U S U A FLYING CLUB 1 NEWSLETTER

April 1989

FROM THE LEFT SEAT
by Rob Brooke

Winter's over! The weekend of March 25/26 was sublime. Whitman Strip is still pretty moist, but it was pure pleasure being there on Easter Sunday. Admittedly, I spent a lot of time on chores. I think there was more of the "good earth" on my plane than under it. I spent an hour and a half washing off all of 1989's accumulated mud. It came off pretty easily and the plane looked great on landing at T.I. Martin and Warrenton-Fauquier airports (paved runways) but the landing on my return to Whitman made a mockery of my morning labors. Charlie Maples showed up and we flew back to Warrenton-Fauquier and thence on a sight-seeing lolligag up to Lake Manassas and back to Whitman Strip. I spent some time wondering where everyone else was, but reflected that it was Easter and maybe there were other things to do. But what a day! I was down to windbreaker, no sweater, no gloves, and as comfortable as could be at 2000'.

Coming up rapidly are real planned flights. I have plans to fly to Windstar to meet Tom Simmons, who expects to fly his new Quicksilver "Sport" back to Whitman Strip on April Fools' Day (not, I trust, an augury of future flying behavior on either of our parts) and on April 2nd, EAA 186 plans a Luncheon Flight to Tappahannock Airport. If anyone wants to get aboard either of those flights, I plan to take off for Windstar Saturday morning at 8:30 am at the latest, with an expected refueling at Clearview Airport in Maryland (east of Mt. Airy). I expect to arrive at Windstar at 11:00 am, or soon thereafter. That means I'll be putting the "pedal to the metal" a little. Windstar is a long haul and I will want to average at least 50 mph.

On Sunday, I will depart for Tappahannock at 10:30 am. I plan to make a leisurely flight of it and will be pottering along at 45 mph, or so. I'm writing all this stuff down so you'll know my plans; if any of you want to join in, give me a call, especially if minor plan changes will be necessary. If I know who wants to go, I will be able to coordinate with everyone, so let me know, or take your chances that the schedule I've offered here really works out.

Whitman Strip is ripe for some Spring Cleaning work. Unfortunately, we haven't scheduled it until May 7th. That will be too late for some things, like rolling the taxiway and runway, which are both badly rutted. We need to address some of that stuff immediately. Other things, like trash clean-out, hangar painting, etc., can wait a while. The windsock is back in good order, thanks to Charlie Maples. The field is flyable, but stick to the high ground and keep your wheel pants out of the ruts! And take your rubber-soled high-steppers for walking around in.

Fly Safely!

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ADVISORIES

For the April meeting, we have lined up some more video entertainment. Paul McClung has been pointing his Panasonic in every direction imaginable, so there will be more Whitman Strip action footage to enjoy. He is also threatening to show the club's "This Old Prop" video.

As usual, there will be a progress report on our efforts to get Whitman Strip reinstated with Fauquier County. There is to be a hearing before the county's Zoning and Planning Commission on March 30th and the report of that experience will be available.

At the March meeting, it was decided to accept Windstar's offer to send Mike, their Rotax expert, down to one of our meetings to present a demonstration program on Rotax engine repair and maintenance. Windstar has been contacted and right now, the June meeting (June 1st) looks like the most likely opportunity. The cost will be a minimum of $200. If more than twenty people attend, an additional $10.00 per person for each person over the first twenty will be charged. The club has decided to cover the cost by levying a charge of $10.00 a head for all attendees. If there are fewer than twenty attendees, the club will take up the slack. The demonstration will be videotaped by Paul McClung, so we should get a valuable permanent record for use by the club. Windstar will also get a copy of the tape.

It was also decided at the March meeting to make our May meeting a part of "Air Safety Week". This occurs during the first week of May and our meeting falls within the week. Air Safety Week consists of a series of safety seminars at various locations in the area on a variety of topics. The schedule is being choreographed by some people in the FAA. Our meeting will be listed on the overall schedule and billed as a seminar on ultralight flight safety. Whether this will generate attendance by people from other sectors of aviation is unknown, but we will be providing a program on that topic by the best authority we can find.

WHITMAN STRIP

The club's effort to restore Whitman Strip to legal operation proceeds with all deliberate bureaucratic speed. Paul McClung is in constant contact with Ed Whitman and with the Fauquier County Zoning and Planning Commission, whose approval of the application for a zoning exception is the first hurdle which must be cleared. We have submitted the application, coughed up the $750 application fee and responded in timely fashion to two requests for further information and paperwork from the Planning Commission. There will be a hearing before the commission at the end of March at which the club will present the plans for the use of the field and answer any questions the commission may have.

Pending the commission's approval, the matter will be presented to the Fauquier County Board of Supervisors for hearing and final approval.

After much discussion at the club's March meeting over the costs being incurred in this effort, it was moved, seconded and passed unanimously that the following would from now on pertain:

People who are based at Whitman Strip, that is, officially storing their planes there or otherwise occupying hangar space, will pay $50.00 as their share of these costs. This is a one time payment, to be payable immediately if you are already based there or to be assessed each new occupant as he bubbles to the top of the hangar list. The good news is, the $50.00

(Whitman Strip, cont.)
will be reimbursed if you give up your hangar slot to someone else. So if you move away, give up flying or find someplace else to keep your plane, you get your "share" back.

Unaddressed is what is to happen if the field closes, if the approval for continued operation is not forthcoming or some other such catastrophe. In that case, the fifty bucks will probably be a write-off, but if we spread it out, no one gets hurt too bad.

So, if you are based at Whitman Strip and want to stay there, send in your check for $50.00, made out to USUA Flying Club #1. Send it to:

Charles Maples
4656 Conwell Drive
Annandale, VA 22003

Be sure to include a note with the check that it is your share of the Airport Restoration Fund.

SAFETY
by Rob Brooke

Back in the salad days of 1986, when now vice-president Tom Simmons was the club's Safety Officer (a post unfilled at this moment), we could count on an interesting and thought-provoking article on the subject of ultralight flight safety every month. In the many months since those days, safety, it seems, has been put on the back burner.

Recent events show that complacency in the flying business is an insidious breeding ground for disaster. I know that when I started flying, safety was always on my mind. I suffered small doses of anxiety when I looked down from great heights, I fretted about the continuing airworthiness of my plane, I thought ceaselessly about where I might land safely if I had an engine-out along the way. But now, I have become complacent, therefore occasionally careless, and that ain't good. If you are like me, you need an occasional awareness update. Here it is for this month.

I mentioned recent events. On March 12th at Whitman Strip, Tom Mangan was taking off to join three others of us, Charlie Maples, Paul McClung and me, on a short cross-country to Hartwood Airport. Just as he lifted off, he found himself suddenly in more cross-wind than he could handle, started a ground-loop and wound up going into the electric fence wire which borders the runway with his wheels just off the ground. This terminated the takeoff pretty abruptly and, in ways which will never be known to me, bent the airplane up pretty severely.

Mercifully, Tom emerged from the tangle without so much as a bruise. The Allder/Mangan Quicksilver is, however, once again grounded for repairs, and from the point of view of everyone, that's a bummer.

Without going into any more details about the accident, I want to share with you my analysis of the major factors which contributed to it, in the hope that there is something constructive here from which we can all profit. I believe four influences came together at once which led to the event. I'll deal with each separately, though they are interrelated.

1. A relatively low-time, inexperienced pilot who hasn't flown for months finds himself trying to fly in conditions which are, at the moment, beyond him. This is a situation which happens all the time and which cannot necessarily be predicted. I've been in almost exactly the same situation - a gusty, turbulent cross-wind which was more than I could handle. With me, it was a landing situation, but otherwise, the situation was the same. I was low-time, inexperienced, and I hadn't flown at all for four months. I bent my airplane up just as bad as Tom's, took out a runway light at Warrenton Fauquier

(Safety, cont.)
Airport and was a public spectacle to every pilot who landed that afternoon as I humbly disassembled my bent-up bird and stuffed it into its trailer.

What's to learn? I guess the important lesson is to heed the still small voice of anxiety inside each of us that says,"Maybe conditions are a little hairier today than I really feel comfortable with!". We ultralight pilots really are not a bunch of competitive fighter-jocks, and I, for one, will look up to, rather than down on, anyone who decides the conditions aren't right for him. It's a truly personal call, and each of us must make it for himself.

2. Complacency was at work, doing its worst. The wind had been strong, 15 to 25 mph, and from a quarter that made it a crosswind to the main runway and to the east extension of the taxiway. For the earlier flights of the day, the wind had been more west than northwest, so we had been taking off and landing from the eastern extension of the taxiway. It is my remembered impression that for the takeoff in question, the wind direction had swung much more northerly and had picked up to the stronger end of its range.

This should have dictated a change to the main runway and a takeoff toward the north. The windsock was down for repairs and was not blatantly announcing the state of the wind. My feeling was, as was everyone else's I am sure, that, what the Hell, we've been doing it all day, things are not that much different.

The lesson here is, of course, to make a reasonable analysis of conditions before every flight, to avoid habit and pattern in decisions arising from that analysis and always to decide on the safest and most conservative course of action.

3. This was to have been a group flight. The suggestion of the flight was followed by a fairly speedy departure with no particular discussion of conditions or anything else except destination. Four planes were all lined up to take off. There was pressure on everyone not to impede the flight by a change of decision or, for that matter, even a delay to "think about it". There is always a feeling, where group flights are concerned, of being rushed, of trying to keep up and be part of the action, of not being the one to slow things down or make everything reset and start over.

Since we, as a club, are planning a lot of group flights this year, we must find ways to avoid this syndrome for everyone involved. This will take a certain amount of discipline. Pilot meetings before the flight must establish: that everyone feels O.K. about the conditions; that the time set for departure provides all participants time for an unrushed pre-flight; that plans are in place for in-air behavior on the way to the destination; that plans are agreed to for the way the landings will be conducted on arrival.

4. The club didn't do its job as an educational and support organization. Tom was in company with three of the most experienced ultralight pilots in USUA Club #1. One of the primary functions of flying clubs like ours is to provide education, advice and support as folks get into this sport and learn to practice it competently, through experience. We are there to suggest ways of doing things safely and well, and yes, sometimes to suggest that maybe they shouldn't be done at all today.

The lesson here is that at least one of the three of us should have made very clear to Tom Mangan that the conditions were, indeed, pretty squirrely and that he should be sure things felt right to him be-

(Safety, cont.)
fore committing himself to a flight. It is sometimes an embarrassment to suggest such a thing to another pilot. One cannot know just how experienced someone is until some common experiences have been built up. So those of us whose job it is to nurture must run the risk of putting our own feet in our mouths. In retrospect, contemplating the taste of my own socks now seems far the lesser evil than having Tom Mangan and Tom Allder grounded for the next month.

WAITING FOR THE S-9
by Jim Gildea

January 1989 - Here it is the last week of January and no airplane kit yet. I should know better by now but hope springs eternal. For all these years that I've been building and flying hang-gliders and ultralights, I have never got one on or before the promised delivery date. RANS won't miss by too much; I was assured this morning that it would go on the truck today.

There is plenty to do without the hardware . . . studying the plans is important to see how to organize the workspace and get some sort of overview of the project flow. There is the inevitable "Yeah, you can do it that way O.K., but if you get this widget, you can cut construction time down". Common hand tools are O.K.; specialized aircraft tools save time (but definitely not money). Even this early in the project, it's time to look ahead; to find out where to paint, to borrow equipment, to get a trailer, to decide which airport for test flights, which insurance company.

The tool salesmen are starting to consider me their best buddy. At work they make it a point to drop by my office twice a week with all the latest gadgets. Oh well, I've needed some good tools anyway.

Building the S-9 - It arrived! The first ten days was: unpack, inventory and organize, followed by the tedious task of deburring piles of little parts. The results of the inventory were good: I have most of the parts the inventory list said I should have, and the few missing parts are on the way. My first serious construction was the wing structure. The spars, compression tubes and anti-drag tubes . . . went together very quickly. Next the ailerons . . . again, no problem.

At this point, I decided to shift emphasis to the fuselage and control system. With the wings in one room and the fuselage in another, it's possible to shift to different tasks without moving stuff around. Getting the tail surfaces to fit was a bit annoying until I saw the fine print that suggested a 12" long 1/4" drill bit for reaming the hinges. It's twenty-eight miles, one-way, to the nearest source of good drills, a trip I expect to make more than once.

Fitting the landing gear was sort of like the tail . . . lots of filing to fit and reaming the hinges. Installing the axles was where I made my first big mistake. I thought it would be a good idea to pilot-drill the axles to verify the accuracy of the hole. The titanium bit broke off inside the first one. Even another titanium bit won't drill out its own kind, nor does sacrificing a half-dozen other drills make a bit of difference. At this point, I had a hole into each side of the axle and could see the obstruction. Finally, it occurred to me that brute force was in order. A pin punch, five pound hammer and anvil had it out in no time. Three hours for one hole. The second axle was easy, drilled full size the first time.

The tailwheel went on with the usual minor fitting, so time for the brakes. The left brake needed some alignment work; the right brake

(Waiting For the S-9, cont.) turned out to be a second left brake! Yeah . . . two left brakes, no right brake. Time for the daily call to the factory.

Nothing but "good" news from the factory. "The brake will be out next week and oh, by the way, nobody ever ordered the dual carburetor option before. We just found out it won't fit your airplane. But don't worry, we will send you a new motor mount, muffler, cowling, and materials to build the cooling ducts . . ." After some discussion, it turned out that by opting for the inverted fuel system, I could solve the problem quite easily (just throw money at it). Aerobatic airplanes should fly upside down anyway.

Overall impression so far? Good airplane, good factory support, good construction manual. I have the plane on the gear with the stick and seat installed, already fantasizing the trip to Winchester in the fall.

Don't worry; be happy!

EAA 186 LUNCHEON SCHEDULE

The club has received the complete schedule of the monthly EAA 186 Luncheon Flights. Gathering time for lunch is always 12:30 PM; breakfasts are served during most of the morning. Each of these will be publicized in our own monthly calendar, but for those of you who like to plan ahead, here is the whole list:

April 2 - Tappahannock Airport, lunch at Lowery's Restaurant.

April 30 - Orange County Airport, lunch at the airport restaurant.

May 7 - Winchester Municipal Airport, EAA 186 Pancake Breakfast.

May 28 - Sky Bryce Airport, lunch at Bryce Lodge.

June 25 - Whitman Strip, picnic lunch on the field with USUA #1.

July 23 - Mexico Farms Airport, Pancake Breakfast on the field.

Sept. 3 - Tangier Island, lunch at Mrs. Crockett's.

Oct. 1 - College Park Airport (Md.), lunch at the airport restaurant.

Oct. 29 - Winchester Municipal Airport, EAA 186 Pancake Breakfast.

Nov. 19 - Hummel Airport, lunch at the Pilot House Restaurant.

ELECTRONIC ULTRALIGHT

by Lew Clement

I use my Flight Simulator on a laptop computer with a "Supertwist" LCD screen. The screen is colorblind to several colors; as a result, I miss some details seen in color. The same may be true of other monochrome screens. I'm also using an abbreviated keyboard without the 10-key number-pad. This limits my controls and requires that I use a mouse for controlling the airplane. Nevertheless, I can fly all the modes available in the program.

Taxiing about an airfield is easiest, I find, if I use the map display option to show me where I'm going, since I do miss some details.

Having the same aversion as any pilot to "crashing" on landing, even in a simulator, I've spent a lot of time learning to fly straight and level and to make controlled climbs and descents before trying to land. Learn what power settings and pitch combinations work best for your desired rates of climb and descent. Also, remember that the gear is always down in

(Electronic Ultralight, cont.)
your real-life ultralight, so leave it down here. Although your ultralight has no flaps, you must use flaps in the Simulator Cessna or Piper. The long flat approach characteristic of no-flap landings is so unlike an ultralight approach as to be of no value in your practice. Experiment with different flap settings to find one that flies like your ultralight.

Most ultralights have no trim tabs. I recommend that you not use the elevator trim in the simulator. Learn, instead, to adjust power alone to maintain level flight.

Turns in the simulator are enough like most aircraft to be useful in your practice: applying back pressure in turns to maintain altitude and releasing it during rollout, and starting rollout at the right time to have wings level on a desired heading. Unfortunately, the Flight Simulator gives you no control pressures nor "seat of the pants" feeling of flight. Everything is visual, but you can get so involved that you forget these shortcomings quickly.

After you're satisfied with your controlled climbs, descents and your turns, try climbing and descending turns. Remember to use the right combination of power and pitch, combined with a constant angle of bank (no more than 20 - 30 degrees).

Now you're ready to try some landing approaches. The airports are usually visible some miles away but the runways are not, especially at pattern altitude. Close-in patterns allow you to see the runways clearly and in somewhat more of a 3-D view. This seems to make it easier for me to line up and establish a better glide angle. I had made many approaches and go-arounds before I felt ready to try landing!

FLIGHT PLAN

Apr 2 - EAA 186 Luncheon Flight, Tappahannock Airport. Lunch at Lowery's Restaurant, 12:30 PM.

Apr 6 - Club Meeting, Washington Gas Light's Springfield Center, 7:30 PM.

Apr 22 - USUA #1 Cross-country flight to Orange County Airport. Takeoff from Whitman Strip at 10:30 AM.

Apr 30 - EAA 186 Luncheon Flight, Orange County Airport. Lunch at 12:30 PM.

May 7 - Whitman Strip Clean-up Day, 9:00 AM throughout the day. Clean and groom the airport; spiff up your plane.

CLASSIFIED

FOR SALE - Phantom ultralight, engine rebuilt by Windstar Aviation, new sails, excellent condition, strobe, ballistic chute, hangared at Whitman Strip. $4500. Call Steve, (703)349-9089.

FOR SALE - '84 StarFlight 2-place, Rotax 503. '85 StarFlight XC-280, Rotax 447. `88 Quicksilver MXL II, new kit, save shipping. Loss of hangar forces fleet reduction! Jim Kelly, (301)475-5519, 6-9 PM weekdays.

FOR SALE - Pioneer Flightstar, 3-axis control, fairing, brakes, CHT, EGT, ASI, Altimeter, Compass, Tach, Ballistic chute, Rotax 377. $4500/offer. Sean McCormick 703/941-3754.

FOR SALE - Eipper Quicksilver MXL, 3-axis control, Stits Aerothane protectant, steerable nosewheel, BRS-4 chute, intake and exhaust silencers, flex-shaft, Rotax 377, $4500/offer. Scott Chapman, days 703/761_1167, eves 703/368-7157.