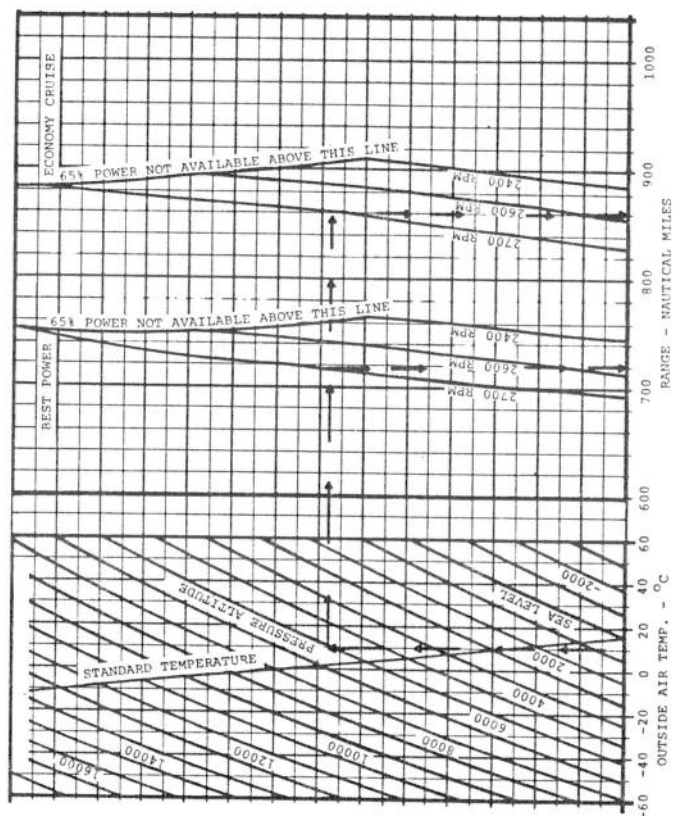
REV A 9-23-82
 ISSUED 9-4-81

Mooney M20J

5-23

SECTION V PERFORMANCE

RANGE 65% POWER - 2740 LBS (1243 KGS)



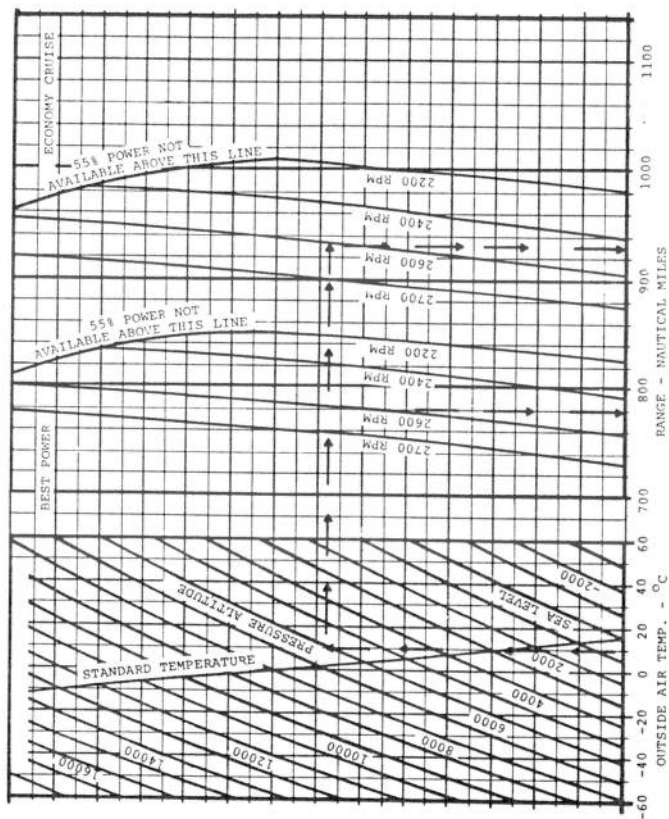
CLEAN CONFIGURATION
64 GAL. USABLE FUEL (51.3 IMP. GAL.)
ZERO WIND, COML FLAPS CLOSED
RANGE INCLUDES WARMUP, TAXI,
TAKEOFF, CRUISE, CLIMB, 15 MIN.
RESERVE & CRUISE POWER

EXAMPLE: → 6000 FT.
CRUISE ALT 10°C
CRUISE ON 65%
*POWER 2700 RPM
*RPM 719 N.M.
RANGE, BEST POWER 860 N.M.
RANGE, ECON. CRUISE

*MP FOR 2700 RPM @ 65% POWER
FROM CRUISE POWER SCHEDULE

SECTION V PERFORMANCE

RANGE 55% POWER - 2740 LBS (1243 KGS)



CLEAN CONFIGURATION
64 GAL. USABLE FUEL (53.3 IMP. GAL.)
ZERO WIND, CONFL FLAPS CLOSED
RANGE INCLUDES WARMUP, TAXI,
TAKEOFF, CLIMB PLUS 45 MIN.
RESERVE & CRUISE POWER

EXAMPLE: ↑
CRUISE ALT. 6000 FT.
CRUISE ONT 10°C
POWER 55%
RPM 2600 RPM
RANGE, BEST POWER 782 N.M.
RANGE, ECON. CRUISE 935 N.M.

*MP FOR 2600 RPM @ 55% POWER
FROM CRUISE POWER SCHEDULE.

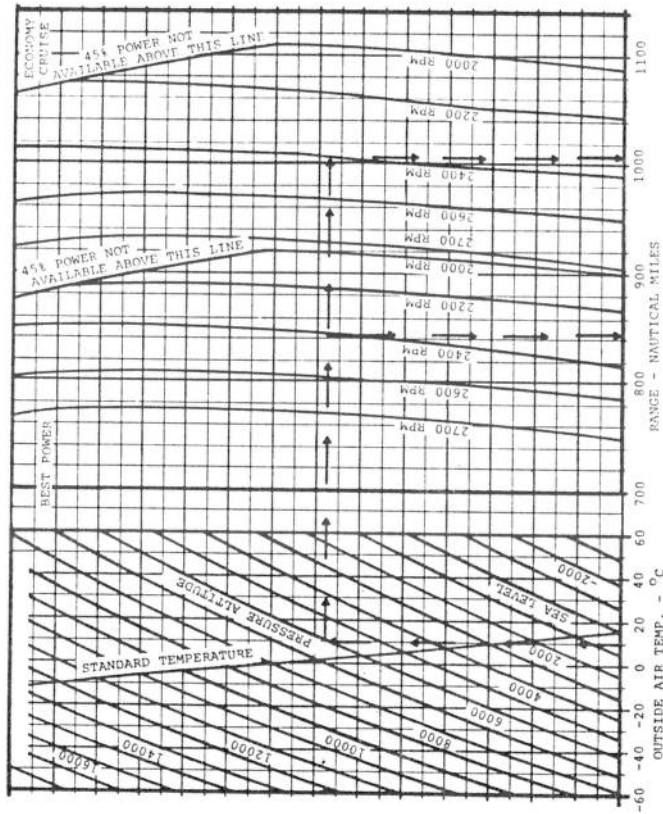
REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

5-25

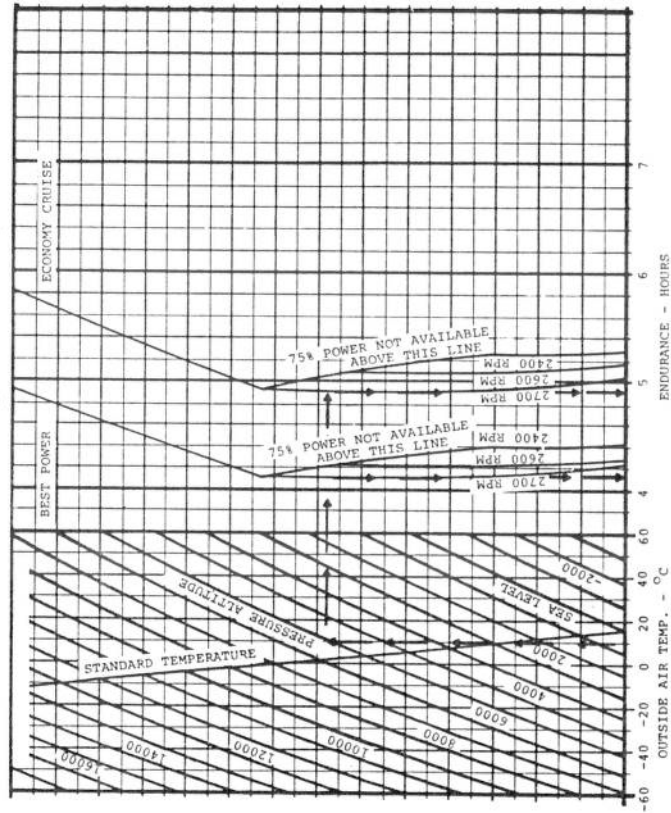
SECTION V PERFORMANCE

RANGE 45% POWER - 2740 LBS(1243 KGS)



SECTION V PERFORMANCE

ENDURANCE 75% POWER - 2740 LBS (1243 KGS)



CLEAN CONFIGURATION
64 GAL. USABLE FUEL (53.3 IMP. GAL.)
COML FLAPS CLOSED, ZERO WIND
ENDURANCE INCLUDES WARMUP, TAXI,
TAKEOFF CLIMB PLUS 45 MIN.
RESERVE @ CRUISE POWER

EXAMPLE:
↑
CRUISE ALT 6000 FT.
CRUISE OAT 10°C
POWER 75%
RPM 2700 RPM
ENDURANCE, BEST POWER 4.10 HRS.
ENDURANCE, ECON. CRUISE 4.90 HRS.
*MP FOR 2700 RPM @ 75% POWER FROM
CRUISE POWER SCHEDULE.

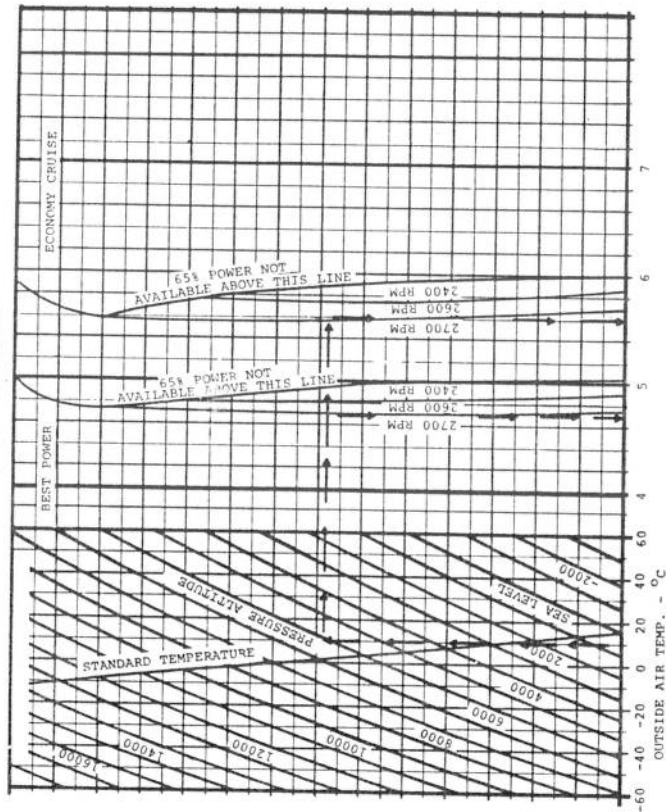
REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

5-27

SECTION V
PERFORMANCE

ENDURANCE 65% - 2740 LBS (1243 KGS)



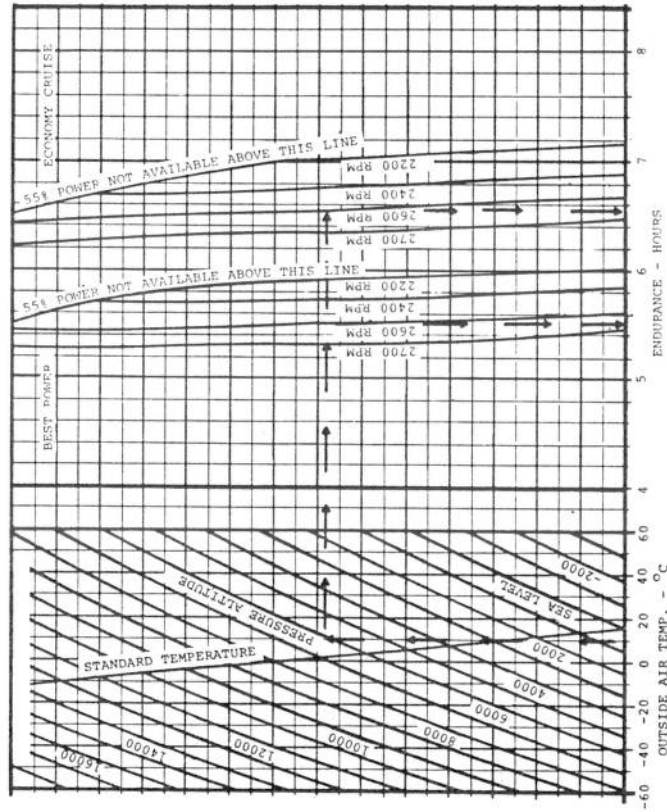
CLEAN CONFIGURATION
64 GAL. USABLE FUEL (53.3 IMP. GAL.)
COWL FLAPS CLOSED, ZERO WIND
ENDURANCE INCLUDES WARMUP, TAXI,
TAKEOFF, CLIMB PLUS 45 MIN.
RESERVE & CRUISE POWER

EXAMPLE: →
CRUISE PRESS ALT 6000 FT.
CRUISE OAT 10°C
*POWER 65%
*RPM 2700 RPM
*ENDURANCE, BEST POWER 4.70 HRS.
*ENDURANCE, ECON. CRUISE 5.60 HRS.

*MP FOR 2700 RPM @ 65% POWER FROM
CRUISE POWER SCHEDULE.

SECTION V PERFORMANCE

ENDURANCE 55% POWER - 2740 LBS (1243 KGS)



CLEAN CONFIGURATION
64 GAL. US GAL. FUEL (53.3 IMP. GAL.)
FLAPS DOWN, COM. FLAPS CLOSED
ENDURANCE INCLUDES WARMUP, TAXI,
TAKEOFF, CLIMB PLUS 45 MIN.
RESERVE 8 CRUISE POWER

EXAMPLE: →
CRUISE ALT 6000 FT.
CRUISE ON 10°C
*POWER 52%
*RPM 2600 RPM
ENDURANCE, BEST POWER 5.52 HRS.
ENDURANCE, ECON. CRUISE 6.55 HRS.

*MP FOR 2600 RPM @ 55% POWER FROM
CRUISE POWER SCHEDULE

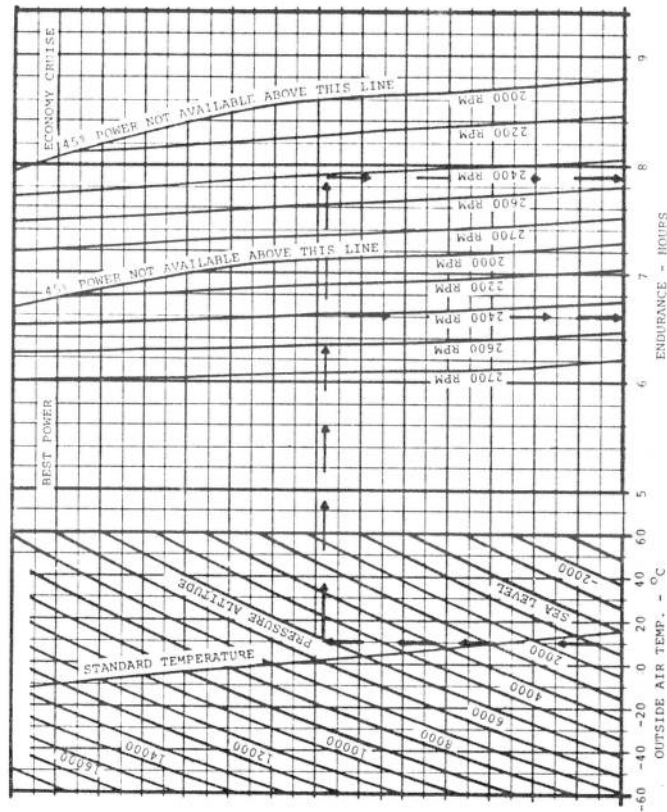
REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

5-29

SECTION V PERFORMANCE

ENDURANCE 45% POWER - 2740 LBS (1243 KGS)



CLEAN CONFIGURATION
64 GAL. USABLE FUEL (53.3 IMP. GAL.)
ZERO WIND, COM. FLAPS CLOSED
ENDURANCE INCLUDES WARMUP,
TAXI, TAKEOFF, CLIMB PLUS 45 MIN.
RESERVE & CRUISE POWER

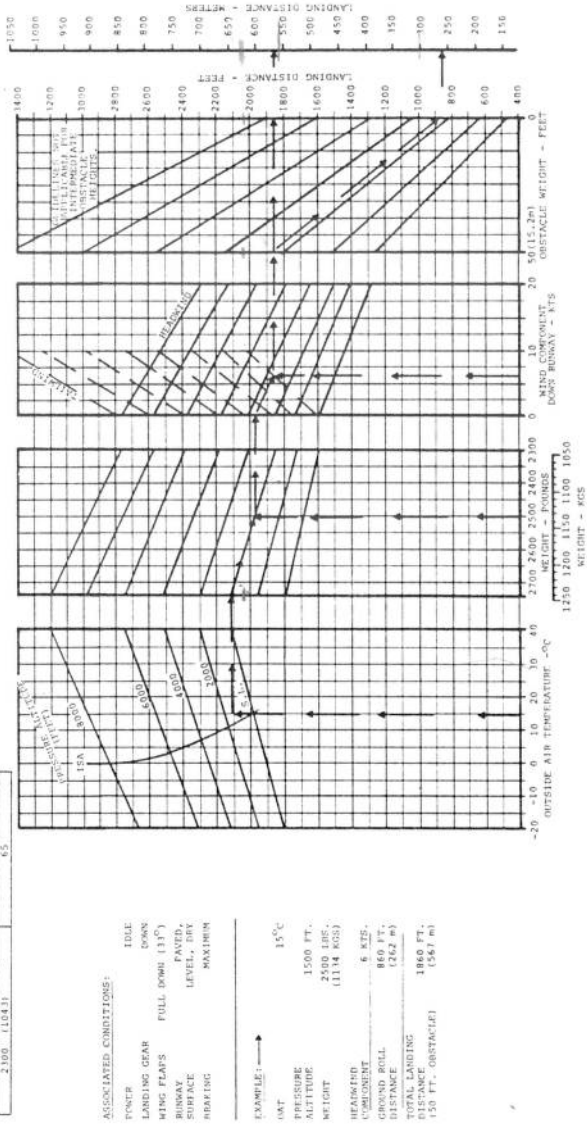
EXAMPLE:
CRUISE ALT 5000 FT.
CRUISE ONT 14°C
CRUISE ONT 45°C
*POWER 2400 RPM
*RPM 2400 RPM
ENDURANCE, BEST POWER 6.42 HRS.
ENDURANCE, ECON. CRUISE 7.91 HRS.
*MP FOR 2400 RPM @ 45% POWER FROM
CRUISE POWER SCHEDULE.

SECTION V PERFORMANCE

NORMAL LANDING DISTANCE

LANDING WEIGHT - LBS (KGS)	APPROACH SPEED - KTS
2150 (1243)	71
2400 (1093)	71
2600 (1183)	65

NOTE: MAXIMUM DEMONSTRATED CROSSWIND VELOCITY IS 11 KNOTS.



REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

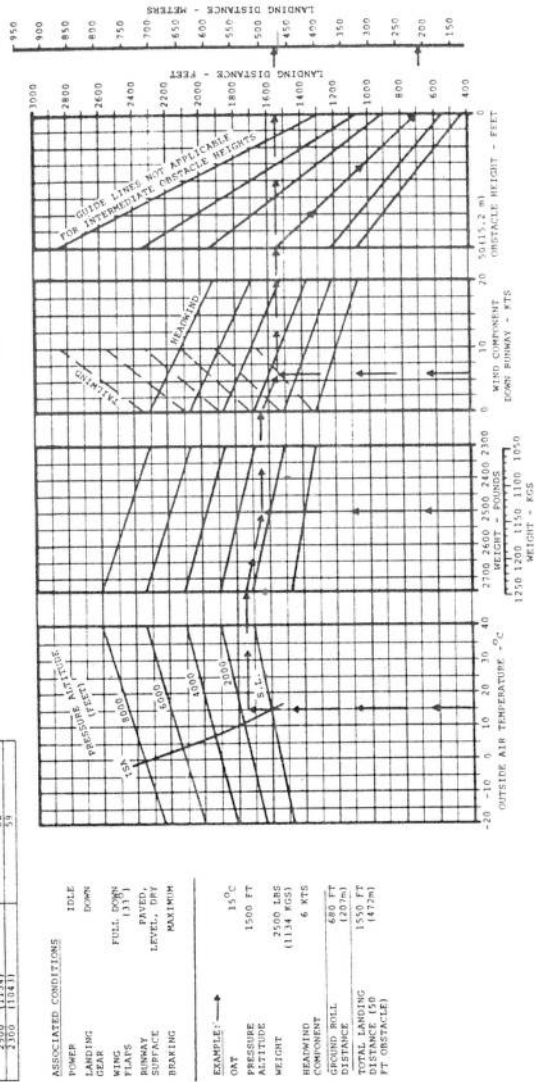
5-31

SECTION V PERFORMANCE

MAXIMUM PERFORMANCE LANDING DISTANCE

LANDING WEIGHT - LBS KGS	APPROACH SPEED - KIAS
2740 (1243)	53
2500 (1134)	52
2300 (1043)	51

NOTE: MAXIMUM DEMONSTRATED CROSSWIND VELOCITY IS 11 KNOTS



SECTION V PERFORMANCE

NORMAL LANDING DISTANCE-GRASS SURFACE

LANDING WEIGHT - LBS (KGS)	APPROACH SPEED - KIAS
2700 (1243)	71
2500 (1134)	69
2300 (1043)	67

ASSOCIATED CONDITIONS:

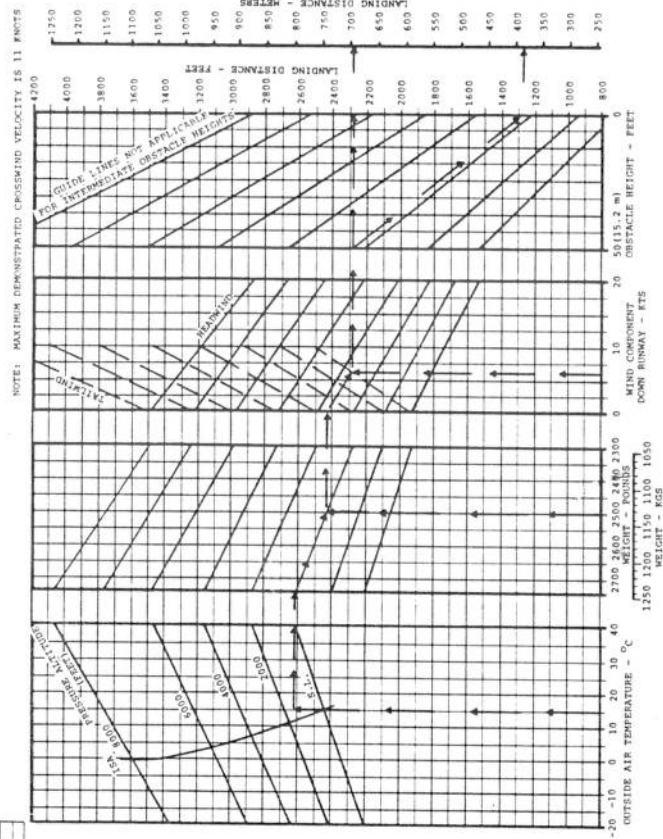
POWER
LANDING
CLAP
WING FLAPS
RUNWAY
SURFACE
BRAKING

idle
down
full down (13°)
short, dry
grass, level
maximum

EXAMPLE:

OAT
PRESSURE
ALTITUDE
WEIGHT
HEADWIND
COMPONENT
GROUND ROLL
DISTANCE
TOTAL LANDING
DISTANCE
(50 FT. OBSTACLE)

15°C
1500 FT.
2500 LBS.
(1134 KGS)
6 KTS.
1270 FT.
(387 m)
2280 FT.
(695 m)



REV A 9-23-82
ISSUED 9-4-81

Mooney M20J

