THE LEADING EDGE
The Newsletter of the M.I.T. Soaring Association, Inc.
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Contents

News briefs . . . . Mark Tuttle 1
A flight test at Sugarbush . . . . Steve Glow 1
Way high in wave . . . . Terry Wong 3
Turn point blues . . . . Errol Drew 5
Eliminating midairs . . . . Jim Short, SSA 6
Midair in England . . . . The Times, London 7
Minutes of the Board of Directors . . . . . Carl Johnson 7

News briefs

Mark Tuttle

New pilots: Steve Glow is MITSA's newest private pilot. Steve took his flight test up at Sugarbush on October 18, and has written about the experience for this newsletter. Congratulations, Steve!

New members: Please welcome Ken Gassett and Walter Hollister as MITSA's newest members. Both are highly-experienced pilots who will be adding a glider rating to their certificates. Welcome to MITSA!

By the way, last month I wrote that our new member Varun Puri was "more-or-less new to the sport," and then I happened to learn how wrong I was. Varun has a great deal of glider experience from his time at the Air Force Academy in Colorado Springs, some of it even as an instructor. Unfortunately, the Air Force and the FAA operate under different rules for certification, so Varun is scrambling to get a glider rating added to his private certificate.

New PhDs: Jakov Kucan (kucan@theory.lcs.mit.edu) finished his thesis! I've lost the announcement of his thesis defense, but his papers have titles like "A proof of strong normalization of F_2, F_ω and beyond." Ask him to explain that over a glass of beer. Jakov says he will continue to work for Lotus for the moment, but next year he will start a postdoc at Brandeis University with Harry Mairson. "I hope to see you at the field more often now!"

By the way, I find it fascinating that when I go to his web page and click on the phrase "To find about my life outside MIT look here," his web server tells me that I do not have permission to get that information. Jakov, exactly what *do* you do outside MIT?!?

New jobs: I ran into former member Greg Ryan at Hanscom Field this weekend. Greg has been teaching at Executive Flyers, specializing in aerobatics, but he has recently accepted a job with Colgan Air (specializing in aerobatics?) based in Manassas, Virginia, and flying out of Hyannis and Bar Harbor. Greg has been checked out by the company and is waiting for his assignment, and hoping for Hyannis.

Departing members: Matt Greenway, George Hossfield, and Margaret Rappaport have indicated that they will not be renewing their membership with MITSA.

Matt writes (condor@engc.bu.edu) from BU: "Just typing a quick note to say I'm off to Kansas for my Masters!! I really didn't get a lot of time this past summer to do all the flying I wanted to do. I've been up to my eyeballs in work. Well, my ship came in and I got a fellowship at Kansas State. I'll contact you when I get there. ... I wish I had the chance to come to the field and say goodbye, I feel really bad. I'll be back at Christmas, hopefully to see some of the guys at the field!"

George writes (hossfieldg@averydennison.com) from England: "Thank you for keeping me up to date with the club activities. I think that since I will be here until March or even longer I will be joining The Northumberland Gliding Club Ltd. The club uses winch launching and aerotow. They have much the same services. I hope to hear from you soon."

Margaret writes (jave36a@prodigy.com) from Cape Cod: "I have decided not to renew my membership at MITSA. I think and feel the club to be wonderful and interesting. I enjoyed my visits to the field and participating with fellow club members. However, Sterling is too far away from my home to be practical as a club for me. ... I plan in the year ahead to do more flying and to reach some of the goals that are appropriate to my level of experience. My plans include staying at some soaring sites around the country to work with mentor pilots. ... I hope to come to MITSA during the season, to say hello, and perhaps to fly with friends."

MITSA will miss each of you.

A flight test at Sugarbush

Steve Glow

The idea of taking my flight test up at Sugarbush rather than down at the field in Sterling hit me some time back. Sugarbush seemed to offer several real advantages over Sterling; first I felt that it would be easier for me to plan a trip up there at my convenience than to arrange for an examiner to drive up to Sterling, second I had flown with the examiner/chief instructor there on my one other trip to Sugarbush, and I felt a little more comfortable taking the test with someone that I'd flown with at least once before. There was also the prospect of getting some ridge or wave experience while I was up there, and the fact that there would likely be no one I knew around watching in the event that I didn't pass the test.

Of course there were some drawbacks to going up to Sugarbush for the test: I would have to take it in a 2-33, a type of glider that I'd only flown once before, and it would likely cost me a fair amount more to take the test up there because of the glider rental fee, the more expensive tows, etc.

I was still wavering a bit when I learned that John Boyce, the examiner for our region, had decided to retire shortly after giving a couple of flight tests here at Sterling (no relation of events I'm sure), and no one I spoke to was sure who would be taking his place. This made the decision for me and I made a date to take the test up at Sugarbush for Friday, October 18th.

The Wednesday before my test I left work a little early, packed my logbook, sectional, etc., and headed up to Vermont. I put myself to sleep that evening studying part 61 and 91 of the FARs, and made it to the field nice and early the next morning to get some practice in before the big day.

It was with mixed feelings that I discovered one of our club Blaniks waiting for me at the field. I was of course pleased that I would be able to save some cash and take the test in an aircraft that I was familiar with, however I had only taken one flight in the Blanik over the last few months preferring to practice in the club 1-26 which handles very much like the 2-33s used up at Sugarbush. The Blanik had been left up there by the club members who had been flying it the weekend before in hopes that they could get some more of the terrific wave flying in before hauling it back.

I took a few flights with one of the Sugarbush instructors that day. This gave me a chance to get reacquainted with the heavy control inputs required to fly the Blanik, and to get used to the area. My first couple of flights were pretty uneventful, I practiced boxing the wake and making short field landings, and generally began to feel pretty confident about the flight test. My confidence was not long lived however, when on my third tow I was given a simulated rope brake. It was a nice easy one at about 700 feet AGL, and I had no problem coming around for a left hand pattern (the opposite of normal) on 04. Just as I was turning final I noticed that the tow plane had decided to race me down and was turning final for a right hand pattern on the same runway. I didn't think too much about it, after all I was going to land on the grass and tow planes always land on the tarmac, right? Well I learned that I shouldn't make assumptions when the tow plane lined up on the grass directly below me and made a nice short field landing. This is how I came to have my first hard surface landing, and bounced it for my second, and my third...

Friday morning conditions didn't look too promising at the field. There was an 8-12 knot wind blowing at nearly a 90 degree angle to the active runway (22), and the sky was completely overcast with a ceiling of perhaps 2,000 feet. At around 10 AM Bill showed up and we went upstairs to get started on the oral portion of the exam.

We began by working our way through the Blanik manual. Bill seemed genuinely interested in the performance data for the Blanik having little experience with the L23. We discussed best glide verses minimum sink and the determination of the best speed to fly for various conditions. He also asked about VNE and rough air speed, not just what these speeds were for the Blanik, but what their implications were and how they might be affected by altitude. When we came to the weight and balance table in the manual Bill seemed somewhat amused by it's complexity, but listened as I worked my way through it and found that he and I would indeed be within range for the aircraft.

From the Blanik manual we continued with the FARs and spent some time discussing airspace restrictions and the requirements for the use of oxygen. Also on the agenda was a discussion of hypoxia, hyper-ventilation, vertigo, and (my personal favorite) motion sickness. From there we moved on to the sectional and I was asked to identify an assortment of markings and airspaces. At one point he asked me what the highest obstruction within a particular quadrant of the map was. After several minutes of carefully examination I identified a particular mountain peek as the tallest. With a grin Bill pointed out the large numbers right in the middle of each quadrant which indicated the highest obstruction within it. Oh well.

With the oral behind us we went outside to find that the ceiling had lifted to around 3,000 feet and I decided that the flight test was a go. The first tow was started uneventfully, at around 1,000 feet I was asked to box the wake which I did with reasonable accuracy. At around 2,300 feet the clouds started to look a bit close and I suggested that we release. Bill thought I was being a little conservative, and suggested that we stay on a bit longer. At 3,000 feet we released and practiced straight flying and turning to a point. There was some very weak wave activity and Bill had me trying to find and stay in it (with very little success I must admit) and after some minutes of this he asked me to do a series of straight stalls. I took a couple of clearing turns but decided that we didn't have the altitude to perform the maneuvers safely and suggested that we land and try the stalls on the next flight. Bill agreed and asked me to do a short field landing. He picked out a point at which he wanted me to touch down and finish the roll out as quickly as possible. This was to be my first landing on runway 22 for this trip, and as I lined up on final I remembered that the runway had a serious up-slope to it from this direction. This slope has the effect of making you feel higher then you actually are on final, and even though I had flown on the runway a couple of months ago I was duped and ended up touching down some 100 feet before the mark that Bill had set. When the glider rolled to a stop, Bill seemed to have a bit of trouble getting out of the back seat and said half aloud, "This looks like it's going to take some effort." Funny, I was thinking the same thing myself.

The airport was just about deserted, and our second flight started with us unable to find a wing runner. I said that I'd never done an unassisted takeoff before, but with a little coaching from the back seat it turned out to be a non-issue and the wing came off the grass within ten feet or so. The flight was uneventful, we did some stalls and slips and I managed to get some lift out of the weak wave. Bill gave me a chance to redeem myself on the landing and this time I touched down very close to the requested spot and used the wheel brake to shorten my runout.

My third and final flight started again without a wing runner, but I was a pro at this by now. The tow up was a little rough, I guess that weak wave implies weak rotor and that's what I was being pulled through. We released again at around 3,000 feet and played around in the wave for a while. When the time came to land Bill asked for a downwind landing on the hard surface. Since the prevailing wind was almost perpendicular to the runway we hardly had any tailwind coming in, and I had no problem lining up on the tarmac. I did bounce a little on touch down, the hard surface is much less forgiving then the grass it seems.

After the three flights Bill seemed satisfied and we went inside the office to do some paperwork and receive mild congratulations from the crew hiding from the mountain chill. The whole experience was not as difficult as I had feared, although I think that I was helped by the low ceiling which shortened our series of flights somewhat.

And so now I am a private pilot. I couldn't have gotten here without the patient assistance of all the wing runners, tow pilots, and especially instructors with which MITSA is blessed. Thanks everyone, I'm looking forward to a great season in '97.

Wave excitement: Mike Baxa (mbaxa@aol.com), author of the great wave article in the last newsletter, wrote on October 15 to say, "I called Gorham airport this morning and spoke with Walter. They have 7-8 gliders on the field. Yesterday, [a pilot] set an absolute state record and went to 29,100 feet after 5,100 feet release in 10 knots straight up! Walter said it even looks better today." Read on for another great wave article. . .

Way high in wave

Terry Wong

I had just returned from a business trip when I remembered that the upcoming weekend was supposed to be a MITSA encampment up at Sugarbush to take advantage of the fall wave conditions. I hadn't heard anything, so I gave Carl Johnson a call as he had volunteered to organize the excursion. Carl wasn't very upbeat about the possibilities, as he had found no one else interested in going up for the week, let alone the weekend. I was pretty excited by my experience at Springfield the month prior, so I really wanted to go.

I suggested to Carl, that perhaps the two of us should bring up a Blanik for a long weekend. After solving a few small logistical problems, such as finding a tow vehicle and getting a day off from work on short notice, we were ready to go. When Friday rolled around, it was a surprisingly uneventful trip up to Sugarbush. We had plenty of help show up to derig and load the glider at Sterling (thanks everyone!), and Mark Evans was with us to show us the way. (Mark was heading up in order to bring back his own glider for the winter.) I guess things went smoother because the Blanik had been derigged up at Springfield, so nothing was sticking this time. It was around midnight when we finally pulled into Sugarbush under a crystal clear night with an amazing concentration of stars overhead.

The next morning Carl and I went out to the airport early to start rigging the Blanik. We had met a couple of Canadians who were part of a club encampment for the week at breakfast, and upon arriving at the field met the other five or six members. They were fascinated by the Blanik, and we soon roped them into helping us rig. Other than pointing out a few places where the paint had sheared off the rivets (due to "aerobatting," as they put it), and where they expected the skin to eventually cut through the rivets themselves, they were very helpful. One of the Canadians claimed the original Blanik was designed to be a disposable trainer for the Russian Air Force. One hundred hours of air time, and then onto the trash heap. I hoped I was just getting some of that dry Canadian humor.

After rigging we watched the action as there were quite a few gliders around, probably the most gliders that I've ever seen at one time. It certainly put our Sterling operation into a different light. Sugarbush's L-19's keep up a pretty quick launch rate, and soon the launch area was pretty clear and no one was coming back. Some radio reports had gliders reaching 10,000 MSL in wave. Time to GO!

Carl took PIC for the first flight as we launched west towards the Sugarbush (ski area) parking lot. It was a little rough below 2,000 AGL, until suddenly it smoothed out, the vario pegged up, and we were surrounded by slowly drifting gliders. It looked like the secondary wave, so Carl released near the gaggle. We had been told to stay on tow to at least 3,000 feet, but we were both way too excited to remember that. Of course the strong lift we thought we were in, left with the tow plane. It was still pretty smooth, but nothing was really going up. In fact all the other gliders we saw were struggling to hold altitude. Carl flew valiantly, gaining 500 feet in a small bubble, only to lose it again as the bubble faded or moved away. Soon we had about eight gliders in the area all trying to stay up. It got pretty crowded because unlike a thermal, there was no real order to the search for lift. Gliders were going in pretty much every direction. It started to look pretty grim, as the whole gaggle of gliders was struggling 1,500 feet above the airport height. Carl decided he'd rather be the first instead of the last to land, and we headed back to the airport. As it turned out only one other glass ship landed while the rest made it out.

Latter in the day we talked to Mark Evans who had been in the crowd with us. He had moved towards the south and contacted some wave, but without a radio he couldn't call us over to where the lift was. This instance of the lack of a radio being a drawback wasn't the last. Carl and I swapped seats and I took over as PIC. We resolved to take a high tow to give us a better chance of making wave. Off we went, but this time the tow plane turned east, away from where everything was working before. It did look like a nice lenticular was forming over the east ridge, and we spotted two gliders over there. Thinking the tow pilot knew better, we stayed on tow to 4,000 AGL. Of course we found nothing, nada, zippo. We burned most of our altitude trying to find the lift, rather than make a bee line across the valley to the real lift. Soon we were back at pattern altitude over the airport. I was beginning to think wave flying was a lot more difficult than expected. Once on the ground, it turned out that of the two gliders we saw on the east ridge, one was giving rides, and was returning anyway, and the other was circling with his spoilers open. This pilot said he was experiencing mild hydraulic problems and found that area was filled with smooth sink to get him back quicker. Thanks! Oh for a radio! (By the way, this guy was also Canadian, and I was starting to get a complex.)

Carl and I switched seats again and took another high tow, this time to the west. I guess we should have known that the day was dying as we had to wait for five or six gliders to land before we could launch. And yet again we slowly drifted back towards ground. Needless to say, we both were pretty frustrated as all the other pilots around us seem to be gloating over 10,000 foot ceilings, and five hour flights.

The next morning dawned overcast and foggy. Great I thought, another washout. We decided to go out to the field anyway to find it pretty deserted. Joe Kwasnik and Al Gold showed up, without their 1-26. As we stood around talking a sudden shaft of sunlight lit up the field. Collectively, we turned to see a large blue whole and a nicely shaped lenticular cloud. Lets go! Carl flew first with a friend for 90 minutes, being limited by a ceiling around 9,000 MSL. Still, they had pretty big smiles on their faces when they landed.

Next up, Joe and I jumped into the Blanik and off we went. This time we released over the Sugarbush parking lot in about six knots of lift. Up and up we went as a large blue hole, probably two miles by 10 miles opened up above us. At around 8,000 MSL we were playing at the edges of the lowest cloud ceiling. I could see other gliders way above us, so I continued to climb into the hole. Joe and I reassured each other that as soon as the hole started to shrink, we'd head back down, but I was still a little nervous. As long as there were more gliders above us, than below, I decided to continue upwards.

Around 10,000 MSL we were in-between two layers of lenticular. It's pretty awesome to have solid clouds both above and below you! The lift started to get weaker, down to 1-2 knots but incredibly wide. We must have flown 5-6 miles across the wave and along the blue hole, always going up. We started to celebrate each new plateau, 11,000 feet, 12,000 feet, 12,500 feet. I was becoming giddy, what was the FAR?, Oxygen required above 12,500 MSL after 1/2 hour? I think it was just a natural high as we were several thousand feet above the cloud tops and really enjoying the view.

As we anticipated reaching 13,000 MSL I couldn't pull my eyes from the altimeter. We then noticed that there weren't any gliders above us, in fact many of them seemed to be circling below as it appeared that the window was slowly closing. Having seen how fast the windows can close from the ground, Joe and I decided pretty quickly to head back down. Full spoiler, steep turns, full side slips to get below the more rapidly closing window. It was tremendous fun to fly circles around the small wisps forming and to fly the Blanik at 100 knots for sustained periods. After being at minimum sink for one and a half hours, 100 knots seems pretty fast. We penetrated up wind, found the down wash coming off the mountain and soon was in some serious 1,000 foot/minute sink. We decided enough height was lost so we headed downwind into the primary wave. It was still working and the window had opened up again, but having been up for almost two hours we decided to head back and hand the ship over to Carl and Al. The only regret I had was not taking a barograph. I could have had the silver altitude gain (1,000 meters), and almost the gold (1,500 feet short of the 3,000 meters).

Monday morning arose with a strong wind out of the west. Winds aloft showed almost 60 knots! Any flying today would be gravy after the previous day. Carl and I launched around 11:00 AM and released around 3,500 AGL. It took some floundering around to find the wave, as it was much further downwind than the previous two days. The winds were so strong aloft, that after trimming to min sink speed, we'd end up flying out the back of the lift, tail end first. I was getting jealous of the GPS equipped pilots as it became hard to stay in the strongest lift as we got higher and the ground references got further away. At one point we ended up flying backwards into some rotor.

It was all the more discomforting, because I didn't see it coming. For the rest of the flight I kept as much an eye backwards, as I did forwards.

At 11,000 feet we decided to explore the wave some. Carl flew upwind to find what we thought would be the primary, only to find 1,000 foot/minute sink. It took five minutes to get five miles upwind at 90 knots, and about 30 seconds to get back into the lift. We regained some height as we explored the wave, this time perpendicular to the wind direction. After about 90 minutes we decided it was Joe and Al's turn (and I was having some hydraulic problems) and decided to burn off altitude from 10,000 feet. Carl demonstrated some wing overs, and zero G maneuvers two or three times. (It was fun to play astronaut — if even only for a few seconds. Did you ever spin a juice box on your finger? It's much easier without gravity.) Leveling out, we checked the altimeter and it read 10,200. Zero loss aerobatics, pretty neat! If that wasn't going to get us down, then the sink would, so we flew upwind again. Pretty soon we were going down at a pretty good clip, when at 5,000 MSL I experienced the second rotor of the day. After being glassy smooth all day, its not fun to have your feet knocked off the rudder pedals. As it turns out, the rotor had settled directly over the airport so it was a pretty exciting finish to a great flight.

Once on the ground we looked around for Joe and Al. They were gone as Sugarbush had closed down operations due to the rough conditions. Some of the glass ship pilots claimed it was the worst they've ever seen. The wind gauge was showing maximum gusts of 35 knots, perpendicular to the runway! If only we had had a radio, we could have stayed up for the rest of the day. In any case, it gave Carl and me an early start back to Boston. I can't wait to do it all again next year.

Soaring Club Med: Paul Lynch (pklynch@aol.com) wrote to say, "Since I left Boston and MITSA last spring and transferred to Norfolk, my soaring has come to a raging halt. The Navy is about to send me on a six-month cruise to the Mediterranean and Persian Gulf. Now to the uninitiated, that may seem like a great deal, but the USS Theodore Roosevelt is not a luxury cruise ship! Anyway, we are visiting some interesting ports over the next few months and I was hoping to get a chance to soar. If anyone has any info on getting a chance to soar in the following places, please let me know by 24 November. Why 24 November? That is when e-mail gets a little harder, although we may have some limited satellite access. Anyway, we hope to visit Cartegena and Palma, Spain, Cannes and Marseilles, France, Naples and Trieste, Italy, Haifa, Israel, Antalya, Turkey, and Corfu and Rhodes, Greece. We do not go to them in that order, and the schedule is likely to change, especially if some hot spot in the world heats up. I won't tell you what garden spot in the Persian Gulf we get to visit; I am sure there isn't much soaring in the United Arab Emirates."

Turn point blues

Errol Drew

Maybe it's "Murphy's Law of Gliding" but turn points are always in the blue, far from the comfort of a cumulus. There comes that moment when you abandon the haven of sure and steady lift, departing with as much altitude as you can legally muster from that the last cloud and head off into the unknown with the turn point barely in sight, way off in the distance where there's not a cloud in sight.

About a thousand feet later, having pushed boldly on without so much as a goshawk's fart for lift and the turn point hardly any closer, you begin to question the air mass, the strength of the sun, your ship's glide ratio, your judgment and why you're putting yourself through this anyway when you could and should be at home mowing the lawn. It's at around this time that you start thinking it may be better to turn back for the sanctuary of that last cu that's probably long since collapsed anyway. So you press on a little further and lose a few hundred feet more hoping for at least a little lift to come your way. An it does, that one knot and zero sink that loses you more than you gain while turning, hoping for more. But at least its something and gives hope there's lift to be found out there in the blue. You even begin to wonder whether the farmer whose field you'll be landing in will be accommodating. If you find a field, that is, and don't have to make some ignominious crash landing in the virgin forest below stretching all the way to the turn point. Another thousand feet later, the turn point is well in sight and turning back would be pointless having come so far. Soon you can see the fields much better now because you're much closer to them. Dashing around the turn point, hastily snapping a picture, you're starting to admit to yourself there's more than a hint of desperation in your attitude. You're picking fields while edging towards those cu's that seem way way off. Summoning that last bit of courage and good judgment, you forsake those beckoning farm fields in the valley and head for the hills, sunny side up. And sure enough, there's two knots of ragged lift. You work it for all a retrieve is worth until five hundred feet later, it smoothes out and gives you a steady three knots. What were you worrying about any way? If there is lift under the clouds, there must be some lift in the blue. Somewhere. Just finding it's the problem.

Ventus B for sale: The club has received an ad for a Ventus B for sale for $42,500. "This ship was built in November 1983 and has 750 gentle hours. It has never had any damage whatsoever. It has always been meticulously maintained and stored in its trailer in a garage. The gel coat is in very good condition. … The plane is contest ready and comes with a very nice Cobra trailer." Contact Randy Hollenberg, pager 713 768-5758, fax 713 392-4083, email rwholl@ix.netcom.com.

Eliminating midairs

Jim Short, SSA

Jim Short of the SSA Government Liaison Board sent the following letter to MITSA all soaring organizations. —Editor

Today we can not deny that parts of the airspace are crowded. Particularly around terminal airspace (Classes B and C) we find more heavy aircraft operations than ever before. We find more airline activity dedicated to moving more people more quickly and more economically. We can't deny these facts or the safety challenge they represent to recreational forms of aviation such as soaring!

As glider pilots, we are proponents of the "See and Be Seen" principle. We don't always carry radios, and we don't have to carry transponders except in Class A or B airspace. If we want to protect our right to fly in certain airspace and our privilege to carry less sophisticated navigation and surveillance equipment than other forms of aviation, we are going to need more vigilance and more responsibility in sharing airspace with our commercial brethren. At a recent meeting of the General Aviation Action Plan Coalition in Washington, the SSA (along with other associations) was directly challenged by FAA Administrator Hinson to "find a way to achieve a goal of **no midairs**." Later in the meeting Hinson stated, "If you [general aviation societies and associations] don't find a way to do this, we will find it for you." In 1996 that is a fact, not a threat.

The purpose of this letter is to raise our levels of consciousness of this problem. It is also to lay out a method for each local soaring operation to develop ways to reduce conflict in areas of glider/heavy aircraft interface. Finally, it is to enlist everyone who reads this letter to think and act to reduce conflict which could lead to that worst of catastrophes — a collision between a glider and a commercial or military aircraft.

Please take a look at the suggestions attached, appoint an airspace chairman and do your best to work as a team with FAA in your area to share airspace and reduce or eliminate potential conflict. Develop a plan to reduce the threat of collisions of all kinds (and don't forget to continue vigilance to keep gliders from colliding with other gliders!). The SSA is working with the FAA and Congress to protect our fights. Let's make sure we work together within SSA to promote safety and share airspace responsibly.

Finally, let SSA know what works for you in your area. Call the office in Hobbs (505) 392-1177 or call me evenings (Central time) at (708) 963-9813.

The preceding letter from Jim Short included the following list of things that soaring organizations can do to prevent midairs. —Editor

SSA asks each site, club or school to appoint an airspace chairman. Appoint a club member who is aware of the approach, departure, and enroute patterns of other categories of aircraft within 30-40 miles of your normal soaring areas. This member could be an IFR rated power pilot, an airline pilot who is familiar with sailplane flight routes as well as ATC procedures, or a glider-only pilot who just wants to get involved.

What should the airspace chairman do? Start by diagramming the busy corridors in which heavy and high speed (i.e., commercial, military, or business) aircraft operate. For instructional purposes, these diagrams could be made on sectional charts or on other maps which are illustrative for glider pilots flying locally or cross country. The diagrams should show, among other ideas:

- Approach and Departure routes for commercial (or high activity) airports.
- Altitudes at which aircraft typically operate on these routes.
- Busy IFR intersections and reporting points, VORs and other hazardous areas, such as parachute jumping zones, known acrobatic practice areas, etc.
- Typical glider operating areas and cross-country routes.
- Conflict and danger areas for soaring operations.

What then? Hold regular briefings as part of ground schools, area checkouts, or local safety meetings, to make sure that everyone flying at your site knows of the danger areas. Seek input from everyone present at your meetings. For starters, discuss these topics:

- Areas and altitudes to avoid to relieve potential interface with high speed metal.
- How to reduce conflict when flying through danger areas on cross-countries.
- The absolute need to adhere to standard cloud clearances and possibly even double them in high traffic areas. Adherence to other traffic and airspace responsibilities. What areas should be avoided in times of reduced visibility.
- Published and observed changes in the large aircraft approach/departure behavior.
- How glider pilots can report traffic to each other on glider frequencies.
- How gliders in some areas can contact Approach Control when a need arises.

Then disseminate the results of these meetings in mailings and newsletters. Post your maps showing areas of potential conflict on your club/airport bulletin board. Concentrate on traffic procedures and collision avoidance during Biennial Flight Reviews. Plan a briefing on local and cross-country soaring operations for local FAA Air Traffic personnel. Build a team relationship with ATC personnel so you can work together to alleviate problems before they occur. Take ATC personnel for glider flights so they know what we do.

Finally, let SSA know what you are doing and how successful you are. Let's have a forum, based on your ideas, in Soaring magazine and on the Internet. Let's work together to save our skies through safety, education, and responsible use.

Midair in England

The Times, London

My father (Morrie Tuttle, tuttle@zeus.unl.edu) sent me a photoccopy of this article "Pilot, 74, killed as gliders crash over Cotswolds" printed in The Times (London) on August 22, 1996. —Editor

A pilot died yesterday after a collision between two gliders over an estate in Gloucestershire owned by the Princess Royal. The other pilot parachuted to safety with minor cuts and bruises.

The dead man was named last night as Leslie Akehurst, 74, of Thrupp, near Stroud, a former Wing Commander who won the OBE for his role as a senior air traffic controller during the Berlin airlift. The other pilot was Geoff Fellowes, 45, a builder, from Chippenham, Wiltshire. Both were members of the Cotswold Gliding Club.

Mr Fellowes walked a mile across fields on the Gatcombe Park estate to the gliding club office at Aston Down airfield, where he summoned help. The estate is managed by the Princess's former husband, Captain Mark Phillips. Debris from the gliders was scattered over the grounds of his 18th-century farmhouse.

Captain Phillips, who was watching the couple's daughter, Zara, compete at a pony club event in Shropshire yesterday, said: "I am very sorry to hear about this terrible accident and I would like to pass on my sympathy to the families of those involved."

A joint investigation by the Department of Transport and the British Gliding Association will examine why the pilots were flying so close together, said Superintendent Adrian Grimmett, police divisional commander at Stroud.

One of the gliders disintegrated and fell to the ground "like confetti," according to one witness. David Webb, 40, a painter, was sitting in his car having a tea break while working outside a cottage in Cherington, less than a mile from the crash. "As I got out of my care there was this big bang. I looked up and there were bits flying everywhere."

A local coroner was at the scene while firemen from Stroud were involved in a search of the wreckage. A police helicopter was scrambled in the hope of taking survivors to hospital.

The Cotswold escarpment is popular with gliding enthusiasts. It is believed that the crash was at about 1,500 feet, and David Roberts, secretary of the club, said the survivor was "very lucky" to have baled out successfully. He said that the club had run for almost 30 years with no serious injury.

Minutes of the Board of Directors

Carl Johnson

These minutes have been heavily edited by Mark Tuttle for publication in the newsletter. —Editor

September 18, 1996

The meeting of the Board of Directors was held at 7:30 PM at Steve Moysey's house in Arlington. Steve Moysey, Phil Gaisford, Mark Tuttle, Carl Johnson, Joe Kwasnik, Guenther Eichhorn, and Bruce Easom were present. Terry Wong was absent.

Mark Tuttle opened the meeting with the latest financial summary. The financial status of the club was discussed in light of the next topic of conversation, which was Steve Moysey's suggestion that the club consider the purchase of a two-place fiberglass glider. Mark emphasized that he has historically had a difficult time predicting expenses, and therefore felt more comfortable with an extra cushion of money in the checking account. He also wondered if the club could adequately maintain a fiberglass glider. In the general discussion that followed, the board members acknowledged the difficulties involved in purchasing a new glider, and agreed to table the discussion.

The board next discussed the status of the towplane and possible replacements for it. The prices for Pawnees, Super Cubs, and L-19s were mentioned, and it was agreed that the club currently has insufficient funds to purchase a new towplane.

The general status of the membership was then discussed, and it was agreed that the club could do more to foster a sense of camaraderie within the membership. The current lack of a club house prevents people from having a place to socialize after the day's operation, and over the years this has resulted in a lack of commitment and enthusiasm among the members. It may have also indirectly contributed to other club problems, such as the shortage of qualified instructors. The board agreed to investigate the purchase of a construction trailer to act as a clubhouse, with the goal of getting it installed before winter. Joe agreed to lead the effort. John Wren had investigated this purchase briefly about two years ago, and the people at Sterling airport are already accustomed to and enthusiastic about the idea. The board discussed the probable location of the clubhouse (the flat area behind the glider tiedowns), and talked about building a deck in front once it is installed.

Bruce motioned to make the clubhouse the next major expenditure, a vote passed the motion. The board agreed to leave the budget open until more information was available from Joe.

Joe then mentioned Tom Avery's offer to paint the 1-26 if the club would strip the old paint and provide the new paint and materials. It was agreed that the club should take him up on his offer if we could arrange a group of people to do the necessary work.

Mark then mentioned the need to improve the maintenance on the club gliders, especially the L-23's which currently have no canopy covers. The board agreed to look in Soaring magazine for a source for new covers.

Carl agreed to try to arrange for monthly membership meetings, in order to increase member enthusiasm and general awareness of club operations. He said he would try to plan the first meeting sometime in October.

Carl then mentioned his plan to organize a club encampment at Sugarbush over the Columbus day weekend, and he agreed to write something about it for the club newsletter.

Guenther then summarized the maintenance status. The leaking wing tanks in the towplane are now fixed, as well as the broken tail wheels on the Blaniks. The Blanik repairs are temporary, and will probably last us only through this season.

The board then concluded the meeting with a discussion of a recent stall/spin accident in a Blanik L-13, where the newly licensed pilot was within the CG limits as placarded, but according to the sailplane manual was flying with the CG too far aft. Bruce presented his calculations of weight and balance for the L-23's and it appeared that the placards are similarly misleading. Bruce agreed to add a sticker to the L-23's warning pilots close to the CG limits to carry extra ballast.

October 30, 1996

The meeting of the Board of Directors was held at 7:30 PM at Carl Johnson's house in Newton. Phil Gaisford, Mark Tuttle, Carl Johnson, Joe Kwasnik, Terry Wong, and Bruce Easom were present. Steve Moysey and Guenther Eichhorn were absent. Ian Clark was also present.

Mark Tuttle opened the meeting with a discussion of the recent instructor crisis within the club. Before beginning, it was generally agreed that any substantive discussions in this area would require Steve Moysey's input, and no decisions could be made until then, so the general issue of training and/or temporarily acquiring new instructors was deferred until a later date.

The agenda then moved on to the use of club parachutes during primary training. The board discussed the differences in opinion among club members as to whether or not the use of parachutes should become a standard part of the training syllabus. The opinions against requiring parachutes in the syllabus included:

- According to a German study, parachutes are generally worthless at altitudes less than 600 meters, where MITSA training flights spend most of their time.
- The chair style parachutes presently owned by the club are inappropriate for the Blanik seats, which are designed for backpack style parachutes. The club would have to make a considerable investment of $800-1,000 per parachute.
- The club does not have a very good record of caring for the existing parachutes. Several examples of misuse at the field were recounted.
- The parachutes would have to be repacked often, at considerable cost and hassle.
- If parachutes become a required part of the training syllabus, then would the club shutdown if there is any delay in getting the parachutes back from being repacked?

No specific arguments in favor of requiring parachutes were mentioned by the board members present at the meeting, although Steve has argued in favor of parachutes in the past. The board then agreed that the chief instructor is responsible for making a recommendation to the board concerning a resolution to this issue.

The discussion then moved on to the standard training syllabus for the club. Again, the board agreed that it is up to the chief instructor to make a recommendation to the board. The board also agreed that the MITSA syllabus should continue to be based on the Knauff book and syllabus, since a considerable investment has already been made in this area.

Mark then made a motion to nominate Steve Moysey as the chief instructor. The motion was seconded and unanimously agreed upon by the board.

The board then discussed potential instructor candidates within the club membership. Seven possible candidates were mentioned. The requirement for cross-country experience prior to becoming a qualified MITSA instructor was mentioned as a possible stumbling block to getting certain members to become club instructors. The reasons behind this exclusion were discussed, with some board members feeling that local pattern flying, unusual attitudes, and other basic instruction could be taught perfectly well by instructors lacking cross-country sailplane experience. Carl then brought up the possibility of using instructors from other clubs who have volunteered to instruct for MITSA over the winter and early spring months. The board then discussed the arguments for and against allowing outside people to instruct for MITSA. It was agreed that the chief instructor should settle this issue, although the board felt it would be permissible for non-members to instruct if they held current instructor certificates, were approved by the chief instructor, and taught according to the MITSA syllabus.

The board then moved on to a discussion of the purchase of a new club house trailer. Joe summarized the types of trailers that could be purchased from the Wayside trailer company, the selection ranging from a very rough unfinished trailer to a nicely appointed trailer. The size of the trailers under consideration is generally 10x40 feet, enough for two small offices and a large central training area. The board approved a budget for the trailer. Joe agreed to identify a specific trailer within this price range and also agreed to provide an opportunity for other board or general members to view the trailer prior to purchase.

Ian then discussed the status of the club golf carts. Thanks to his efforts, they are both currently running, but he mentioned that they benefit from use and should be run every weekend. He also recommended again that the club purchase a new golf cart.

The board then discussed candidates for next year's board of directors. Currently four members are planning to step down from their current positions. These positions are president, treasurer, operations, and maintenance. Phil and Carl were proposed by board members for the roles of president and vice president. Bruce and Joe agreed to remain their positions of logistics and membership. Suggested candidates for the remaining positions were Steve Glow for treasurer, Al Gold for operations, Jim Emken for maintenance, and one of Rob Playter, Uros Marter, or Peter Stark for secretary.

Ian then mentioned the importance of waxing the gliders, preferably before winter.

The final discussion of the evening centered around finding a location for the annual membership meeting. It was agreed that each board member should look for potential locations, preferably restaurants with appropriate meeting facilities. The board also discussed possible candidates for speakers at the meeting.

Robbery foiled by tow plane. Walter Sakowicz (wsax@aol.com) sent the following funny story to the club via email: "Heard this about an occurrence at Franconia glider port. Seems a home near the airport was robbed and the police were searching the nearby woods, looking for the robbers, one supposedly wearing a white hat. The tow pilot figured, seeing a white hat from the air should be easy, so he took off and circled around low, making a lot of noise with the low pitch prop. He saw nothing, and upon landing was greeted by the police and thanked for helping in the apprehension. He was somewhat dumbfounded. Seems the robbers upon hearing the plane and the proximity of the police just figured that they had it, and came out of the woods with their hands up to surrender."

Jim Emken (james_emken@3mail.3com.com) sent the following story: During the heat of the space race in the 1960's, NASA decided it needed a ball point pen to write in the zero gravity confines of its space capsules. After considerable research and development, the Astronaut Pen was developed at a cost of $1 million. The pen worked and also enjoyed some modest success as a novelty item back here on earth. The Soviet Union, faced with the same problem, used a pencil.

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For more information about MITSA, you can contact the club by email, visit our web page, or contact Joe Kwasnik, our director of membership listed above.

The Leading Edge is the newsletter of the MIT Soaring Association, Inc. The newsletter is edited by Mark Tuttle, and published every other month (more frequently during the soaring season). The submission deadline is the first of each month. Please send any inquiries or material for publication to Mark Tuttle, 8 Melanie Lane, Arlington, MA 02174; tuttle@crl.dec.com

Please remember that the pilot in command of a club glider — or of any glider flying behind a club tow plane — must be a club member, and that each solo flight in a club glider by a pilot flying on a student certificate must be supervised by a club instructor.