

Physics of the American Physical Society.

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9/84

Author review policy

I was disappointed that your response to R. S. Raghavan, who complained (August, page 84) that changes were made in his manuscript after he reviewed it, was not forthcoming. You say it is not usual for authors to see the final galleys at magazines, but you could very well decide yourselves that the stature of PHYSICS TODAY requires you to ask your authors and correspondents to review all changes made by the editors at any point. Why don't you do so? You could give an immediate deadline or query the authors on the telephone to eliminate delays—but almost any delay would be better than having material appear over an author's name that the author would have corrected.

JAY M. PASACHOFF
Williams College
Hopkins Observatory

9/84

Physics of soaring

I enjoyed Lloyd Hunter's cover story "The Art and Physics of Soaring" in PHYSICS TODAY (April, page 34), but one point needs to be corrected. Hunter notes that thermals drift with the wind, but he then ignores this drift when calculating the speed to fly to achieve best cross-country speed in a wind. One can insert the missing extra term into Hunter's expression for the time for cruising between thermals, t_D , and work it through, but it is more illuminating to arrive at the result by taking an imaginary flight in a sailplane.

We'll assume that the entire flight, consisting of climbs in thermals and glides between thermals, takes place in a constant horizontal wind. If our frame of reference is comoving with the sailplane, the speed to fly cannot depend on the wind, but only on the sailplane's polar curve, the climb rate achieved in thermals and the inter-thermal subsidence. Back in the earth's frame, we see the cross-country speed is obtained simply by adding the wind to the cross-country speed one would obtain in no-wind conditions. Thus the pilot can ignore the wind when calculating the optimum cruising speed at which to fly the sailplane.

In Lloyd Hunter's example, with a

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