

Flectotachometry, it appears, is here to stay. A few months ago, to help launch "Information Exchange" (PHYSICS TODAY's expanded classified-advertising department), we prepared a few ads such as the following:

for sale

One Mark I mass-charge flectotachometer, five years old, in good condition; used by a little old physicist who only flectotachometered on Sundays. Reason for sale: purchase of Mark II model. Reply to Box XXX.

research results

We have a lab report consisting of five-years-worth of mass-charge flectotachometry data. "Worth reading ..." (Daily Post); "A promising start ..." (Clarion). Available free: write Box YYY.

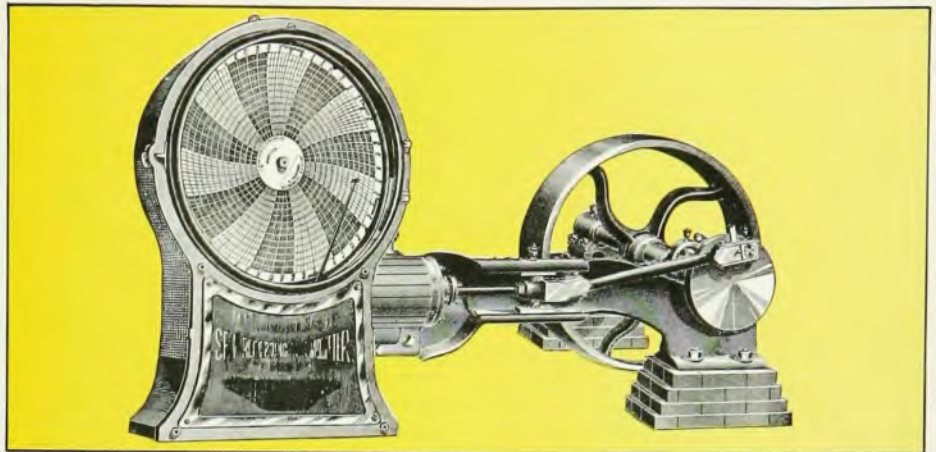
research queries

Can anyone with experience in flectotachometry tell us how to stop the Mark II model from falling over whenever we push the "Start" button? Reply in confidence to Box ZZZ.

Then we started to get replies. As well as some routine requests for the lab report, the file now contains news on the design front and some good advice for flectotachometer owners. For example, Sidney Hodges, who is professor of physics at Southeast Missouri State University, Cape Girardeau, writes:

Apparently the holders of Box ZZZ are having some problem with the Mark II model of the Flectotachometer falling over when the "Start" button is pushed. The solution to this problem is rather obvious. The manufacturers inadvertently put the "Start" button too high on the chassis. We have found a simple solution—interchange the positions of the "Start" and "Stop" buttons. Then, on starting, the Flectotachometer does not fall over. However, there is still this problem with the "Stop."

Another relatively simple solution is a Flectotachometer Stabilizer, which is being developed by one of our younger staff members. This consists of a piece of white pine lumber measuring, in cross section, about 2 × 4 inches and of a suitable length. This Stabilizer is then wedged between the Flectotachometer and the nearest wall, thus effectively preventing the Mark II from falling over when the "Start" button is pressed. Of course, this keeps the Mark II from being portable, but otherwise seems to be a satisfactory solution.



This would appear to clear the problem up; but more advice is available:

Gentlemen:

We can sympathize with owners of the Mark II Flectotachometer and their problems with the "Start" button.

We can only advise that the Mark IV model has substantially reduced the problem (the Mark III totally eliminated the problem, but we were unable to control the feedback circuit to the horizonator).

For those wishing to trade-in their old Mark II on the updated Mark IV we wish to advise that a trade-in program, fully explained in our advertisements in the *Clarion*, has been instituted. However, for those who missed the ad, the substance of the program is that owners of the Mark II (serial numbers 114 through 116) may ship their apparatus prepaid to the address shown on the nameplate, and for a fee of \$37 500.00 receive the Mark IV and a two-year subscription to *Modern Flectotachometry*.

Sincerely yours,
CALVIN NEWTON
VP Public Relations

American Flectotachometer Corp.

TO: Interested Flectotachometer Users
FROM: Flecto-Systems, Ltd.
RE: Mark II Model Flectotachometer, problems with "Start" button

In response to the "Research Query" on page 78 of the June 1974 issue of *PHYSICS TODAY*, please be advised that we are well aware of the serious design fault in the Mark II.

We have, therefore, redesigned the

"Start" button on the following principle: A careful analysis, using Monte Carlo procedures applied to thousands of statistically selected pushes on the Mark II "Start" button, has shown that an equal force (to within one standard deviation) is exerted by the button on the finger of the pusher. It is therefore easy to see that, since the forces are equal and oppositely directed, the "Start" button will at all times remain in equilibrium. We have made careful use of this interesting phenomenon in redesigning the macrostructure surrounding the "Start" button subassembly, and are sure that this will solve the problem.

This modification is found on our new Mark III Flectotachometer.

Dear ZZZ,

Man, there's some bad vibes going down between you and that flec. Like, a flectotachometer is no soulless crinkle-finish digital-readout lab instrument. Be cool, man; dig where that flec's head is at. Here at Catatonic State I'm the only physics grad student getting FT data so let me put it to you like it is.

Your flec has got to have everything natural. Don't plug it in to any artificial power. Forget the distilled water, man; get spring water. Talk to your flec every day (but don't shout, dig?). If you can't be there weekends, leave the radio on, tuned to rock.

Another thing. Don't calibrate your flec before noon.

FASSIT SALTER
Catatonic State University

Don't watch this space for further news of flectotachometry—but do keep an eye on Information Exchange. □