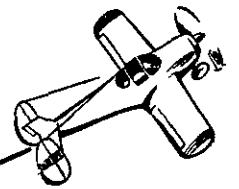


**ERCOUPE  
SERVICE  
MEMORANDUM**

**No. 45**

# *Ercoupe* **MEMORANDUM**

**SUBJECT: Outer Panel Leading Edge  
Skin Dents**



1. This memorandum is prepared to give information of the effect of dents in the outer panel leading edge skin. On Ercoupes Serial Nos. 1 to 112, inclusive, the leading edge was fabricated of 52S  $\frac{1}{2}$ H aluminum sheet .013" thick. As this stock could be easily deformed, the leading edge material was changed to 24ST aluminum sheet .016" thick. This change to heavier, thicker material on the leading edge was effective on Ercoupe Serial No. 113 and up. With this in mind, more careful inspection should be made on Ercoupes Serial Nos. 1 to 112, inclusive, for any dents or deformation. Serious dents should be removed or repaired, as soon as possible, in accordance with C.A.A. Manual No. 18 covering Repairs and Alterations.

2. A dent or deformation of the leading edge skin will cause a slight increase in drag and a decrease

in lift, especially at low speeds. The extent of the effect is dependent upon the size, shape and position of the deformation, so that a hard and fast rule of what is a "serious defect" cannot be easily expressed. In general, if the damage does not affect the structural integrity and does not extend for more than one foot along the leading edge, it should not cause serious flying difficulties. However, whenever an airplane is reported as seriously wing-heavy or tending to drop a wing at low speeds, a careful inspection for leading edge deformation should be made and large defects corrected.

3. If the leading edge is distorted enough to require replacement, only the heavier gauge outer panel leading edge skin (415-14002-1) will be available.