

Letters

Envy and Caution

Dear Vic (Saudek):

The Easter Wave Soaring Expedition is a splendid idea! I wish I could take part, but I will not be able to get away at that time . . . Easter is a very good time (for waves). I would just watch for the *dangerous* type pressure jump wave (the "straight line, 'way back roll cloud;" very rare, however) and avoid flying it with inexperienced people. How I wish I could once more try big distance!! Good luck to this very fine enterprise!

DR. JOACHIM P. KUENTTNER

Huntsville, Ala.

¶ Between 1950 and 1955 Dr. Kuettner was Project Scientist of the Sierra Wave Projects for the USAF, at which time he executed many splendid high-altitude soaring flights in Pratt-Read, TG-3A and 2-25 sailplanes. He pioneered the long distance wave hopping technique with his 375 mile flight from Bishop to Williams, Arizona; 80% of this high speed ride (94 mph avg.) was above 20,000 feet. The good results of the Sierra Wave investigations are, in large measure, due to Dr. Kuettner's direction and analysis of the project. —Ed.

Dr. Raspet Replies

Dear Editor:

Re: Greenbaum letter, SOARING, January, 1960.

For a gentleman to write in a "sweet reasonable rage" amazes me. Secondly, for an engineer or scientist, whichever he may be, to attempt to discuss a technical paper in a rage is certainly unethical of his professional standing.

Mr. Greenbaum is perfectly right in his assumption that laminar flat plate values of skin friction were used to determine what the ultimate performance of a Plank would be. The curve showing this fact was clearly marked "Laminar Flow."

The flat statement that such values of profile drag coefficient never have been attained in experiment might better have been written that Mr. Greenbaum does not know of any experiment wherein such values were obtained.

If Mr. Greenbaum is interested in learning of an experiment which does demonstrate practically laminar flat plate drag values, I refer him to my paper, "Performance Measurements of a Soaring Bird," *Aeronautical Engineering Review*, December, 1950.

Mr. Greenbaum's comment 2 has no pertinence to the subject paper. I used the classical Oswald performance analysis which has served us well in guiding the performance improvement of sailplanes and airplanes throughout the world. I would be interested in seeing a publication by Mr. Greenbaum in which he analyzes sailplane performance from the vorticity concept and then takes the trouble to experimentally verify his theoretical extrapolation.

I agree with comment 3. In fact, I stated in my paper that the practical ulti-

mate without suction boundary layer control is around 40 to 1. It is this barrier for which I explored means of crossing, but apparently there are mental hazards which must first be overcome.

Mr. Greenbaum refers to Dr. Pfenniger's work which was done in Zurich and is available as NACA TM1181. There is a much more recent work by B. H. Carmichael, "Flight Observations of Suction Stabilized Boundary Layers," *Aeronautical Engineering Review*, February, 1954. A still more recent paper by B. H. Carmichael is our Research Report No. 6, entitled "Flight Research on Nineteen Porosity Distributions Designed to Maintain Laminar Flow on a NACA Airfoil with a Single Internal Chamber." This report was declassified only recently because of its security implications.

Regarding comment 5, I suggest Mr. Greenbaum merely read the scientific literature in the field of viscous aerodynamics. In so doing, he will learn enough to design a boundary layer control system himself.

Finally, I know of no way to make progress in any field without determining what is ultimately possible. If an empiricist wishes to call this process "extrapolation" and hates the word, then let him at least write some valid papers in which he does more than just express his "sweet reasonable rage."

AUGUST RASPET, Head

Aerophysics Department, Mississippi State University, State College, Miss.

Dear Mr. Licher:

The article "Some Thoughts on New Approaches to Soaring" by August Raspet, which you published in the November issue of SOARING, is of tremendous interest and I must congratulate you on having published it. It can certainly be described as a "landmark," and I see it has already been republished in the French "AVIA-SPORT."

I would like to reprint it in SAILPLANE & GLIDING, so I am writing to you to ask for permission to do so. Although many of our readers see SOARING, there are many more who ought to subscribe to it but don't, and I hope publication of Raspet's article might induce them to do so.

I am pleased that you are now publishing SOARING every month, and I wish we could do the same with SAILPLANE & GLIDING, but I have not been able to persuade our Magazine Committee to do so.

ALAN E. SLATER, Editor

Dell Farm, Whippsnade, Dunstable Beds, England.

Dear Lloyd:

I was rather disappointed with August Raspet's article in Nov. '59 SOARING, "Some Thoughts on New Approaches to Soaring." His "bold steps" of suggesting that we extract solar energy within the sailplane or use manpower, is getting away from the basic concept of soaring. I hope the influential comments of this one man do not contaminate soaring with the idea of using power devices in any way, shape, or form. This may be good for research, but it is not for soaring.

NAME WITHHELD

Are You There?

Dear Lloyd:

There was much laughter at the SSA Board of Directors' meeting held in Kansas City in January, when you told about the SSA Governor who wrote a letter to you inquiring if there was any soaring activity going on in his state.

This particular Governor may have had an experience similar to my case in which I have repeatedly written letters to the various soaring clubs in the state during the year of 1959 and have as yet to receive a reply from any of them.

We are all no doubt guilty to some degree, so let's all of us try to do better in the coming year and make it really the Soaring Sixty.

E. L. "JACK" BATES, SSA Gov.
2902 Denver, Kansas City 28, Mo.

A Friend Departs

Mr. Editor:

I'd like leave to write a little here in SOARING — to soaring people everywhere.

It is just now noticed that this scratch pad I picked up on which to make these notes is headed "Don't Forget." That seems to be a most appropriate title for this thing I wish to write about — "Don't Forget."

Vernie Ross of Wichita Falls, Texas, has gone away. He was fifty-eight years of age and died suddenly of natural causes.

It was a cold and blustery mid-winter afternoon there in Wichita Falls last Friday, February 12th when we all paid our last respects to this great little gliderman.

All of Vernie's family, his brothers and sisters — his younger brother Harland is best known to you all — his wonderful wife and simply superb twelve children, seven daughters and five sons, and a host of friends and neighbors were there.

We were sad, as you will be to learn of Vernie's going. At the same time we can be glad that we had a man like this in gliding and soaring — I know I am glad that a man like Vernie Ross came my way.

He was a plain sort of fellow — he didn't change none at all in all the years I knew him. Since he never made any enemies, he left here none but friends.

I reckon Vernie wouldn't want me to make with any fancy words — as if I could make so in the first place — especially about his final take-off.

Vernie Ross was, everything aside, my kind of man. He was of that great old school of glidermen in America — truly one of the pioneers of motorless flying in our country. He together with his younger brother Harland, can I think take full credit for the advent of level country soaring in America — and possibly the world. Certainly he was the man most instrumental in introducing soaring to Texas.

There is little need for me here to mention to Vernie's friends in soaring his many contributions over the years. He was as we all know a great and imaginative designer — a self taught technician — a quiet and unassuming man — one who loved the sky.

I am pretty sure Vernie Ross has hit that final goal — the one we will all want to attain one day.

E. J. REEVES

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