

# Maule Aircraft Corporation

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



April 27, 1977  
Revised: 1/27/86  
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## SERVICE LETTER #36

**SUBJECT:** Revised Center of Gravity and C.G. Envelope.

**MODELS AFFECTED:** M-5-235C, Ser. Nos. 7001C - 7026C, 7028C, 7030C - 7032C, 7037C.

**COMPLIANCE:** Within 50 flight hours.

**AUTHORITY:** This service letter is FAA Approved.

**BACKGROUND:** When your airplane was weighed to determine the Center of Gravity, it contained 10 quarts of engine oil rather than undrainable oil as indicated on the weight and balance sheet supplied with your airplane, and thus the C.G. you figure per our weight and balance instructions may be slightly in error.

Also, it has been found possible, with a light fuel load and just a pilot, to load the M-5-235C forward of the Approved C.G. limits. Thus we repeated our forward C.G. FAA Certification tests and gained approval for an expanded C.G. Envelope.

### ACTION TO BE TAKEN:

(1) You have the choice of adhering to the C.G. limits as published in the original Flight Manual. You can use the new C.G. limits. However, if you desire to take advantage of the expanded C.G. limits, it is necessary to comply with all of the following:

(a) AFN- Incorporate the following pages:

Page 1	Revision A	Date	8/16/76
Page 1	Revision A	Date	8/16/76
Page 2	Revision A	Date	8/16/76
Page 3	Revision A	Date	8/16/76
Page 6	Revision A	Date	8/16/76

(b) Weight and Balance- Effective Pages:

Page 1	Date	9/22/76
Page 2	Date	3/19/76
Page 3	Date	9/22/76
Page 4	Date	7/30/76
Page 5	Date	7/30/76
Page 6	Date	4/22/81
Page 7	Date	undated

(c) Remark your airspeed indicator in accordance with revised page 1 of the Airplane Flight Manual. Since the instrument case must be opened, it is required that an approved instrument shop do the work. It was necessary to change the airspeed indicator markings because when the airplane is loaded to the new forward C.G. limits the certification stall speed becomes a minimum steady flight speed, which determines the airspeed indicator markings.

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ACTION TO BE TAKEN: (Cont'd)

(2) If you do not choose to use the new C.G. Envelope, comply with the following:

(a) AFM- original AFM dated 4/6/76 is effective.

(b) Weight and Balance- Effective Pages:

Page 1	Date <u>3/19/76</u>
Page 2	Date <u>3/19/76</u>
Page 3	Date <u>9/22/76</u>
Page 4	Date <u>7/30/76</u>
Page 5	Date <u>3/19/76</u>
Page 6	Date <u>4/22/81</u>
Page 7	Date <u>undated</u>

(3) Please complete the attached compliance form and return it to us.

NOTE: For airplanes modified in accordance with Service Letter #43 which are to be operated at the new increased maximum weight of 2500 lbs., AFM Supplement and Weight and Balance data per Service Letter #43 are effective and airspeed indicator markings to be per item 1.c. of this Service Letter #36. For airplanes modified in accordance with Service Letter #43 and #44 (incorporates 20°/40° flap ratchet), AFM Supplement and Weight and Balance data to be per Service Letter #43 and airspeed indicator markings to be per Service Letter #44.

**MAULE AIRCRAFT CORPORATION**  
**SERVICE LETTER #36 COMPLIANCE RECORD**

**AIRPLANE SERIAL NUMBER** \_\_\_\_\_

**AIRPLANE REGISTRATION NUMBER** \_\_\_\_\_

**THE FOLLOWING ACTION HAS BEEN TAKEN WITH RESPECT TO THIS SERVICE LETTER:  
(CHECK ONE)**

I have substituted the revised weight and balance papers but prefer to keep the old AFM pages and comply with those limitations.

The Airspeed Indicator has been remarked with a white arc from 65 to 94 mph, and a green arc from 70 to 145 mph. Also, a flight manual with revision A to pages 1, 2, 3 and 6 has been substituted for the original flight manual, and a Weight and Balance Data form with revised pages 1 thru 6 has been substituted for the original Weight and Balance Data.

I no longer own this aircraft, it was sold to:

**NAME** \_\_\_\_\_

**ADDRESS** \_\_\_\_\_

**CITY, STATE, & ZIP** \_\_\_\_\_

**CERTIFIED BY:** \_\_\_\_\_  
(SIGNATURE)

**NAME:** \_\_\_\_\_  
(PRINT)

**TITLE:** \_\_\_\_\_  
(OWNER, A & P, IA, ETC.)

**DATE:** \_\_\_\_\_

**Return this Compliance Record to:**

Maule Air, Inc.  
2099 GA Hwy. 133 S.  
Moultrie, GA 31788  
ATTN: Engineering Records