

FROM THE EDITOR

In a letter in to last October's issue of SOARING, Wes Boyd expressed his willingness to produce a news-letter so that flyers and builders "could communicate with one another in order to come together as a class." As I see it, to compete or to fly as a class we must be referred to as 13-meter sport class. The problem seems to be too much money or too much refinement. If it has an L/D of 40/1, was produced in a factory and costs \$21,000. I would cringe at notion of calling it sport. As I said in a questionaire when I first started my Duster, I am flying for fun. Long Island, like Hawaii doesn't lend itself much to X-C flying- we have too much water on the East end and too much TCA on the West end. My idea of sport is releasing in the first bump above traffic pattern altitude, scratching away for twenty minutes at 50°/min. rate of climb and then spending several hours at the thermal tops. Herschel Smith of Milford, Conn., writes: to keep the class from becoming a builder's race, the following ought to be adopted ... no feature of construction may be incorporated in a 13m Sport class that is beyond the capabilities of a skilled amateur builder or a small-scale factory organization, (forbid) construction features that tend to make the cost higher ... (&) achieve performance levels that make existing craft obsolete. Wes is also stumping for better pilot protective structure in the event of a crash. It seems to

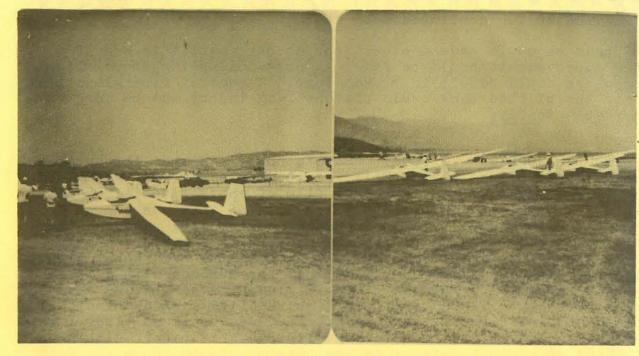
FROM THE EDITOR continued....

me that we could have another look at our cockpit to see if a few improvements could be made. A nose collapsing under slight pressure could result in broken legs. A seat of fiberglass that fits the pilot's back could prevent back injury and be more comfortable to fly.

AFTER THE WOODWORK IS DONE: "Here's how I finished the outside Surfaces." writes Ulrich Toll. First dacron fabric was glued on (1.8 oz./yd) with a very thin film of epoxy glue (Aircraft Spruce & Specialty Co., about \$13/gal.) and that was enough to cover the fuselage, tail surfaces and center wing panel. After the epoxy was cured, I filled the weave with a mixture of the same epoxy and micro-balloons. Then comes the hard work. First. in order to save sandpaper. I scraped the surface with a 12" wide scraper made from one of those wide hack saw blades used in machine shops. The edge of it is shaped like a wood chisel. I tried sanding first but the sandpaper plugs up in no time. I wet sanded sanded after the scraping with 240-grit paper as thin as I dared go without getting to the fabric. I did touch the fabric in a few places but this was easily repaired with more epoxy, then more scraping and sanding at the area. This whole process is very monotonous, time consuming and very hard on the old elbow but gives a very tough, smooth surface. Please warn your readers to use latex or rubber gloves when working with the epoxy. I made the mistake last winter, when I started to finish the tail surfaces, and got some of the hardener on my hands. I have developed an alergy to the epoxy now which is plainly miserable and expensive because of frequent doctor bills. I didn't seem to get rid of it for a long time.

FROM BELT, MONTANA Mark Pederson writes- "I have plan #191 and bought the raw materials kit from D.S.K. With no prior experience and with supplies limitted here in Montana, I thought this best. Most of the ribs and all of the fuselage bulkheads are cut out and about ready to assemble- as soon as I get heat in my garage- winter's getting close.

I have a commercial pilot license etc but no glider time other than a ride in one at the time I decided to build a sailplane and order the Duster. Since there is no soaring in this part of the country or clubs or rentals, we started a club this past September and have a Blanik. I hope to take my flight test in a couple of weeks. The more I soar, the better I like it.



DUSTER ASSOCIATION NEWS by John S. Sinclair

The first Duster gathering was held on September 7 & 8 at Skylark Field, Elsinor, Ca. Unfortunately only three Dusters flew due to last minute delays on several Duster projects. Our beginning was small, but it was a beginning. The Duster Association was formed and our first president elected, ie. (me)

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I am the contact point for future contests and get-togethers and I will feed information to the DUST RAG on scheduled events. Speaking of scheduled events, we will have a badge flying gathering of Dusters at Minden, Nevada Wave Camp next spring(Easter Vacation) and a full fledged contest to be held next summer '75.

I envision the tasks at next summers contest to be on the modest side as many Duster pilots are new to soaring. I am in favor of tasks with a total distance under 100 miles. de-

pending on weather conditions and pilot experience. Speaking of pilot experience, we need at least 5 cross-country ready Duster pilots at next summers contest. What is a cross-country ready pilot? The big thing is experience. Fly some cross-country. On my first cross-country I followed another ship around a 60 mile triangle. I don't recommend this more than once or twice as you are following and not making the required decisions yourself; however, this is an excellent way to break the umbilical cord and get on with the cross-country flying. The other thing that is required for cross-country flying is a crew, someone to come and get you if you fall down.

I know that many of you are still building and that cross-country flying is the next big project. Please, be cross-country oriented and not be one of these timid souls that never loses sight of the local airport. We need you and the Duster will do it: On my diamond goal flight this summer I

beat a Libelle around a 190 mile triangle.

Don't hesitate to contact me at the above address for Duster Association information and look for details about the Minden Wave Camp and the 1975 Duster contest in future issues of the DUST RAG.

MORE ON THE GATHERING by Cliff Espensen #64

As to attendance,...three Dusters were present and a handful of interested people. Most of us not only have to finish our aircraft but learn to fly them well enough to feel the need to compete with them. (The Gathering) was especially rewarding to me in that I did meet the designer and solve a problem that has been worrying me, ie., my height. The following concerns only builders of a height that might make it difficult to fit into the cockpit. I am 6'2" tall.

On Sunday, while in a bull session with Hank Thor, Jim Maupin and John Sinclair, I was literally stuffed into the cockpit of John's Duster(which incidently is a thing of beauty) and it became apparent that there was no way to close the canopy short of removing a portion of my head. In the ensuing discussion two modifications were discussed and agreed upon. First, lower the intercostals the seat is mounted on to just clear part # 2/7 Control Yoke. The next offering

GATHERING continued

still more room, Hank suggested increasing the dimensions of the turtleback to provide more height to the top of the canopy. This means that you would no longer have a straight line from the tip of the nose cone to the top of the canopy. Hank says this is OK but he did stipulate that the cross section of the turtleback <u>must not decrease</u> until aft of the trailing edge of the wing, which involves increasing the radius of the wing root fairings a little.

MEETING AT SKYLARK by Tom Protheroe #86

The Duster meeting at Skylark Gliderport, Lake Elsinore, Ca. on the 7th & 8th of September was the first step in organizing the Duster Association by electing (railroading) John Sinclair into the presidency. I am certain this is a good choice and I personally want to thank him for "volunteering" to steer us in some kind of direction.

Three Dusters were on hand that weekend for twenty or so builders to eyeball, feel or sit in. There were quite a few questions asked about various stages of building or finishing. I was not aware of anyone having serious problems with the actual construction as most of the question/answer sessions delt more or less with refined techniques in building or finishing. We are fortunate that Hank Thor took the trouble to draw excellent plans for the Duster.

About 1:30 on Saturday the three Dusters took to the air, John Sinclair, Jim Maupin and myself. We had some kind of ragged plan to fly to Hemet and back, a distance of about 20 miles. I won't elaborate on the fantastic flying Jim and I did on the Elsinore south shore and return speed run and will simply say that ole John flew off to Hemet and then on another twenty miles or so to Mt. San Jacinto. San Jacinto towers over 10,000° above Palm Springs. He buzzed the summit and then made a straight run home.

Hank Thor attended the sessions on Sunday and later on was able to get in a few hours of flying in Jim's Duster. John and I made a few comparison runs to check airspeed and vario indications as well as general performance. I might add that the Duster looks real good in the air. You are building a ship in which you can be proud of performance as well as appearance.

THE GATHERING by James Maupin

The "Gathering" at Elsinore was, I suppose, a qualified success. The participation was light but they seemed to enjoy themselves, and we could all at least tell ourselves that it was at least the first of hopefully a long line of such further gatherings.

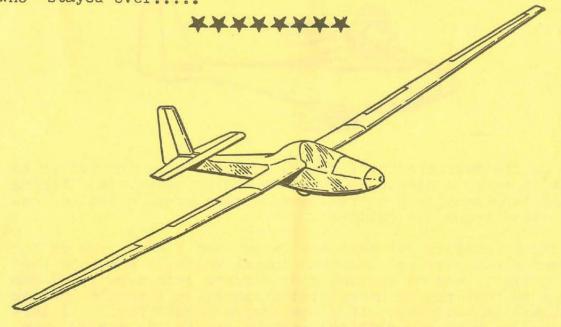
There were between 25 and thirty Duster builders, from as

far away as Hawaii and Arizona. There was lots of

conversation, swapping of ideas etc ..

A lot of builders who had hoped to be finished by the September date just didn't quite make it.... There was no formal contest. I claim first place because I was back on the ground first. I claim Tom Protheroe finished next to last and John Sinclair went over to the San Jacinto Mountain with a straight glide for home.

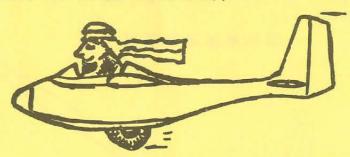
Saturday evening Larry and Arlene (who operate the glider program) put on a barbeque for everyone who staved over.....



LETTER FROM IRAN

I've been out in Iran for 3 yrs. now and it looks as though I could have another 4 years..... I have many things to find out yet, main ones being inspection and whether one can fly one's own aircraft here. I've been told that foreigners are not allowed to own aircraft. However, I hope to get a lot of spade work done, such as all the metalwork, ribs, formers, etc., even if I find that I can go no further here. In the past I have built a boat of marine ply, so don't really anticipate too much trouble with the woodwork.

As to gliding experience, I must confess to being something of a greybeard who got his 'C' badge 20 years ago in the U.K. but then let it lapse, and now I am just about ready to resolo on Blaniks at the Tehran Gliding Club. We use a dirt strip alongside the single runway at an Air Force base that is surrounded by the city, and the first two or three circuits are rather frightening with a main road jammed with Tehran traffic directly below on the downwind leg. (Tehran traffic has to be driven in to be believed!)



... The main reason, I think, for my liking the Duster is that it seems a simple no-nonsense design, some are flying (most important) and there seems to be a great spirit of co-operation among the builders.

The apartments out here are large and I have one on the ground floor with an L-shaped lounge which is about 30 feet by 35 feet, and by opening double doors into a hall. I can get a 50 foot run of unrestricted space, so I should have no problems in building, if I can progress that far. I look forward to having something constructive to do during our winter evenings, as although we have summer temperatures of 110 F, it drops to 20 F or lower in winter, with plenty of snow...

Sincerely, Don Clark #220

WING SPAR PREPARATION

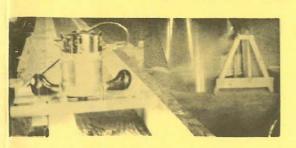
We received some interesting Duster building tips from Ulrich Toll #25. Judging from the photos enclosed, he must be about

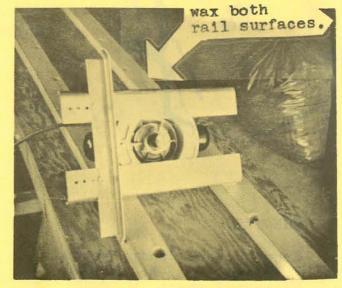
ready to fly. He writes:

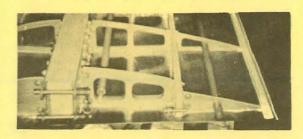
Here is the way I made my spars, which was not exactly easy but was easier than hand planing. First of all, I made my bench from 3/4" plywood, 18" wide... Now I drilled a double row of holes evenly spaced from the centerline of the bench, to use as a clamping fixture for the lamination later. This is similar to what Hank Thor suggests. When it was time to make the spars, I used the already drilled holes in the bench to mount 2 tapered rails, one on either side, 6" apart, the width of the spar blank.

Then a small milling-cutter was made to fit my router, about 1 1/8" 0.D. with a 1" stem and small carbide inserts. Then I mounted my router on 2 alum. angles and added an adjustable stop on one side so that I could lead this down one side of the rails making straight cuts. As you can see, I made tapered grooves in the spar blank, one right next to the other, going progressively deeper. (See photos). When each blank was done, I touched it up

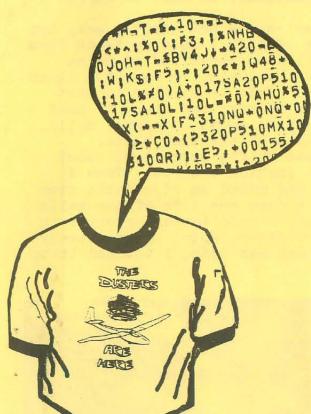
with a large hand-plane.







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Whadda ya mean the window's too small?

