



# THE GLENN L. MARTIN COMPANY

BALTIMORE

June 4, 1932

*Handwritten:* 7-15-32

Subject: Martin 333 Engine for TC-14 Airship.

To: Air Corps, Materiel Division, Wright Field,  
Dayton, Ohio - For Major C. W. Howard, Chief,  
Engineering Section.

1. Supplementing our letter of May 27, 1932, we wish to offer the following information in answer to the requests made verbally to Mr. Martin.

a. From our test stand data we find that the volume of air required to cool the D-333 engine is 53 cu.ft. at full rated rpm of 2100. Graph enclosed shows air requirements at lower rpm.

b. The velocity pressure at the entrance to cowl openings in our tests is 3 in. of water at 1600 rpm, and 3.6 in. at 2100 rpm.

c. The power required to furnish the necessary air at the pressures stated is 3.75 H.P., input at the blower.

We would recommend some additional allowance of power to provide for the restrictions which will be present in an enclosed installation. However, the velocity pressure need not be greater than 3 in. of water at any time, including full throttle operation.

Very truly yours,

THE GLENN L. MARTIN COMPANY,

*Signature of Lessiter C. Milburn*  
Lessiter C. Milburn,  
Vice President-Chief Engineer.

LCM/HT

CENTRAL FILES  
7-15-32

*Handwritten:* P. 25/100  
100/100