

Maule Aircraft Corporation

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



FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT NO. 1

FOR

MODEL M-5-210TC

Reg. No. _____

Ser. No. _____

This Supplement must be attached to the FAA Approved Airplane Flight Manual dated 4 February 1980 when ratchet p/n 3207 is installed in accordance with Maule Service Letter #47.

The information contained herein supersedes and 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: Mar. 11, 1983

MAULE AIRCRAFT CORPORATION

MOULTRIE, GEORGIA

AFM SUPPLEMENT NO. 1

M-5-210TC

I. LIMITATIONS

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

F. Airspeed Limits: (CAS)

NOTE: Airspeed Instrument Markings and their significance:

- (d) WHITE arc denotes flap operating range, 54 - 94 mph (47 - 82K): Extends from full flap, power off minimum steady flight speed at 2300 lbs. From (V_{S0}) to the maximum flaps extended speed (V_{FE}).

II. PROCEDURES

A. Normal Procedures

1. Wing Flap Settings:

Takeoff - Normal - 20° (First Notch). No-Flap (0°) takeoff permissible
- Shortfield - 40° (Second Notch) until safely airborne, then retract to 20°

Normal Climb - 0°

Best Angle Climb - 20°

Landing - 40° (0° or 20° permissible)

3. Best Rate of Climb - 90 mph CAS, no flaps

Best Angle of Climb - 75 mph CAS, 20° flaps

MAULE AEROSPACE TECHNOLOGY, INC.

LAKE MAULE -:- RT. 5, BOX 318 -:- MOULTRIE, GA. 31768 -:- PHONE (912) 985-2045 -:- FAX: (912) 890-2402

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT NO. 2

FOR

MAULE M-5-210TC

Reg. No. _____

Ser. No. _____

This Supplement must be attached to the FAA Approved Airplane Flight Manual dated **4 February, 1980** when modification for **gross weight increase** is installed in accordance with **Maule Modification Kit No. 21**.

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

FAA APPROVED: Robert B. Hoodall
FOR Manager, Aircraft Certification Office
Federal Aviation Administration
Atlanta, Georgia

DATE: DEC 16 1998

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IT'S PERFORMANCE THAT COUNTS!

MAULE AEROSPACE TECHNOLOGY, INC.
MOULTRIE, GEORGIA
AFM SUPPLEMENT NO. 2
FOR MAULE **M-5-210TC**

SECTION I

OPERATING LIMITATIONS

AIRSPEED LIMITS: All airspeeds are calibrated airspeeds (CAS).

AIRSPEED INDICATOR MARKINGS: Green Arc - 68-145 mph (59-126K)

White Arc - 56-94 mph (49-82K)

EXPLANATION OF AIRSPEED INDICATOR MARKINGS:

Green Arc - Normal Operating Range, 68-145 mph (59-126K): Extends from flaps up, power off stall speed at 2500 lbs. (V_{S1}) to design cruise speed.

White Arc - Flap Operating Range, 56-94 mph (49-82K): Extends from full flaps, power off stall speed at 2500 lbs. (V_{SO}) to the maximum flaps extended speed (V_{FE}).

MAXIMUM WEIGHT: 2500 lbs.

CENTER OF GRAVITY LIMITS: +15.6 to +20.5 inches @ 2500 lbs.
+12.0 to +20.5 inches @ 1700 lbs. or less

Straight line variation between points given
Datum: Wing leading edge

PLACARDS:

The following placard is on flap control handle in clear view of the pilot:

"FLAP/PULL ON/20° TAKEOFF/40° LANDING"

SECTION II

NORMAL OPERATING PROCEDURES

NORMAL FLIGHT OPERATIONS:

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DATE: DEC 16 1993

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MAULE AEROSPACE TECHNOLOGY, INC.
MOULTRIE, GEORGIA
AFM SUPPLEMENT NO. **2**
FOR MAULE **M-5-210TC**

NORMAL FLIGHT OPERATIONS: Cont'd

FLAP SETTINGS:

Normal Takeoff - 0° (no flaps) 20° (first notch) flaps permissible for Takeoff

Short, rough, soft field Takeoff - 40° (second notch) until safely airborne, then retract to 20°

Best Angle of Climb - 20°

Landing - 40° (0° or 20° permissible)

Climbing:

Best Angle of Climb - 75 mph CAS, 20° flaps

SECTION IV

WEIGHT AND BALANCE

WEIGHT AND BALANCE DATA:

Weight and Balance Data pages 2 through 4, 6 and 7 of the Airplane Flight Manual and pages 4 and 5 of this supplement are in effect for this modification. Complete page 4 using information from page 1 of original Weight and Balance Data Form.

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DATE: DEC 16 1938

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WEIGHT AND BALANCE:

Serial Number _____ Registration Number _____

It is the responsibility of the airplane owner and the pilot to insure that the airplane is loaded properly. The empty weight, empty weight center of gravity and useful load are listed below for this airplane as delivered from the factory. If the airplane has been altered, refer to the aircraft log and/or aircraft records for this information.

WEIGHT AND BALANCE DATA SUMMARY AS DELIVERED FROM THE FACTORY:

Basic Empty Weight (including engine oil)..... _____ Lbs.
 Gross Weight..... 2500 Lbs.
 Useful Load..... _____ Lbs.
 Empty Center of Gravity..... _____ Inches
 Empty Weight Moment..... _____ Inch Lbs.

CENTER OF GRAVITY RANGE:

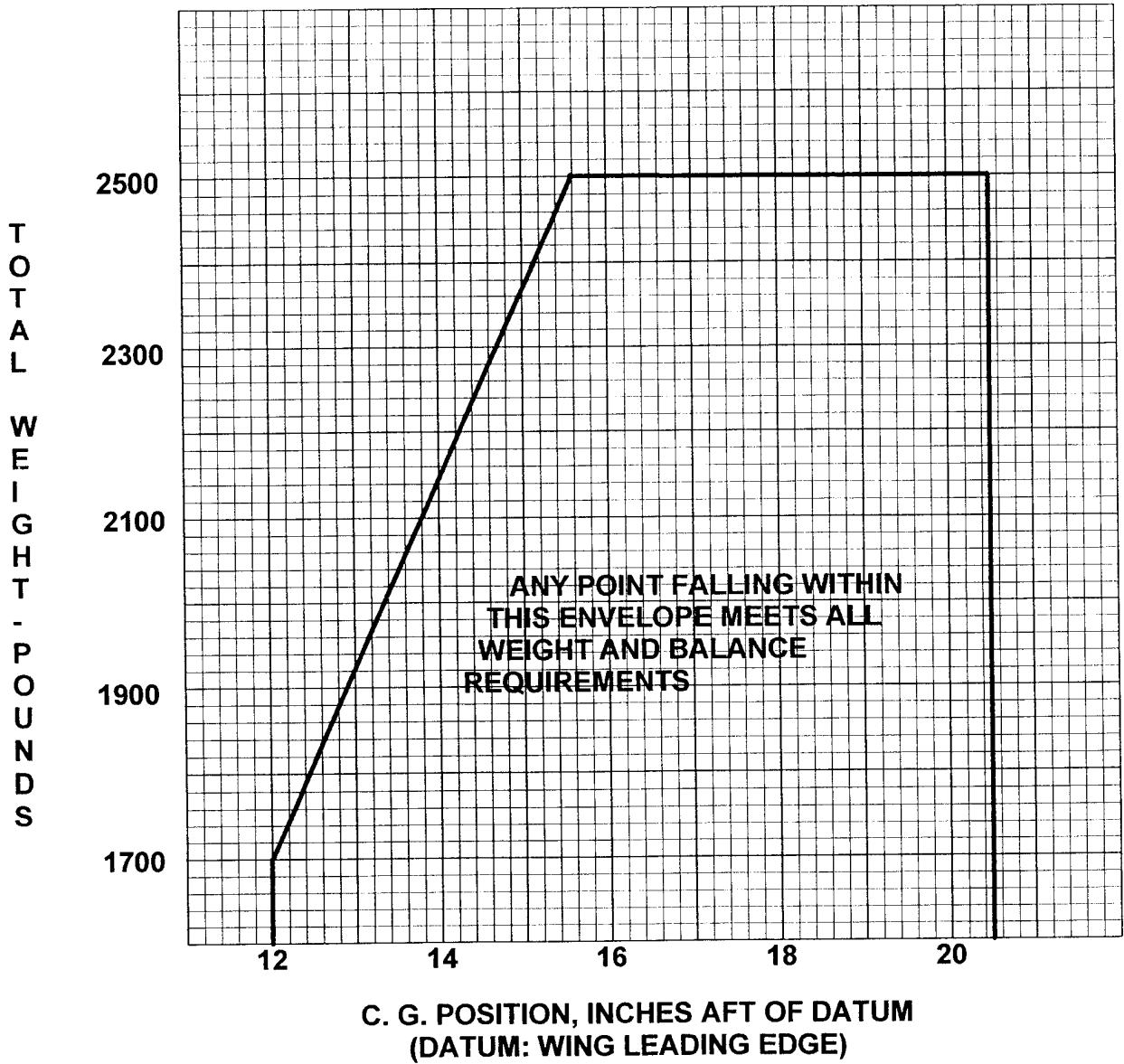
<u>At Weight of</u>	<u>Center of Gravity Range</u>
2500 lbs.	+15.6 to +20.5 inches
1700 lbs. or less	+12.0 to +20.5 inches

NOTE: Straight line variation between given points
 DATUM: Wing leading edge

NOTE: See page 7, Equipment Change Form, for any change in weight and balance if extra equipment has been added.

CERTIFIED BY _____ DATE _____

WEIGHT AND BALANCE ENVELOPE



MAULE AIRCRAFT CORPORATION

MOULTRIE, GEORGIA

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT NO. 4

FOR

MODEL M-5-210TC

Reg. No. _____

Ser. No. _____

This Supplement must be attached to the FAA Approved Airplane Flight Manual dated Feb. 4, 1980 when Fli-Lite Model 3000 MK IIIA Skis are installed in accordance with Maule drawing 9079A.

The information contained herein supersedes and 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: Francis C. Rock

CHIEF, ENGINEERING AND MANUFACTURING
BRANCH, FAA, SOUTHERN REGION

DATE: 6-20-80

MAULE AIRCRAFT CORPORATION

MOULTRIE, GEORGIA

AFM SUPPLEMENT NO. 4

M-5-210TC

LIMITATIONS:

Airspeed Limits:

Never exceed (V_{ne} speed) = 160 mph (139K)

Center of Gravity Limits:

(+12.5 to +20.0) at 2300 lbe.

(+9.5 to +20.0) at 1600 lbs. and below

Straight line variation between points given

Datum: Wing leading edge

Placards: (to be located in plain view of pilot. If aircraft approved for night flight, placards must be suitably lighted)

1. "SKIPLANE LIMITATIONS: MAXIMUM GROSS WT. 2300 LBS. DO NOT EXCEED 160 MPH. SKI OPERATION PROCEDURES: SET SELECTOR TO POSITION DESIRED THEN OPERATE PUMP UNTIL MAXIMUM PRESSURE IS DEVELOPED."
2. "SKI CONTROL SELECTOR: SKIS - FORWARD
WHEELS - AFT

PROCEDURES:

A. Normal procedures for ski-wheel conversion.

1. For ski landing or takeoff, move "Ski Control Selector" to "Skis" position and operate pump handle until the ski extends downward and under the tire to the full aft position. This will take approximately 22 strokes. When the full "Skis" position is reached, maximum hydraulic pressure will be developed and the pump handle cannot be operated any further. A visual check to determine that full "Skis" position has been reached should be made.
2. For wheel landing or takeoff, move "Ski Control Selector" to "Wheels" and operate pump handle (approximately 17 strokes) until the ski retracts to the full forward position ahead of the tire. When the full "Wheel" position is reached, maximum hydraulic pressure will be developed and the pump handle cannot be operated any further. A visual check should be made to determine that full "Wheels" position has been reached.

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MAULE AIRCRAFT CORPORATION

MOULTRIE, GEORGIA

AFM SUPPLEMENT NO. 4

M-5-210TC

3. Before landing or taking off either on "Skis" or "Wheels", check position of the "Ski Control Selector" for desired position and operate pump handle to obtain maximum pump pressure.

NOTE 1 - To preclude the possibility of freezing the load transfer shoe in either forward or aft position following take-off and landings in slush or wet snow, the skis should be actuated through one full cycle so as to cause any excess slush to fall free of the skis after becoming airborne. Skis then should be actuated to desired position for next anticipated landing; i.e., if wheel landing is next, skis should be actuated to "Wheel" position.

NOTE 2 - Transfer from skis to wheels and vice versa can be performed on the ground while taxiing or standing still or at any time during flight.

NOTE 3 - Landings on snow can be made with the "Wheels" position (ski retracted) without adversely affecting any of the ski structure. Normally, the "Skis" position should be used for snow landings.

4. Takeoff and landing distances, under the most favorable conditions of smooth packed snow at temperatures of approximately 30° F, may be expected to increase as follows:
 - (a) Take-off distance will be approximately 10% greater than the landplane.
 - (b) Landing distances will be approximately 20% greater than the landplane.
 - (c) Other conditions of snow will require proportionately greater distances for takeoff.

Note: M-5-210TC Weight and Balance Data pages 1A and 5A are in effect for this modification.

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Date: 6/20/80

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MAULE AIRCRAFT CORPORATION

Page 1A
Date: 20 Jun 80

WEIGHT AND BALANCE DATA

FOR M-5-210TC with FLI-LITE Model 3000 MK IIIA SKIS

Production No. _____, Serial No. _____ Registration No. _____

It is the responsibility of the airplane owner and the pilot to insure that the airplane is loaded properly. The empty weight, empty weight center of gravity and useful load are listed below for this airplane as delivered from the factory. If the airplane has been altered, refer to the aircraft log and/or aircraft records for this information.

WEIGHT AND BALANCE DATA SUMMARY, AS DELIVERED FROM THE FACTORY.

Empty Weight, Including Engine Oil..... _____ lbs.
 Gross Weight..... _____ lbs.
 Useful Load..... _____ lbs.
 Empty Center of Gravity..... _____ ins.
 Empty Weight Moment..... _____ in.#

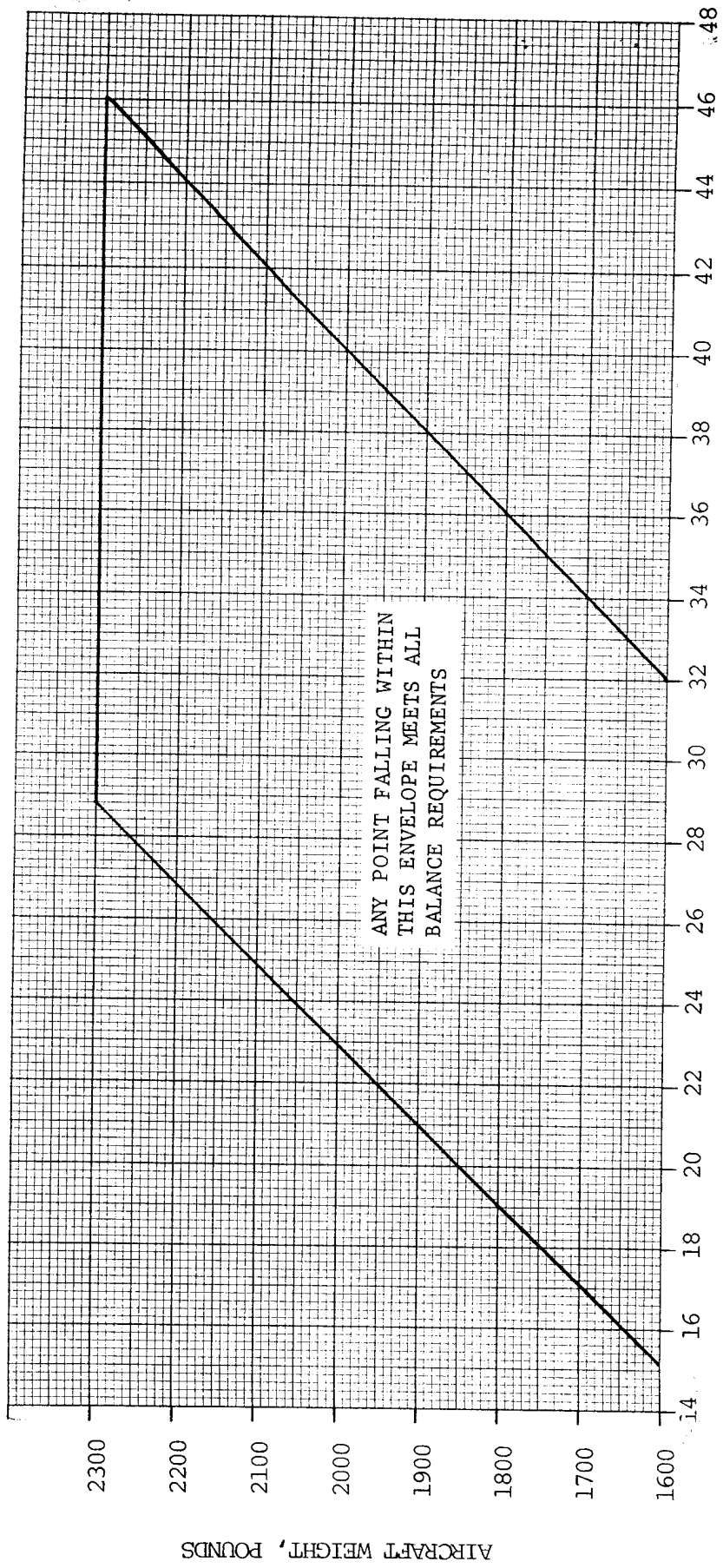
CENTER OF GRAVITY RANGE

<u>At Weight of</u>	<u>Center of Gravity Range</u>
2300#	+12.5 to +20.0
1600# or less	+9.5 to +20.0

NOTE: Straight line variation between given points.

DATUM: Wing Leading Edge.

CERTIFIED BY _____ DATE _____



TOTAL MOMENT, THOUSANDS OF INCH-POUNDS

CENTER OF GRAVITY ENVELOPE

M-5-210TC with FLI-LITE Model 3000 MK IIIA SKIS

MAULE AEROSPACE TECHNOLOGY, INC.

LAKE MAULE -- RT. 5, BOX 318 -- MOULTRIE, GA. 31768 -- PHONE (912) 985-2045 -- FAX: (912) 890-2402

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR

MAULE M-5

with

2110X-30 Wing Assemblies

Reg. No. _____

Ser. No. _____

This Supplement must be attached to the FAA Approved M-5 Series Airplane Flight Manual when Wing Assemblies P/N 2110X-30 (with 2167X Main Fuel Tanks) are installed on M-5 in accordance with Maule Modification Kit No. 15.

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

FAA APPROVED:



for

Manager, Aircraft Certification Office
Federal Aviation Administration
Atlanta, Georgia

DATE: **OCT 8 1996** _____

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MAULE AEROSPACE TECHNOLOGY, INC.
MOULTRIE, GEORGIA
AFM SUPPLEMENT
FOR MAULE **M-5** with **2110X-30 Wing Assemblies**

SECTION I

GENERAL: NORMAL CATEGORY OPERATION

FUEL CAPACITY:

USABLE FUEL: Main Tanks - 21.5 Gallon each
Optional Auxiliary Tanks - 11.5 Gallons each

UNUSABLE FUEL: 2.3 Gallons per Main Tank

////////////////////
////CAUTION////
////////////////////

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

SECTION II

LIMITATIONS

PLACARDS:

The following placards are in the cockpit in clear view of the pilot:

“FUEL REMAINING IN TANK WHEN INDICATOR READS EMPTY CANNOT BE
USED SAFELY IN FLIGHT.”

FAA APPROVED
DATE: OCT 8 2007