

DENNEY

AEROCRAFT
COMPANY

March 15, 1989

Service Bulletin #3

SUBJECT: Vne-Velocity never exceed
TO: Flying Kitfox Owners
FROM: Denney Aircraft Company

Recently two Kitfox builders have related to us similar experiences that resulted in damage to their airplanes, which in either case could have led to even more serious consequences. Coincidentally these incidents occurred within one week. One builder had logged about 140 hours on his Kitfox while the other had flown only about 2 hours. Both pilots reported that they were flying very near, or perhaps in excess of 100 mph, when the flaperons fluttered.

In the first case an overseas builder was flight testing the airplane with less than two hours flight time, and with two persons on board, initiated a high speed shallow dive. The airspeed was probably in excess of 100 mph when the flaperons fluttered with enough force to break the mixer bell crank in the center.

In the second case, a U. S. builder had his Kitfox in a shallow diving left turn near 100 mph. He overflew a bluff and encountered turbulence which may have triggered the flaperons to flutter with such force that they both separated from the trailing edge.

In both cases, to the credit of the Kitfox design and the flyer's good fortune, these pilots were able to control the airplane with elevator and rudder alone and land safely.

Because of these incidents, we are issuing a mandatory change in the Vne to 90 mph.

We have received isolated reports from builders who have experienced flaperon flutter at lower airspeeds, but they reported no structural damage. In every case these problems at lower airspeeds were the result of slack in the control system. From the very first page of the construction manual (F-1) and here again we emphasize the importance of "tight" controls with absolutely minimal freeplay. It is much better to have some friction resistance to control movement than for the controls to move too freely or with "ball bearing" feel.

Also we want to emphasize the significance of the Vne and of a careful well-planned flight test program. The Vne means velocity, never exceed. This limitation in any airplane is the

absolute maximum airspeed for that airplane and should be approached with caution and only in smooth air.

We have designed and are testing a mass balance counterweight that should eliminate any flutter problem at or below V_{ne} . It is designed to retrofit any Kitfox flaperon and will be available very shortly.

As soon as we have completed testing the counterweight we will notify all builders of its availability by a separate letter.

If you need assistance in any way, please call customer service. Before returning any items to Denney Aircraft Co. please obtain a Return Goods Authorization (RMA) number from customer service.