

KEEP SOARING INSTRUMENTS ALIVE

by TOM PAGE

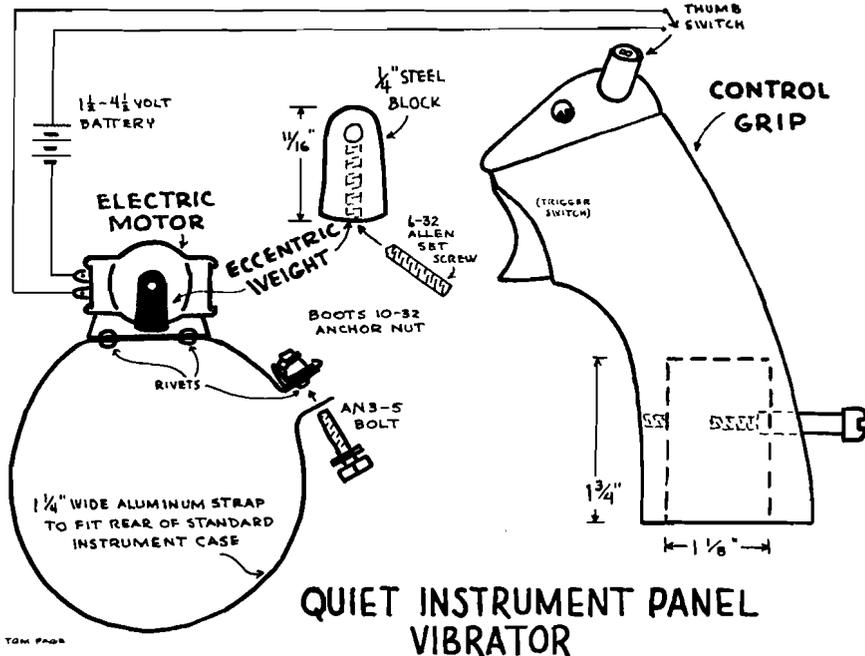
A chronic problem in the vibrationless sailplane is instrument lag. Even the best mechanical instruments lag enough to be annoying and even dangerous near the ground in a sailplane without some artificial vibration to keep the instrument pivots alive in their jewel bearings. This vibration is often supplied by the pilot himself — by tapping gently but frequently on the instrument panel.

This takes an extra hand — often a third one—which most pilots lack. In desperation some of them have added mechanical vibrators to their instrument panels. Most frequently these have been electrically powered buzzers, creating an annoying racket that interferes with concentration on the urgent business at hand — that of milking the best lift out of an invisible thermal column.

A quiet but effective improvement on the nervous finger or the noisy buzzer is an eccentric weight on a small electric motor, switched on

with the flying hand by a push switch on the control stick itself. The accompanying illustration shows a representative set-up for this simple installation. A surplus control grip with one or two electric switches, one a trigger switch reserved for radio operation and the other a thumb switch used for the instrument vibrator, is added to the control stick. Usually the stick must be shortened somewhat and perhaps a sleeve added to correct the diameter of the top end. The wires may be led out the bottom of the stick or through grommeted holes in the reinforced part of the stick near the pivot bearing. One side of the wire pair connects through a small battery clip for 1½ to 4½ volts.

The key of the system is a small electric motor strapped to the main instrument for which vibration is desired, but which supplies gentle, noiseless vibration for the whole
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QUIET INSTRUMENT PANEL VIBRATOR

TOM PAGE

Meteorology Research, Inc.
RESEARCH IN ATMOSPHERIC PHYSICS
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MATERIAL AVAILABLE

The SSA has a variety of items available on a free distribution basis, unless otherwise specified. Request by item number or name from SSA, Box 66071, Los Angeles 66, Calif.

Item 3. FAI soaring awards application blanks.

Item 4. SSA membership application blanks. These are in the form of business reply envelopes, making it easy for new applicants to mail in their dues.

Item 6. SOARING . . . The S.S.A. . . . and YOU pamphlets, telling about the sport of soaring, glider pilot certificates, how soaring is organized, what the SSA is and what it does, and how to get started in soaring. Ideal for answering the questions of prospective soaring enthusiasts.

Item 7. Region lists of soaring clubs and SSA Governors, by SSA region number, as excerpted from the SSA Directory. The list for each region lists all soaring clubs in that region, their addresses, meeting times and places, flying sites and contact persons and the SSA Governors' names and addresses for each state in the region. Add the region number in parentheses after Item 7 when ordering or just the state desired.

Item 8. List giving Availability of Plans, Kits, Partially Completed and Ready-to-fly Gliders and Sailplanes. At present, the list includes only U. S. designs for which details have been obtained, including a brief description, price, manufacturer's name and address. New equipment only.

Item 9. List of Glider Schools and Commercial Glider Operators in the U.S., giving location, equipment, services and prices, where known.

Item 10. List of Books on Soaring, where they may be obtained, prices and a brief description of each.

Item 24. Incorporation Procedures—California. Intended to show non-profit soaring clubs the way to incorporate, with specific details for the state of California.

Item 28. Used Sailplanes For Sale List. Over 40 ships listed by type, N number, price and owner's name and address, as compiled from SSA census report forms, ads and owner's notices. Revised frequently.

Item 30. Film Library List, with rules governing use of the films. Request from Walter B. Hausler, 67 Fisher Rd., Rochester 11, N.Y.