



Block shown in open position to show Alum plate.
Clamp the 3 pieces together, insert VG's, file to
length and bend over. Eze!

Vortex Generators

Gene Zabler - Want to try vortex generators on your canard? Does your nose get heavy in the rain? Do people sit on your canard? This might be the answer. RAF has drawings of the sizes and placement of the vortex generators that Magna Liset from Australia is using now. They have fixed my "nose heavy" problem in heavy rain.

(Editor note: The same information is also available in the CSA April 91 newsletter, pp 21-23)

I made my vortex generators, VG's, from .020" aluminium stock. First cut strips 1" wide, the length is not critical. (see drawing). The VG's are 1" long, mark the shapes on the aluminium stock and cut them off, making about 100 pieces.

A bending and sizing block is made as follows. Use two pieces of 3/4" X 2" X 4" hardwood. Cut one edge of one block back 5 degrees to allow for metal springback. After cutting left and right hand shapes out of .020" X 2" X 4" aluminium, use double faced tape to hold it to one side of a block. Clamp the two blocks together and your bending block is complete. Drop the VG's into the "pockets", put a 1/8" steel file guide in back of the VG's. Using a fine file, finish off the length of the flange 1/8" above the blocks. With a block and hammer bend the 1/8" flange over. This is the mounting surface. Trim a 1/8" X 45 degree chamfer on the front and back ends of the mounting flanges (removes the sharp corners).

File off the sharp corners and edges (all 1400 of them), double face tape them to a board and paint. I laid out

the canard with masking tape, putting lines for spacing on the tape. I attached the VG's to the canard with white silicone rubber. It fills in the gap under the mounting flange and is eze to clean up and can be removed without any paint damage if you don't like them.

I have found no adverse changes in performance, only a "lighter" canard in the rain. I am still working on the stall series in medium and heavy rains. It is hard to find heavy rains with high enough ceilings for a safety factor. If you try the VG's write in and let us know the before and after results. Be sure to read Central States newsletter, April 91, pages 21-23.

Be sure also, to put in a log book entry on the installation of the VG's.