

## LETTERING AND DESIGN PAINTING

All airplanes must carry either the C.A.A. registration numbers or license numbers. In addition to the numbers carried, almost all airplanes have some design painting, such as an insignia or an emblem of some type. In recovering or refinishing airplanes, this work is usually done by the mechanic.

## PLACES AND DIMENSIONS OF MARKS

"Identification marks shall be located as follows:

(A) On Airplanes and Gliders.- On the lower surface of the lower left wing and the upper surface of the upper right wing, the top of the letters or figures to be toward the leading edge, the height to be at least four-fifths of the mean chord: Provided, however, that in the event four-fifths of the mean chord is more than 30 inches the height of the letters and figures need not be more, but shall not be less than 30 inches. If the lower left plane is less than one-half the span of the upper left plane the letters or figures thus described shall be on the under surface of the upper left plane, as far to the left as is possible. In the case of a monoplane the mark shall be displayed on the lower surface of the left wing and the upper surface of the right wing in the manner thus described. On gliders the letters and/or figures shall be displayed in the same manner and place prescribed for airplanes except the minimum size shall be 15 inches in height and 10 inches in width, using a 2-1/2 inch stroke. The marks shall also appear on both sides of the vertical tail surface or surfaces, of size as large as the surface will permit, leaving a margin of at least 2 inches.

"(D) The width of the letters and figures of all marks shall be at least two-thirds of the height and the width of the stroke shall be at least one-sixth of the height. The letters and figures shall be painted in plain black type on a white background, or in any color on any background, but there must be a strong contrast between the two. The letters and numbers must be uniform in shape and size." - from Air Commerce Regulations.

## LETTERING LAYOUT

Probably the easiest way to lay out block letters on a wing is to use a chalk line to mark the location for the top and bottom of the numbers. A yard stick may be used for the vertical lines. In most cases the vertical lines can be laid out parallel to the ribs. The letters are usually blocked in with pencil.

For outlining the smaller block numbers and letters, such as those required on the tail group, much time will be saved if a lettering guide of the correct size and proportion is made. A lettering guide of this nature is shown in Fig. I. Using this guide as a template, the outlines of any number and most letters can be quickly traced directly on the surface.

## MASKING

After the numbers or letters have been outlined by pencil, they should be blocked in with masking tape, as shown in Fig. II. If the