Mooney Aircraft, Inc.	Kerrville, Texas
MCONEY MODEL TWENTY C ACTUAL WEIGHT & BALANCE DATA	nerryllie, lexas
F.A.A. Identification No Serial No	Date
1. WEIGHT LIMITS:	
Maximum weight is 2575 pounds. It is the responsibility of the airplane owner and of the pilot to plant is properly loaded. The empty weight, empty weight C.G., and noted below for this airplane as delivered from the factory. If the ment have been altered, refer to the latest Approved Repair and Altered-337) for this information.	useful load are
2. (.G. LIMITS: C.G. Divelope: 2100 lbs. at 42" (15.0% MAG) to 2575 lbs. at 46.5" (2575 lbs. at 49.0" (26.8% MAC). Straight line variation between research with landing gear extended.	22.6% MAC) to spective limits.
3. EMPTY WEIGHT & WEIGHT C.G. LOCATION:	

Actual weight empty, as weighed. (Includes residual oil and unusuable fuel: 3.38 lbs. at 48.4" lain.)

Item	Weight
Right Main Wheel	IDATIM I
Left Main Wheel	
Nose Wheel	
Weight Empty as Weighed	# #

Horizontal Datum is Centerline of Nose Gear Support Bolts (Sta. 0) and is 33.0" forward of Wing L.J. at Wing Sta. 59.25 (inboard edge of stall strip). MAC is 59.2". L.J. of MAC is 33.1" aft Datum. Leveling means: Door sill (parallel to thrust line). Spirit level is used to level.

Computations:

C G.	Forward of Main Wheels	=	x/	=	=
C.G.	aft Datum =	-	_ =	_";	
C.G.	% MAC = (33.1)/59.2 =	/ 59.	,2 =	

The Empty Weight C.G. location is with the landing gear extended and with both front seats in the forward location. (40.0"). Each seat weighs 17.0 pounds. Maximum seat travel is 7.5" in 6 equal adjustments. Noment change per seat in aft position, (47.5") is 128 in.lbs.

MOONEY AIRCRAFT. IN	10	1							
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Kerrville, Texas

MOONEY M2CC & M2OD ACTUAL WEIGHT & BALANCE DATA

F.A.A. Ide	ntification	No .	Date	
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4. EQUIPMENT LIST:

The following equipment was installed in this airplane as delivered from the factory and is included in the Empty Weight:

Check Items Installed

	No.	\ul_+	Arm
	4. Hartzell Constant Speed Propeller	Wt.	
{ }	(a) Hartzell HC-C2YK Hub with 1/7666-2 Blades (b) Hartzell Spinner Assembly 835-20	53.75	(-30.16)
{ }	(b) Hartzell Spinner Assembly 835-20 (c) Hartzell Governor D-1-4	3.25 4.5	$\begin{pmatrix} -29.18 \\ +3.6 \end{pmatrix}$
()	5. McCauley Constant Speed Propeller		
} }	(a) McCauley 2D34C53-A Hub W/74E-O Blade (b) McCauley D-2808 Dome, D-3148 Bulkhead	49.25	(-30.31)
()	& Fillet Assembly	3.25	(-29.18)
()	(c) Woodward 210345 Propeller Governor	3.0	(-29.18) (+4.0)
(x)	(a) One Engine-Driven Pump, AC Type AH	1.5	(+1,2)
(x)	(b) One Electric Pump, Bendix 476087	1.5	$\begin{pmatrix} +1.2 \\ +19.0 \end{pmatrix}$
(x)	(b) Harrison 8526250	2.0	(190)
(x)	103. Carburetor Air Filter, Air-Maze 13219	2.0	(-18.0) (-17.0)
(x)	103. Carburetor Air Filter, Air-Maze 13219 104. Starter		
(v)	(c) Delco-Remy 1109689 201. Two Main Wheel-Brake Assemblies, 6.00-6	17.8	(-18.0)
(^/	(c) Cleveland Model DHB-3	19.1	(64.5)
	Wheel Assembly No. 40-24		No. Consequences
(x)	Drake Assembly No. 35-5 202.(a) Two Main Wheel 6-Ply Rating Tires, 6.00-6	17.0	(+64.5)
	Type III, with Regular Tubes	1710	(.04.5)
(x)	205. One Nose Wheel, 5.00-5, Type III (b) Cleveland Model 40-33	A	(20)
(x)	206.(a) One Nose Wheel 4-Ply Rating Tire, 5.00-5	4 7	$\left\{ \begin{array}{c} -2.0 \\ -2.0 \end{array} \right\}$
	Type III, with Regular Tube		
(x)	301.Electric Generator (c) 50 AMP, Delco-Remy 1101915	16.6	(-19.5)
(x)	302.(c) Auto-Lite Battery R-35	28.0	(-19.5)
(x)	303. Voltage Regulator	0.0	(17 0)
(x)	(c) 50 AMP, Delco-Remy 1119224 401.FAA Approved Airplane Flight Manual dated	2.0	(+7.0)
	10-20-61 for M20C or 10-15-62 for M20D		(0)
(x)	601.Stall Warning Indicator, Safe-Flight Model 164R 602.Vacuum System	1.0	(+28.0)
()	(a) In Accordance With Mooney Dwg. 610012 (8614)	6.0	(+2.0)
()	603. Instruments		(110 0)
} }	(a) Horizon Gyro (b) Directional Gyro	4.5	(+19.0 (+20.0)
()	(c) Clock	.4	(+23.8)
} }	(d) Outside Air Temperature Gauge	1.5	(+33.0)
()	(e) Rate of Climb Indicator	1.5	(744.3)

MOONEY AIRCRAFT, INC.		Kerrville	, Texas
MOONEY M2OC & M2OD ACTUAL WEIGHT & BALANCE DATA			
F.A.A. Identification No		Date	
4. EQUIPMENT LIST (Con't.)			
() (f) Electric Turn & Bank Indicator () 604. Cigarette Lighter () 605. Rotating Beacon, Grimes, In Accordance With Mooney Dwg. 950018 (8234) () 606. Dual Controls () 607. () 608. () 609. () 610. () 611. () 612.		and the second second	(+21.4) (+21.0) (+163.0) (+14.0)
613.EMPTY WEIGHT AFTER INSTALLATION OF OPTIONAL EQUIPMENT:			
	Weight	Arm	Moment
Weight Empty as Weighed		-	110merro
Computed Empty Weight & C.G.			
*Added after Production Weight & Balance **Rebuilt Instruments ***Removed after Production Weight & Balance			

MOONEY MODEL TWENTY C ACTUAL WEIGHT & BALANCE DATA

Maximum Allowable Weight at " = 2100 + 106 (- 42.0 = 1bs. B. Most Forward Loading with Full Tank Item Weight Arm Moment Weight Empty 0il (2 Gals.) 15 7.4 -111 Front Seats moved aft " each	F.A.A. Identification No		Date	
A. Most Forward at any Weight Item Weight Empty Oil (2 Gals.) Front Seats moved aft	4 LIETCHT & DATANCE LOADING COMPUTATIONS			
Time				
Weight Empty Col (2 Gals.) 15 7.4 -111		Weight	A rom	Moment
15 7.4 -111		WEIGHT	AIII	Homent
Front Seats moved aft		15	7 1	_111
Pailot (7 • •	ada ala ala
Pallot or Passenger (
Weight & C.G. Maximum Allowable Weight at " = 2100 + 106 (Pilot or Passenger (Position of Seat)			**********
Weight & C.G. Maximum Allowable Weight at " = 2100 + 106 (Fuel (15.0 Gals. Minimum in Tanks)		48.4	4356
Maximum Allowable Weight at	Weight & C.G.			
Item	Maximum Allowable Weight at " = 2100 + 106 (42.0 =		lbs.
Item	D. Most Forward Loading with Pull Maul			
Weight Empty Oil (2 Gals.) Front Seats moved aft		Title di miliati		17
Oil (2 Gals.) Front Seats moved aft _ " each Frilot (Position of Seat)		weight	Arm	Moment
Front Seats moved aft		3.5	77 1	777
Pilot ((• 4	-111
Pilot or Passenger (-
Fuel (48.0 Gals. Maximum in Tanks) 288 48.4 13.939 Weight & C.G. Ibs. Ibs. C. Most Forward Loading at Gross Weight Item Weight Arm Moment Weight Empty Weight Arm Moment Oil (2 Gals.) 15 7.4 -111 Front Seats moved aft "each Pilot (Position of Seat) 170 Position of Seat) 170 Pilot or Passenger (Position of Seat) 170 Position of Seat) 170 Fuel (Maximum) 48.4 48.4 48.4 Rear Passengers (2) 340 70.7 24,038 Baggage 93.0 Weight & C.G. 2575 lbs. at 46.5 Weight Arm Moment Lem Weight Empty Weight Empty Weight Empty 15 7.4 -111 Oil (2 Gals.) 15 7.4 -111 Front Seats moved aft "each		475-65-65		-
Weight & C.G. Maximum Allowable Weight at " = 2100 + 106 (101	12 020
Maximum Allowable Weight at " = 2100 + 106 (- 42.0) = 1bs. C. Most Forward Loading at Gross Weight Item		200	40.4	13,939
C. Most Forward Loading at Gross Weight Item Weight Empty Oil (2 Gals.) Front Seats moved aft		-42.0)	=	lbs.
Item	The second secon	-		
Weight Empty 15 7.4 -111 Front Seats moved aft	C. Most Forward Loading at Gross Weight			
Oil (2 Gals.) 15 7.4 -111 Front Seats moved aft " each - - Pilot (Position of Seat) 170 - Pilot or Passenger (Position of Seat) 170 - Fuel (Maximum) 48.4 - Rear Passengers (2) 340 70.7 24,038 Baggage 93.0 Weight & C.G. 2575 lbs. at 46.5 D. Most Rearward Loading at Gross or any Weight Weight Arm Moment Weight Empty - - Oil (2 Gals.) 15 7.4 -111 Front Seats moved aft " each - - -	Item	Weight	Arm	Moment
Front Seats moved aft " each Pilot (
Pilot (Oil (2 Gals.)	15	7.4	-111
Pilot or Passenger (Position of Seat) 170 Fuel (Maximum) 48.4 Rear Passengers (2) 340 70.7 24,038 Baggage 93.0 Weight & C.G. 2575 lbs. at 46.5 D. Most Rearward Loading at Gross or any Weight Weight Arm Moment Weight Empty 0il (2 Gals.) Front Seats moved aft " each 15 7.4 -111	Front Seats moved aft each			
Fuel (Maximum) Rear Passengers (2) Baggage Weight & C.G. Allowable Weight & C.G. 2575 lbs. at 46.5 D. Most Rearward Loading at Gross or any Weight Item Weight Empty Oil (2 Gals.) Front Seats moved aft " each		170	-	-
Rear Passengers (2) Baggage Weight & C.G. Allowable Weight & C.G. 2575 lbs. at 46.5 D. Most Rearward Loading at Gross or any Weight Item Weight Empty Oil (2 Gals.) Front Seats moved aft " each	Pilot or Passenger (Position of Seat)	170		
Baggage 93.0 Weight & C.G. Allowable Weight & C.G. 2575 lbs. at 46.5 D. Most Rearward Loading at Gross or any Weight Item Weight Empty Oil (2 Gals.) Front Seats moved aft " each				
Weight & C.G. Allowable Weight & C.G. 2575 lbs. at 46.5 D. Most Rearward Loading at Gross or any Weight Item Weight Empty Oil (2 Gals.) Front Seats moved aft " each		340		24,038
Allowable Weight & C.G. 2575 lbs. at 46.5 D. Most Rearward Loading at Gross or any Weight Item Weight Empty Oil (2 Gals.) Front Seats moved aft " each Weight & T.4 -111	Marie and the same		93.0	
D. Most Rearward Loading at Gross or any Weight Item Weight Empty Oil (2 Gals.) Front Seats moved aft " each			-	
Item Weight Empty Arm Moment Oil (2 Gals.) 15 7.4 -111 Front Seats moved aft	Allowable Weight & C.G. 2575 lbs. at 46.5			
Item Weight Empty Arm Moment Oil (2 Gals.) 15 7.4 -111 Front Seats moved aft	D. Most Rearward Loading at Gross or any Weight			
Weight Empty Oil (2 Gals.) Front Seats moved aft " each		Weight.	Arm	Moment.
Oil (2 Gals.) Front Seats moved aft " each	Burnario quantità (MI	WOLLAND		HOMOTTO
Front Seats moved aft " each		15	7.4	-111
Pilot or Passenger (Position of Seat) 170			-	***************************************
Fuel (Gals.)		-1-	48.4	
Rear Passengers (2) 340 70.7 24,038		340	District Control of the	24,038
	Baggage (Maximum)	244		,.,.,.
	Weight & C.G.			
	Allowable Weight & C.G. 2575 lbs. at 49.0"			

NOTE: These computations cover the various combinations of allowable loading in the Loading Schedule on Page 5.

Mooney Aircraft, Inc. MOONEY MODEL TWENTY C ACTUAL WEIGHT & BALANCE DATA F.A.A. Identification No. 7. USEFUL LOAD: Maximum Useful Load is 2575 lbs. Useful Load Items are: Weight Item Arm Qil, 2 Gallons -7.4 15 170 Pilots, (2) each 36.5 to 44.0 Fuel, 48 Gallons Maximum 288 48.4 170 Rear Passengers, (2) each 70.7 120 Baggage Maximum 93.0 Hatrack Maximum 114 8. LOADING SCHEDULES: The rollowing loading schedules are based on the computations from Page 4 and are furnished to enable the pilot to insure that the airplane is properly loaded before flight. All loading combinations shown are within the Approved Loading Envelope. See Section 6D, Weight and Balance Loading Computations, for most aft front seat positions with loadings #4 and #5 at maximum baggage. No other loadings are permissible unless substantiated by additional computations. A 10 pound hatrack load may be included with Loading #1, #2, or #3. Loading #1. Pilot Alone (Not Limited) Loading #2. Pilot & Copilot (Not Limited) Loading #3. Pilot, Copilot & 1 Passenger (Not Ltd.) 120 max. #4. Pilot, Copilot & 2 Pass. 110 J.00 90 80 70 60 BA 50 40 30 Pilot, Copilot, 2 Passengers, & 20 10 lbs. on hatrack 10 180 190 200 210 220 230 240 250 260 270 280 Full Fuel ALLOWABLE FUEL AT TAKE-OFF (POUNDS) Loading #4: take-off fuel with ___ # baggage = 1880 - ___ - empty wt. = ___ baggage with full fuel = 1592 - empty wt. = ___ lbs. (max) Loading #5: take-off fuel with ___ # baggage* = 1870 - ___ - empty wt. = ___ _lbs. (max) baggage with full fuel = 1582 - empty wt. = ___

*Note: Max. baggage for loading #5 is 15 lbs. less than max. baggage for loading #4.

Retrised 7-16-62