The Leading Edge
The newsletter of the MIT Soaring Association
February 2000

Contents

Club news

Mark Tuttle

Annual elections: It is time to vote for the next board of directors. Please use the form at the end of this newsletter to cast your ballot and to reserve your place at the annual party, on or before March 18, because ...

Annual party: The annual party will be held on March 25 at

Dolphin Too Seafood Restaurant
12 Washington Street
Natick, MA 01760
(508) 655-0669

We will have drinks at 6:00 followed by a buffet dinner at 7:00 followed by other entertainment. The cost is $35 per person with kids 13 and under for free. The restaurant gives the following directions: Take Route 128 to Route 9 West to Route 27 South, left on Route 135 in Natick Center, and the next left onto Washington Street.

New pilots: Phil Rossoni passed his check ride with Wally Moran on Sunday, December 19, and has added a glider rating to his private pilot certificate. Now there's a Christmas present with a difference! Congratulations, Phil!

New members: Scot Fulghum joined the club in February. Scot says, "I'm thrilled to be joining MITSA. This will actually be the sixth club I've belonged to, but that speaks more to my early start in the sport than my accumulated experience. I started in the Tidewater Soaring Society and soloed at 14. Interests in girls and tennis soon cut my initial flying career short, and I ended up trying again after graduating from college. I flew for a few years in the Pittsburgh area as well as at Ridge Soaring, where I gained my license. I then moved to New Jersey, and was part owner in an Astir CS, and later owner of an ASW-15. As is the way of these things, as my working opportunities expanded, my flying opportunities contracted, to the point where I left the sport for ten years. These were not bad years, however, as I lived several of them in London, met my fabulous wife, Lindsay, and got to see a fair amount of the world. Ultimately, my company decided my life was too cozy in Chelsea, and moved me to our home office in Rhode Island. Using all my powers of persuasion, I talked my wife into coming with me, and more than two years later she has almost forgiven me. I decided it's time to test her love for me again, and what better way than joining a soaring club. My degree is in mechanical engineering, and I am a Vice President and Manager of Product Development at FM Global, an international property insurance and consulting company. Aside from the occasional propensity to covet other people's gliders, I hope to be a contributing and enthusiastic member of the club."

New badges: Walt Hollister has submitted claims to the SSA for diamond altitude and silver distance badges for flights in Minden in January.

Awards: The club awards a number of trophies to club members each year to recognize their achievements in the sport. The trophies and recent trophy recipients are:

- The Nicki Velforth trophy is awarded to the "best student of the year:" 1995 Mike Welles, 1996 Joe Kwasnik, 1997 Steve Glow, 1998 Jim Tsillas, 1999 Peter Vickery.

- The James L. Nash-Webber paddle is awarded to the "most enthusiastic new member:" 1995 Steve Sovis, 1996 Steve Sovis, 1997 Jim Emken, 1998 Karl Kruger, 1999 Peter Vickery.

- The Tommy Thompson trophy is awarded to the candidate "most likely to give something back to soaring," and is often given to someone working on an instructor rating: 1995 Steve Moysey, 1996 Mark Tuttle, 1997 Ian Clark, 1998 Mike Baxa, 1999 Andrew Watson.

- The Charles Stark Draper trophy is awarded for the "best flight in a MITSA glider:" 1995 Larry Timpson, 1997 Joe Kwasnik and Terry Wong for Sugarbush wave to 13,000, 1998 Steve Glow for his five hours in the 1-34, 1999 Al Gold and Joe Kwasnik.
- The Sam Francis trophy is awarded for the "best 100K triangle:" 1998 Mark Koepper for his 100K state record.
- The Eddie Allen trophy is awarded for the "best triangle or out-and-return flight:" 1995 Peter Foley, 1996 Phil Gaisford for his 600K flight, 1997 Mark Koepper for his 300K flight (both of them), 1998 Bob Fletcher.

If you know a good candidate for one of these awards—even if this candidate is you yourself—please contact the board of directors as soon as possible. The board will probably meet to choose the winners soon after February 27. The awards will be presented at the coming annual party. Buying a ticket to this event has been known to enhance the chances of receiving an award, so be sure to attend the party.

Minutes of the Board of Directors

Walt Hollister

These minutes have been edited for publication in the newsletter. —Editor

January 18, 2000

Directors present: Phil Gaisford, Steve Glow, Al Gold, Joe Kwasnik, and Walt Hollister.

Juniors: Joe Kwasnik gave a report on the status of the Juniors program. There are presently eight active members. When several reach the solo stage, the board will consider reserving the 1-26 for Juniors. The Juniors will be meeting on the third Thursday of each month during the off season at the Old Town Hall in Sterling. They plan to elect their own officers. Ray Tadry will act as intermediary between the board and the Juniors, replacing Peter Vickery who is running unopposed for the position of MITSA's operations officer. The board voted a unanimous expression of appreciation to Joe Kwasnik, John Wren, Peter Vickery, Roy Bourgeois, and all those who have contributed to the very successful first season of the Juniors program.

Awards: The board decided to ask the general membership for nominations for awards this year to be certain that all eligible candidates are considered.

Region I contest: The contest will be held this summer at the Morrisville-Stowe airport. MITSA has been requested to provide a director. Interested members should contact John Wren.

Minutes of the Board of Directors

Phil Gaisford

These minutes have been edited for publication in the newsletter. —Editor

February 10, 2000

Directors present: Bruce Easom, Jim Emken, Phil Gaisford, Steve Glow, Al Gold, Carl Johnson, Joe Kwasnik, and Peter Vickery.

Finances: The gliders will be back on insurance in mid-March. The tow plane annual is due in mid-March. The board discussed the cost of annual dues, and the sentiment was that despite high costs in the last year and the relatively poor cash balance, the dues should remain unchanged. The board felt that attracting new members and improving the efficiency of launch operations are more significant sources of income.

Operations: The tow plane is going in for its annual on February 21, which should be done in early March. Anticipated major expenses are an alternator upgrade, strobe replacement, and new tires.

Annual party: The proposed venue is the Dolphin Restaurant in Natick on March 25. Entertainment will include Jeopardy.

Juniors: The Junior winter meeting program is underway. The Junior organization's president, treasurer and safety officer have been appointed. Juniors have introduced a five dollar flight fee.

Logistics: Fertilizer and grass seed mix has been purchased, and we are waiting for proper conditions to apply the fertilizer and seed to the badly worn areas of the airport. We need some more more Tost rings.

Operations: It has been a quiet month.

Membership: Posters and brochures have been posted at the Fitchburg FBO and at Worcester Polytechnic Institute (WPI). We are considering ads in local papers next month.

Date	DO	Instructor	AM Tow	PM Tow
2/12	Koepper	Watson	Easom	Pugh
2/13	Gold	Gaisford	Poduje	Clark
2/19	Loradich	Johnson	Easom	Friedman
2/20	MacMillan	Krueger	Clark	Gammon
2/26	Looft	Watson	Hollister	Pugh
2/27	MacNicol	Rosenberg	Fletcher	Clark
3/4	Kwasnik	Baxa	Eason	Friedman
3/5	Moysey	Bourgeois	Fletcher	Gammon
3/11	Blieden	Gaisford	Hollister	Pugh
3/12	Rossoni	Johnson	Fletcher	Clark
3/18	Timpson	Krueger	Easom	Friedman
3/19	Tsillas	Watson	Poduje	Gammon
3/25	Nordman	Baxa	Pugh	Poduje
3/26	Vickery	Rosenberg	Poduje	Easom
4/1	Sovis	Bourgeois	Hollister	Friedman
4/2	Wong	Johnson	Pugh	Gammon

My week at Minden

Walt Hollister

For the third time in my three and a half year soaring career, I spent a week in January at Soar Minden where the big attraction is the booming wave that forms in the lee of the Sierra Mountains along the Nevada-California border near Lake Tahoe. This year there were five great soaring days plus one beautiful day of skiing on new powder at Heavenly Valley. I had 13 flights and 11.8 total hours, mostly in the Grob 102. There were two flights to above 28,000 feet and two cross-country flights of 100K and 150K. Badge claims were submitted for diamond altitude and silver cross-country.

The wave flights are really exciting. The tow from the surface at 4,700 feet up through the rotor to about 10,000 feet is usually very turbulent. It is not unusual to have your feet fly off the pedals, the rope go slack, the dirt in the belly flying up to the canopy, or the battery coming loose. Once in the wave above the rotor it is smooth as glass going up at 10 knots or more. The day I arrived, they were showing a video taken by the tow pilot the day before. The tow plane was going up at five knots with the propeller stopped! You should be able to see the video if you go to the SSA convention this year. Without an ATC clearance you have to level off below 18,000 feet. If you stay level in the wave you can then scoot along at well over 100 knots.

It is pretty easy to do a long cross-country as long as your track to your destination keeps you in the wave. If you have to get out of the wave to get to a turn point, you may have to endure over 10 knots down until you can maneuver back into the lifting portion of the wave. This happened to me on my silver cross-country flight. For a few moments, I contemplated landing out at Reno International. On the descent it is often turbulent again because you have to get back down through the rotor. Another exciting event occurs if the clear area in which you are flying fills in with cloud. This almost happened to me on descent from my diamond flight when a snow squall developed on the lee side of the mountain range impeding visibility. I never lost the visible horizon, but there were anxious moments when I could not see the mountains below me. Landing conditions at the end of the wave flight are usually into strong gusty winds of 25-30 knots with the rotor sometimes coming all the way to the surface. Fortunately, one will typically have a lot of adrenaline pumping by this time. On one gusty afternoon, I glanced out the window only to see the tow plane being blown away by a dust devil. I ran after it flat out, but two tow pilots got to it ahead of me. Typical day with the Minden wave.

Seconds to live

Walt Lafford

Accidents are usually the result of a chain of events and decisions leading up to the accident, and accidents can usually be avoided by recognizing and breaking any one of the links in the impending chain. We are grateful to Walt Lafford, a friend of Karl Krueger, for providing us with his account of the chain of events leading up to his stall-spin accident. You may wish to discuss his account with your instructor: read and learn. —Editor

I thought that at sometime after I recovered from my accident on June 11, 1998, I should tell my story of how it happened. Also, several soaring friends have asked if I would. At first I thought, “Do I really want to tell the world what a stupid thing I did?” After some contemplation the answer was, “Yes.” Hopefully, someone will learn from my mistake and something good will come of it.

Once I decided to write this tale of woe, I couldn’t decide on a title. Then I read the book review in the April issue of *Soaring* about “Only Seconds to Live,” so I decided to borrow from Dunstan Hadley’s book title since the book covers the subject of my accident. I hope Dunstan will forgive me for this small theft.

First, let me give you a little background information on my experience and the activities leading up to the accident. I have been soaring for about 14 years now, with approximately 1,000 hours of PIC time. Of this, over 600 hours are in the LS-6A belonging to my partner, Dan, and me. Most of this flying is cross-country time, with numerous flights of greater than 500K, over typical western terrain.

Dan and I had left on a soaring safari the previous Saturday. During the safari, we take turns flying with the non-flyer following along with the trailer. We try to fly as far as possible each day and hopefully land at an airport where tows are available. We also carry a tow rope for ground launches, using our truck when aerotows are not possible. We were six days into our safari when my accident occurred.

I had flown from Taos to Gallup, New Mexico, on the previous Monday. On Tuesday, we had to use our 1,100-foot rope to launch Dan from Gallup. On the first launch attempt, the rope broke at about 400 feet. After some discussion, Dan and I decided to splice the rope with a knot and cover it with duct tape. We also talked about not pulling so hard on the launch to avoid a second break. The second attempt was successful with Dan flying north to Cortez, Colorado.

With bad weather in the area the next day, we decided to trailer north to Moab, Utah. On arrival at Moab, we discovered considerable highway construction going on next to the airport, so we decided to go on to Green River, Utah, for a possible ground launch the next day. We parked the trailer at the airport and checked with the local FBO to see if a ground launch would be okay with them. The FBO, Red Tail Aviation concurred with our plans so we went into town to find a motel for the night.

After a good night's rest, we returned to the airport in the morning to prepare for the launch. Green River's runway is a paved surface of approximately 5,600 feet running generally east-west at an elevation of 4,225 feet. I decided to launch at about 11:30 a.m. Winds were light and variable at the time, so I staged the glider at the west end of the runway. I enlisted the help of a local CFI as a wing runner.

This being my first ground launch in the LS-6 for this soaring season, I was trying to be sure I did everything by the numbers. I was also concerned about the rope breaking, so I decided not to pull too steeply in the launch. With this in mind and my pre-launch checklist completed, I commenced with the launch.

I called to Dan on the radio and gave him the go-go-go signal to begin accelerating. Things proceeded normally and I lifted off at between 50-55 knots. Mindful of the weakened rope, I kept my climb angle lower than normal so my speed stayed at about 60-65 knots. Optimum ground launch speed for the LS-6 is about 70 knots. By the time the tow vehicle reached the end of the runway and I had to release, I was at only about 600 feet above ground level (the normal launch altitude for 1,100 feet of rope is between 700 to 800 feet from a 5,000 foot runway).

My flaps were set at +5 degrees for the launch so I left them there after release, thinking that if I didn't find lift right away, I would go ahead and set up a landing. I commenced a 360-degree right turn on the south side of the runway. I immediately encountered very heavy sink and lost about 200 feet in the turn.

During the turn I did a quick check to be sure the glider was configured properly because the sink was very unexpected. Flaps +5 degrees OK, brakes closed OK; pull the release again to be sure I am not dragging any rope, and finally retract landing gear. Still in heavy sink, I rolled out of the right turn over the runway at about 400 feet, heading east. As there was only about 1,000 feet of runway in front of me, I decided to make a 180-degree turn and land to the west. Knowing there was heavy sink to my right, I decided to make the turn to the left. During all this maneuvering, I don't recall looking at the air speed indicator, so I don't know what my speed was for sure. My habit is to always fly at least 55 to 60 knots when down low. I always keep the side vent window open so that if I hear any decrease in wind noise, I know I need to check my airspeed. As I started the left turn, I can't recall if my speed was low but I feel that it must have been. About half way through the turn, with no warning my left inside wing dropped and the nose fell steeply through the horizon.

You know how some people say that you see your whole life go before you when you think you're going to die? Well, for me, that wasn't true. Everything happened too fast to think about it. It seemed like the glider nose was pointed straight down. All I could see was sand and sagebrush. I thought, "You're in a spin and your life is over." I stood on the right rudder pedal and pushed the stick forward and prayed she would unstall. It was all over in less than three seconds. I was able to stop the spin from developing and I believe the left wing was starting to come up when it contacted the runway's north edge. Dan said it flexed quite a bit and the nose hit the ground in the sand, just off the north edge of the runway with the glider bouncing about 25 feet, leaving a two-foot impression in the ground where I hit.

Seconds later I opened my eyes wondering why I was still alive. Everything forward of the stick in the glider was gone. I was still securely strapped into the seat pan with my feet out in the sand. I checked all my extremities and they all still moved although my right foot was pointing off in an unnatural direction. Guess I was still pressing on that rudder pedal when I hit the ground. My back hurt like heck, my right pinky finger was smashed by the instrument panel, crushing it against the stick. (If you ever have the unfortunate opportunity to crash, be sure to let go of the stick before you hit.) I also had a large cut on my left arm from the oxygen regulator and several cuts on my face and head from canopy shards. My partner was there immediately and called 911 on the cell phone. The ambulance arrived within five minutes and they determined I should be flown by helicopter to the trauma center in Grand Junction, Colorado. It was a two-hour round trip for the helicopter, and then I spent nine hours in surgery while they put me back together. Ten months later I am still recovering but hope to be back in the air sometime this summer. I want to offer my sincere thanks to all the good folks who took care of me at the crash site from Emery County Ambulance and Red Tail Aviation. Words are never enough to express one's appreciation.

Why did this accident happen? There is no doubt in my mind that I was flying too slowly. I also think something else must have contributed to the spin. Though the wind was very light, perhaps the turn downwind caused enough loss of airspeed. Because of all the heavy sink in the area, there may have been a thermal nearby and I put one wing in the edge of it. I'll never know for sure.

Why did I survive? First, I have to thank my partner Dan for installing a five-point harness when we bought the LS-6. Without it, I would certainly have submarined under the seat belt and the control stick would have killed me or done me more serious harm. Second, early in my flying career, my instructor insisted upon frequent spin training in a Blanik. The LS-6 manual prohibits spins, so not wanting to be a test pilot, I had only tried some spin entries at altitude in various flight configurations. From these trials, I determined that the wing drop was dramatic and slow to recover with positive flap settings. Negative flaps made it behave a lot nicer. In either case, the glider gave no warning. Had I not applied proper spin recovery techniques, I surely would have hit at a steeper angle. The other thing I believe saved me is that I missed the paved runway by a few feet. The sand was a lot more forgiving than the runway. I don't recall putting the flaps into negative, although the lever was found in that position after the crash. It could have moved from the force of the crash.

I just want to leave you all with one final thought in closing. When flying at low altitude, there are three very important things to remember. In order of importance, they are airspeed, airspeed, and airspeed! I am very thankful to be counted among the living, and I look forward to rejoining all the wonderful friends soaring has brought to me.

The MITSA Board of Directors

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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 02474; tuttle@crl.dec.com.

Ballot for the board of directors

Vote for one person for each position:

- President:
  ____ Phil Gaisford
- Vice President:
  ____ Carl Johnson
- Secretary:
  ____ Walt Hollister
- Treasurer:
  ____ Steve Glow
- Maintenance:
  ____ Jim Emken
- Operations:
  ____ Peter Vickery
- Logistics:
  ____ Mark Koepper
- Membership:
  ____ Joe Kwasnik

Sign your name:

- ______________________________

Print your name:

- ______________________________

Mail this ballot to Carl Johnson, 150 Islington Rd, Newton, MA 02166. Carl must receive this ballot on or before March 18, 2000.

Reservations for the annual meeting

Reservations requested:

____ Number of adults and teenagers ($35 each)

____ Number of children 13 and under (free)

Total amount: $ ____________

Your name: ______________________

Mail this form and a check made out to MITSA for the total amount to Carl Johnson, 150 Islington Rd, Newton, MA 02166. Carl must receive this form on or before March 18, 2000.