

FAA APPROVED

A I R P L A N E F L I G H T M A N U A L

MAULE AIRCRAFT CORPORATION  
JACKSON, MICHIGAN

Model M-4 - 210 Series

(Includes Models M-4-210, M-4-210S, M-4-210C and M-4-210T)

Airplane Serial No. \_\_\_\_\_

FAA Ident. Number \_\_\_\_\_

(THIS DOCUMENT MUST BE KEPT IN THE AIRPLANE AT ALL TIMES)

APPROVED

FOR

*John W. Husley*  
\_\_\_\_\_  
JOHN A. CARRAN, Chief  
Engineering & Manufacturing Br.  
Central Region

DATE: March 15, 1966

MAULE MODEL M-4-120 SERIES  
AIRPLANE FLIGHT MANUAL

LOG OF REVISIONS

Rev. No.	Page Number (s)	Description	Date of Revision	Approved By*
1	3 & 4	Install header tank and fuel system modifications	11/18/64	<i>J. W. Hurley</i>
2	All	Include approval of Models M-4-210, M-4-210S, M-4-210C and M-4-210T airplanes.	3/15/66	<i>J. W. Hurley</i>

REV. 2 AFM

\* For Chief, Engineering & Manufacturing Branch, Central Region

FAA Approved  
Date: 3/15/66

MAULE AIRCRAFT CORPORATION

AIRPLANE FLIGHT MANUAL

**MAULE M-4-210IC**

**LOG OF SUPPLEMENTS**

2  
3  
4

SUPP. NO.	NO. OF PAGES	DESCRIPTION	APPROVAL DATE
1	1	Flight operation with <b>Right Rear Door removed</b> - STC SA258CE. (M-4-210)	09/24/64
2	3	Installation of <b>Fli-Lite 3000 MK IIIA Skis</b> - Maule drawing <b>9079A</b> . (09/25/64) Revised	10/07/65
3	1	Installation of Federal Model <b>A2000A Skis</b> . (09/28/64) Revised	10/07/65
-	1	Installation of <b>Landes-Airglas L-2500A Main Skis</b> . (STC SA222AL)	12/05/66
4	2	Installation of Federal Model <b>C3000H Skis</b> .	09/20/67
5	2	Installation of Federal Model <b>C2200H Skis</b> .	02/09/68
6	1	Installation of <b>Fleet Model 2500 Floats</b> . *	07/23/68
-	7	Installation of <b>CAP Model 62-2000 Floats</b> . (Requires Page 3 of Spec. S-14)	11/21/66
7	1	Installation of <b>EDO Model 248A2440 or 248B2440 Floats</b> - Maule STC SA609CE. * (11/29/68) Revised	09/19/69
8	2	Operation of aircraft with <b>Wing Tip Auxiliary Fuel Tanks installed</b> .	06/04/75
9	1	Installation of Continental IO-360- <u>D</u> engine - <b>Maule SL#42</b> . (Applicable to s/n's 1001-1045, 1001C-1085C)	01/15/80
10	2	<b>Preflight Inspection</b> added for Airplane Flight Manuals dated 9/24/64 and 3/15/66.	05/01/84
11	2	Flight operation with <b>Right Rear Passenger Door removed</b> . (M-4-210C)	09/13/96
12	2	Flight operation with <b>either one (not both) of the Front Doors removed</b> . (M-4-210C)	09/13/96
-	5	Installation of <b>Apollo MX20 Multi-Function Display</b> - Maule Drawing 7265A.	08/15/02
-	8	Installation of <b>GARMIN GNC-420 (GPS/COMM) System</b> per Maule Drawing <b>7251A</b> .	06/30/03
-	9	Installation of <b>GARMIN GNS-530 (GPS/NAV/COMM) System</b> per Maule Drawing <b>7253A</b> .	06/30/03
-	4	Installation of <b>GARMIN GTX-330 Mode S Transponder Traffic Information System (TIS)</b> per Maule Drawing <b>7255A</b> .	06/30/03

\*For s/n's 1001-1035 with Maule SL#7 and #15 complied with; 1036-1045, 1001C-1074C, 1079C, 1080C with SL#15 complied with and 1075C-1078C, 1081C-1117C.

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## MAULE MODEL M-4-210

## AIRPLANE FLIGHT MANUAL

## I. LIMITATIONS

The following limitations must be observed in the operation of this airplane:

- |                             |  |
|-----------------------------|--|
| A. Engine                   | Continental Model IO-360A  |
| B. Engine Limits            | Take Off (5 Min) 2800 RPM<br>(210 HP) METO POWER 2800<br>RPM @ 26.5Hg (195 HP)   |
| C. Fuel                     | 100/130 Minimum Grade Aviation<br>Gasoline   |
| D. Propellers               | McCauley D2A3467/76C-2   |
| E. Power Plant Instruments: |  |
| *Cylinder Head Temp         | Green Arc: 100° F-460° F<br>(Normal Operating Range)<br>Red Radial: 460 F  |
| Manifold Pressure           | Green Arc: 14.5-26.5 In Hg<br>(Normal Operating Range)<br>Yellow Arc (Caution) 26.6-29.0"<br>Hg<br>Red Radial 29.0 In Hg |
| Oil Temperature             | Green Arc: 75-225° F<br>(Normal Operating Range)<br>Yellow Arc (Caution): Below<br>75° F<br>Red Radial: 225° F           |
| Oil Pressure                | Green Arc: 30-60 psi<br>(Normal Operating Range)<br>Yellow Arc (Caution), 10-30 psi<br>Red Radials: 10 and 60 psi        |
| Tachometer                  | Green Arc: 1800-2800 RPM<br>(Normal Operating Range)<br>Red Radial: 2800 RPM   |

\*NOTE This instrument is optional.

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## AIRPLANE FLIGHT MANUAL

## F. Airspeed Limits: (Calibrated Airspeed)

Never Exceed (VNE)	180 mph (156K) (Red Radial)
Caution Range	145-180 mph (126-156K) (Yellow Arc)
Design Cruising Speed (VC)	145 mph (126K)
Normal Operating Range	60-145 mph (52-126K) (Green Arc)
Max. Design Maneuvering Speed (VP)	125 mph (109K)
Max. Flap Extension Speed (VP)	90 mph (82K)
Flap Operating Range	53-90 mph (46-82K) (White Arc)

NOTE: Airspeed Instrument Markings and their Significance:

1. Radial RED line marks the never exceed speed, which is the maximum safe airspeed.
2. YELLOW Arc on indicator denotes range of speeds in which operations should be conducted with caution and only in smooth air.
3. GREEN Arc denotes normal operating speed range.
4. WHITE Arc denotes speed range in which flaps may be safely lowered.

G. Maneuvers: Normal Category maneuvers only are approved.

H. Flight Load Factors: (At max. gross weight of 2100 lbs.)

Maneuver: Positive: 3.8g	Negative: 1.5g
Flaps Extended: 1.9g	

WARNING: Use controls with caution above 125 mph (109K) CAS.

I. Maximum Weight 2100 lbs.

J. Center of Gravity Limits..... $\left\{ \begin{array}{l} +15.0 \\ +11.0 \end{array} \right\}$  to  $\left\{ \begin{array}{l} +23.0 \\ +23.0 \end{array} \right\}$  at 2100 lbs.  
or less

Straight Line variation between points given  
Datum: Wing Leading Edge

NOTE: It is the responsibility of the airplane owner and the pilot to insure that the airplane is properly loaded.

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## AIRPLANE FLIGHT MANUAL

## K. Placards:

"THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATION LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS AND MANUAL."

"NO ACROBATIC MANEUVERS INCLUDING SPIES APPROVED."

"ROUGH AIR OR MANEUVERING SPEED: 125 MPH (109K)"

"TAKE OFF WITH 15° FLAPS"

## Types of Operation Authorized:

One of the following placards is required depending on equipment installed. (See FAR 91).

"THIS AIRCRAFT APPROVED FOR DAY VFR FLIGHT ONLY" or,

"THIS AIRCRAFT APPROVED FOR DAY OR NIGHT VFR FLIGHT" or,

"THIS AIRCRAFT APPROVED FOR DAY OR NIGHT VFR OR IFR FLIGHT".

L. Warning: Flight into icing conditions not approved.

## M. Fuel System Operation

"TAKE OFF AND LAND ON FULLEST MAIN TANK."

"FUEL REMAINING IN TANK WHEN INDICATOR READS ZERO CANNOT BE USED SAFELY IN FLIGHT."

## II. PROCEDURES

## A. Normal Procedures

## 1. Wing Flap Settings:

Takeoff	15°	(First Notch)
Cruise	0°	(Full Up-Retracted)
Landing	35°	(Second Notch)

## 2. Stall Warning Indicator:

The electric stall warning system will light a red light on the instrument panel at approximately seven mph above the stalling speed. It will be inoperative when the master switch is off.

## 3. Maximum 90° crosswind velocity demonstrated: 20 mph

## 4. Anti-Collision Beacon

WARNING: Anti-collision light may cause adverse effect on pilot when flying in overcast or haze. Recommend it be turned off under these conditions.

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## AIRPLANE FLIGHT MANUAL

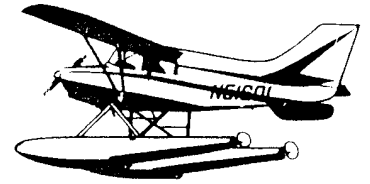
## B. Emergency Procedures:

1. Air Restart  
Use primer pump for engine restart.
2. Engine Failure  
Use 15° flap setting (first notch), maintain 85 mph (78K) CAS. If air restart is not possible, cut ignition and master switches. Execute forced landing.
3. Engine Fire  
Turn fuel valve OFF.  
Open throttle to full ON position.  
Turn ignition switch OFF.

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# Maule Aircraft Corporation

SPENCE AIR BASE :: MOULTREE, GEORGIA 31768 :: PHONE 912/985-2045



FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT NO. 10

FOR

Models M-4-210, M-4-210S,  
M-4-210T and M-4-210C

Reg. No. \_\_\_\_\_

Ser. No. \_\_\_\_\_

This Supplement must be attached to the FAA Approved Airplane Flight Manual dated 24 September 1964 or 15 March 1966 when Quick Drains are installed in the Main and Auxiliary Fuel Tanks in accordance with Maule Service Letter No. 32 and Service Bulletin No. 5 (considered mandatory).

The information contained herein supersedes OR supplements the information of the basic Airplane Flight Manual; for limitations, procedures and performance information not contained in this Supplement, consult the basic Airplane Flight Manual.

FAA APPROVED:

John R. James

MANAGER, ATLANTA AIRCRAFT CERTIFICATION  
OFFICE, FAA, CENTRAL REGION

DATE: May 1, 1984

MAULE AIRCRAFT CORPORATION

MOULTRIE, GEORGIA

AFM SUPPLEMENT NO. 10

for M-4-210, M-4-210S, M-4-210T, M-4-210C

II PROCEDURES

PREFLIGHT INSPECTION:

A. INTERIOR:

1. BAT. Switch.....ON
2. Fuel gauges.....CHECK INDICATIONS
3. All Electrical Switches.....OFF
4. BAT. Switch.....OFF
5. Flaps.....FULL DOWN

B. EXTERIOR: Begin at the left front door, proceed around the left wing to the nose area, then around the right wing and back to the fuselage, then around the tail section.

1. Fuel drains behind step.....DRAIN (2)
2. Left Flap.....CHECK HINGES & CONTROL ATTACHMENT
3. Aileron.....CHECK HINGES & CONTROL ATTACHMENT
4. Wing Top.....CHECK FOR WRINKLES AS INDICATION OF INTERNAL DAMAGE
5. Wing Main & Aux Fuel Tank Drains.....DRAIN (2)
6. Wing tip and nav. light.....CHECK FOR DAMAGE
7. Auxiliary fuel tank.....VISUALLY CHECK QUANTITY
8. Landing light.....CHECK FOR DAMAGE
9. Wing Tiedown.....REMOVE
10. Pitot tube.....REMOVE COVER
11. Stall Warning Switch.....CHECK FOR FREEDOM OF MOVEMENT
12. Main Fuel Tank.....VISUALLY CHECK QUANTITY
13. Left Landing Gear.....CHECK TIRE INFLATION AND BRAKE LINE SECURITY
14. Bottom left side of cowl.....DRAIN GASCOLATOR (1)
15. Top Cowl; Oil access door.....CHECK OIL QUANTITY
16. Propeller.....CHECK LEADING EDGE FOR DAMAGE
17. Air inlets.....CHECK FOR FOREIGN OBJECTS, INSPECT VISIBLE CONNECTIONS AND COMPONENTS
18. Right landing gear.....CHECK TIRE INFLATION AND BRAKE LINE SECURITY
19. Right wing and controls.....INSPECT SAME AS LEFT WING
20. Wing Main & Aux Fuel Tank Drains.....DRAIN (2)
21. Right fuselage side and top.....INSPECT FOR WRINKLES AS INDICATION OF INTERNAL DAMAGE
22. Static port.....CLEAR
23. Right Stabilizer.....CHECK ATTACHMENT POINTS AND STRUT
24. Right Elevator.....CHECK HINGE POINTS
25. Rudder.....CHECK HINGE POINTS, CONTROL ATTACHMENTS AND NAV. LIGHT
26. Tailwheel.....CHECK INFLATION, ATTACHMENTS, REMOVE TIEDOWNS
27. Left Elevator.....CHECK TAB CONTROLS AND ALL HINGE POINTS
28. Left Stabilizer.....CHECK ATTACHMENT AND STRUT
29. Left Fuselage side and bottom.....CHECK FOR WRINKLES AS INDICATION OF INTERNAL DAMAGE
30. Left side Static port.....CLEAR

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