



MOONEY AIRCRAFT, INC. (FAA Approved)

This Service Letter reidentified as
Service Bulletin M 20-100
per Service Instruction M20-15.

SUBJECT: Inspection and Rework of Skin Joint, Wing Station 59.250

MODELS AFFECTED: M20B, Serials 1702 through 1763, except for the following numbers:
1703, 1708, 1709, 1710, 1711, 1715, 1730, 1731, 1750, and 1759

TIME OF COMPLIANCE: **INSPECTION:** Immediately and every 50 hours until rework is performed
REWORK: When needed

A. INTRODUCTION

The rivets attaching the skin to the rib at Wing Station 59.25 are to be inspected for possible looseness, and the described rework accomplished if found necessary, according to the limits described.

B. INSTRUCTIONS

Inspect the rivets in the areas shown on Figure 1 for signs of loosening. Loose rivets are characterized by black oxide which seeps between rivet and skin to the surface. This oxide may leave a slight streak in the direction of the air stream if the rivet has been loose for some time. In any event, if black oxide is present, it will be noticeable by simply passing a finger or white cloth over the head of the rivet.

Paint cracks around the head of a rivet are not necessarily indications of a loose rivet. These paint cracks may occur due to the normal amount of dirt which may be present at the time the rivet is installed, or from solvents used in preparation prior to painting. Only if the black oxide described above is present is the rivet considered loose.

A maximum of four (4) loose rivets per side in the specified areas will be considered acceptable with no rework necessary. However, it will be necessary to continue this simple inspection every fifty (50) hours or so to assure that no additional rivets become loose. The inspection need not be continued after the rework described below has been accomplished.

If and when more than four rivets per side are found to be loose, all of the rework described below is to be accomplished on that wing. It is considered that the rework on both wings as described is desirable in order to avoid continuing inspection of any area not reworked as well as avoid further inconvenience to the owner due to a later repair.

C. REWORK (Left and Right Wing Panels)

I. Areas 1, 2, 4, and 5 (Forward of the Main Spar) Ref. Figure 2

- a. Inboard - Loose rivets in the fuel tank side of the specified areas are to be replaced with the next larger size (AD5's replaced by AD6's) provided that a center-to-center spacing of at least .62 inches exists between AD6's. If the distance is less than .62 inches, replace with existing rivet size.

Resealing of the fuel tank is to be accomplished according to Mooney Service and Maintenance Manual instructions. A copy of these instructions will be included in a sealant kit which may be ordered from:

Mooney Spare Parts Department
P. O. Box 72
Kerrville, Texas 78028

These kits may be supplied at no cost through July 1, 1963, for the purposes of this service letter. Order Kit Number 20-100-1.

- b. Outboard - Add spliced as shown in Figure 2. Splice may be made as shown or ordered at no cost through July 1, 1963, from Mooney Spare Parts Department in two uncut lengths of four feet each. Order Kit Number 20-100-2.

Loose rivets are to be replaced by the next larger size (AD5's replaced by AD6's) provided that a center-to-center spacing of at least .62 inches exists between AD6's. If the distance is less than .62 inches, replace with existing rivet size.

II. Area 3 (Aft of the Main Spar) Ref. Figure 3

Add splices to each side of the upper rib cap as shown. Loose rivets are to be replaced with the next larger size (AD5's with AD6's and AD4's with AD5's) provided that a center-to-center spacing of at least .62 inches exists between AD6's and .50 inches exists on AD5's. If the distance is less than these values, replace with existing rivet size.

- III. If an edge distance of 2D on rivet at ends of splice adjacent to stringers cannot be maintained, trim end(s) of formed splice such that 2D edge distance on second rivet from stringer can be maintained. See Figure 4.

COMPLIANCE

Upon completion of this service letter, please fill out and return the enclosed compliance card to Mooney Aircraft for our records.

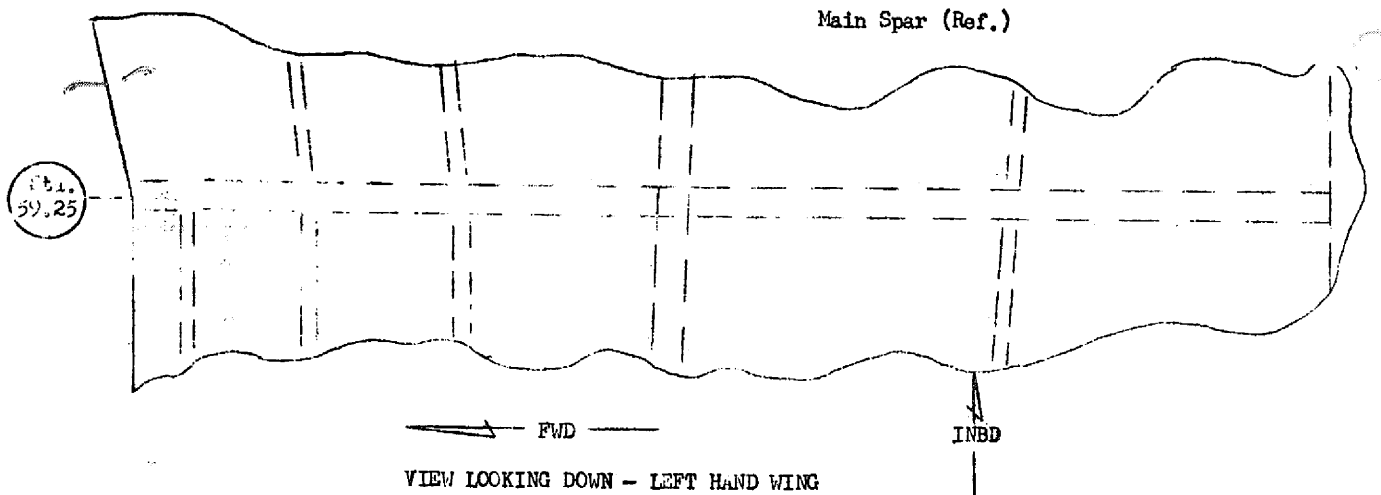
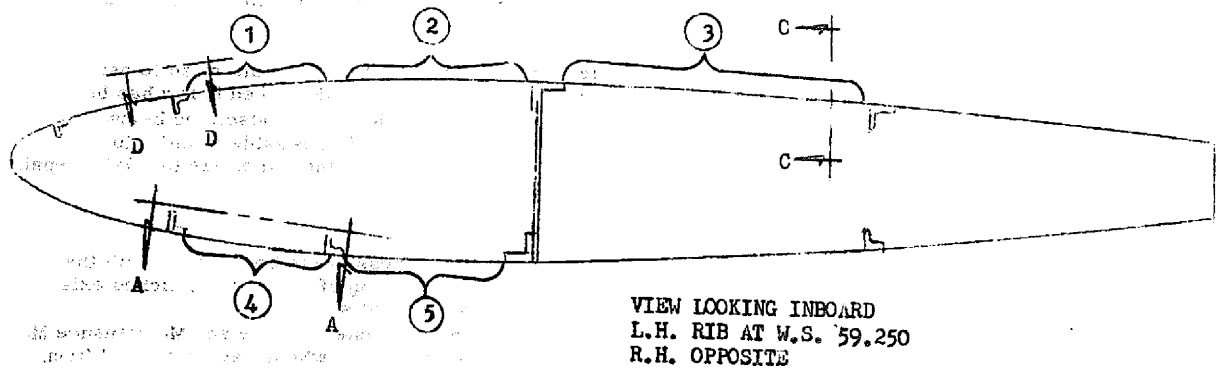


FIGURE 1



Replace AN426AD4's with AN426AD5's as per Par. C.II.

Replace AN426AD5's with AN426AD6's as per Par. C.II.

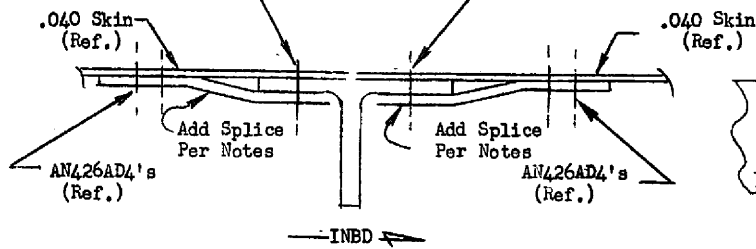


FIGURE 3
(Section C-C)
Area 3

Optional Trim Line For Splice Plates

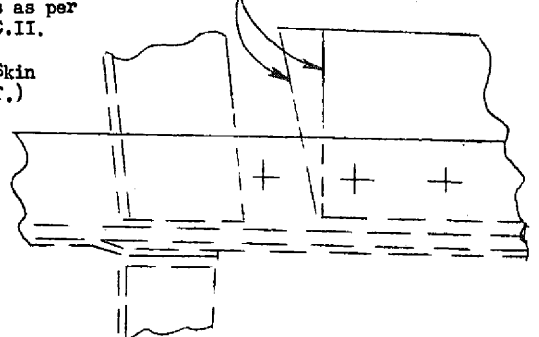


FIGURE 4
(VIEW D-D)
(Typ.)