

PROPOSED WEST COAST TECHNICAL SYMPOSIUM

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Purpose

It has now been several years since a technical symposium devoted to soaring has been held in America. Although technical progress has continued at a good rate in the U.S., the question arises as to whether a symposium might not stimulate wider participation and more rapid progress similar to recent European trends as stimulated by the OSTIV sessions. The use of laminar airfoils has now become widespread, culminating in the work of Wortmann and Epler at Stuttgart where superior sections have been specifically developed to meet the requirements peculiar to sailplanes. The use of sandwich construction to provide light, strong airframes of superior contour and reduced assembly complexity are now in the experimental state, with the first production application offered by Brequet in their new standard class sailplane, the 905-01. The symposium could serve a useful purpose if it only did a thorough job of reviewing the latest developments throughout the world and made this information available in English in a single publication. Beyond this goal, it is hoped that with adequate time between announcement and date of the symposium, that original work extending the present state of the art might be conducted and reported upon.

Scope

A suggested outline covering some of the fields of interest is presented below. Volunteers to summarize the present state of the art or to contribute new approaches are solicited.

1. Aerodynamics Design— Performance and handling characteristics.

2. Structural Design— Strength requirements, possibilities for load relief.

3. Structural Materials— Comparison on basis of strength, rigidity, weight, durability, cost, ease of fabrication.

4. Fabrication Methods— Simplification and cost reduction, fastening and contouring problems.

5. Pilot Accommodations— Seating, controls, visibility, ventilation

and temperature control, crash protection, emergency exit.

6. Instruments— Remote detection of lift sources, improved variometers, blind flight instruments, flight technique optimization aids.

7. Flight Techniques— Test, contest, training, launching, safety, navigation.

8. Meteorology— Knowledge helpful in better utilization of common lift sources, new sources of lift.

When?

As mentioned previously, sufficient time must be allowed to permit the best possible presentation. This means in many cases securing papers from Europe and finding translators for those that are not in English. Also, such compilations cannot help but suggest further investigations, some of which could be conducted and presented at the symposium. Perhaps a goal of summer or fall of 1959 might be reasonable.

Where?

It is the opinion of the undersigned that the country is too large to pick a central location in hope of obtaining a large attendance. It is suggested that the first meeting be organized for a region (West Coast in this case). Papers are solicited from anywhere. A local person familiar with the subject can present papers for those authors unable to attend. The combined papers could be made available for other regional meetings. It should be possible to obtain the Los Angeles IAS building for the symposium and it is felt that it should be held independently of other IAS symposiums.

Presentation

It is suggested that writeups for publication include thorough development of the idea. The symposium presentation, however, should avoid long mathematical derivations. It should instead clearly illustrate the physical principals involved and the practical results in clear and concise form. In general, a single concept per slide is a good rule. Where possible (e. g., in the field of new construction methods), displays and samples would greatly enhance the symposium. Sufficient room exists in the IAS building to permit display of complete sailplane compon-

ents. Posters, for study outside the lecture period, might also be useful.

Organization

Anyone wishing to contribute ideas on the organization of the symposium, wishing to volunteer to organize one of the major portions given in the paragraph on scope, or wishing to contribute either a state of the art summary, or extension of the present field of knowledge, is urged to contact B. H. Carmichael 2221 Thorley Place, Palos Verdes Estates, California. Phone FRontier 7-2336.

FIRST FLIGHT

(Concluded From Page 4)

thermal. Brower told me to edge toward the airport to keep it within gliding range. Off to the right, big clouds with peaked crowns were tempting. I reached for them with a long glide, feeling the plane quiver when I neared a stall, and enjoying the smooth run that came when I lowered the nose.

By the time I'd sailed into the cloud's shadow we were at 1,300 feet and a mile from the field. Teasing thermals played at the wings, but they didn't seem too strong.

"Don't mess around and lose all your altitude," Brower cautioned. I remembered then that the club members had been talking about a member who had gone down in a farmer's patch. It can spoil the afternoon for the whole group when time is lost dismantling a sailplane in a rough field and hauling it out on a trailer.

Every nerve was tensed as I felt, almost begged, for one more thermal to boost me up again. But they just weren't there. I lined up with the runway, too high at 400 feet.

"Slip it just like you would a light plane," Brower said.

I crammed the stick to the left and pressed right rudder. It was like snapping the cable on an elevator. Pressure on the stick indicated Brower was again following me through. He called for me to pull the spoiler lever as we leveled out over the end of the runway.

The nose skid ground angrily into the runway and the ship dragged to a halt after a short run. Almost with a sigh, the plane dropped its right wing to the ground, looking awkward again.

"Well, what do you think?" asked Brower as he opened my canopy.

"Got room for another member in this outfit?" I answered.