<u>SKYLFNES</u>



President's Prerogative

Joe Rees

or those of you who did not make the annual meeting, you missed a good one. It had tension, thrills and chills, something for everyone. The short version is that we have more money on hand this year than last; more members this year than last; and, Eric Litt (now the chief tow pilot) was elected to the board of directors. Oh, and we also raised the dues (from \$20 to \$25 a month), the rental on the ASK to \$39 an hour and the tow rate to \$30 to 3,000 feet (with a minimum of \$20 to 1,000 feet). Now I bet you are sorry you missed the meeting.

The board thought long and hard before we recommended these increases to the membership as I will explain. From the beginning, the club has held the philosophy that capital would come from initiation fees, fixed costs (basically hangars, lease payments and insurance) would come from dues and the variable costs would be carried by income from tows and equipment rental. Well, the current dues have not kept up with increases in fixed costs, capital growth has been slow, eroded by inflation and some extraordinary costs such as the \$9,000 in repairs to the Grob last year.

We considered raising the initiation fee but we were concerned that any raise significant enough to improve our capital position might discourage new members. So we looked at changing the formula and settled on a compromise of raising the dues by \$5 a month to bring dues closer to covering fixed costs (we are still below M-ASA); raising the rental on the ASK to reflect a modest, and deserved, increase in the lease payment as well as to put some separation with the Grob rental that more accurately reflects demand; and, raising the tow rate to reflect increased costs

Significant Events:

On January 17, 2007, my doctors office called an said my Hepatitis C virus is undetectable. This is six months after I finished my second treatment attempt. There was less than a 10% chance of success, but after 4 years and \$80,000 cash, it worked. This milestone leaves me with a greater than 95% chance the virus will be gone for the rest of my life.

For the first time in my life I cried uncontrollably due to good news.

I want to thank the club for all the support they have shown as well as putting up with my cranky attitude.

Thank you, Shane Neitzey

Annual Mandatory Safety Seminar,

February 17, 2007, 10:00 AM Terminal Building, Front Royal Airport. Bring your own chair.

Attendance, or viewing the videotape of the Seminar, is required to continue Club soaring after this date. The Safety Seminar can apply to candidates for the FAA "Wings" program. For more information, contact Jim Kellett at Jim@Kellett.com as well as an anticipated increase in the contribution to the engine overhaul fund. And for those of you paying M-ASA rates or rates at other fields will understand, we are still the least expensive of any operation in the valley.

I am planning on putting a financial summary on our web site so that you will have the tools to better understand our club's financial situation and the overall direction the club is taking. While the directors and officers manage the club on a day-to-day basis, it is important for you to understand where the club is financially and the direction the club is heading. As the club grows the decisions we make will have potentially far reaching implications and I want to make sure that all members have the tools at hand to develop a clear understanding of the process.

Fly safe.





Above: President Joe Rees. Left: Treasurer Dan Noonan and Bottom: some of the attendees. Below is a temporary award for Jonathan made by Craig Sutherland. The Curdmugeon, who handles the real engraved award, was down under. Craig was unable to present it because he was DO on that day.







Report from Down Under

Jim Kellett

at and I just finished a month long vacation with her sister and her husband - actually celebrating our 50th Anniversary, which is next June, early - in New Zealand. Naturally, the 'pound of flesh' that I extracted from this fine group was a day or two visiting gliderports! We visited two - the Marlborough Aero Club near Blenheim on and Southern Soaring in Omarama, both on the South Island. The MAC one of the more typical glidings of 22 in New Zealand) in that it was relatively small, operated only on weekends (and then mostly on Sundays), and wasn't organized to deal with visitors. Southern Soaring, on the other hand, was one of two competing organizations at Omarama (the other is Glide Omarama, operated by the illustrious Gavin Wills). Both these organizations operate 7 days a week in season, and cater to visiting pilots and soaring wannabes. The technical distinctions between 'clubs' and 'commercial operations' is blurred in NZ, as it is in the UK, and they follow the strategic plan of the UK in which the CAA (their equivalent of our FAA) delegates gliding stuff to the private association (BGA in the UK, and GNZ in NZ).

Anyhow, our visit to Omarama included some flying, including 'demo' flights for my in-laws, and a couple of hours for me in a Duo with a CFI serving as guide and check pilot. The conditions were 'mediocre' for Omarama standards - we only got to about 6000' from a 1300' field - but included a sortie out to about 30 MN just for the scenery! And the scenery was fabulous! Unlike our area, where the mountains all line up neatly, out here they are all over the place and, to make it more interesting, there are regularly



Top: An Archer, doing what airplanes were created for (towing gliders!) Above: The Resident Curmudgeon with a smile to split his face after a couple of hours exploring the mountains to the west of Omarama. All photos courtesy of Jim Kellett

wind shears between mountain tops and the surface of up to 180 degrees. That had us flying toward a cliff face in what I thought was the lee side (!) to find a thermal . . . and it often worked. Really pays to know the local meteorology, eh??

They have two tow planes, a Pawnee and - get this! - an Archer! We got a tow in the Duo behind the Archer. Surprisingly good performance, but I shudder at the long-term operating costs!! There are what appears to be a hundreds of small camper trailers at the field, used by NZ pilots who come down for soaring holidays. The Canterbury Club was there during our visit, and they went so far as to have their own little 'ops trailer' permanently located at the site. Many of the local chalets (cottages) were occupied by both Kiwis and Europeans, and (of course) a few Americans - I met an American from Las Vegas who'd come down for a week, flying a single place leased from Gavin Wills' operation.

Omarama is a real rural village. The locals describe it as being a 3.5 hour drive from Christchurch, but you'd have to be a maniac to do that - took us closer to 5 hours to drive 330 Km! No interstates here, guys! NO banks, post office, or even ATM! But several hotels, and gliding is "the" big deal - people come from all over NZ (and the world) to fly here on a regular basis, and it's about the only show in town.

For those who may have forgotten, Omarama is also the site of the filming of the promo IGC tape "Soaring: Your Sport for the New Millennium" that every Skyline Soaring Club member gets upon joining, as well as the site for the Soaring Grand Prix in 2005 that was broadcast on TV and made into a neat DVD.







Top: THIS Pawnee is NOT a tow plane! A veterinarian flies this one, after replacing the hopper with a kit that carries all his 'tools' for on-the-spot vet services on the huge sheep sections all over New Zealand! Based at the Marlborough Aero Club. Above: What is that Thang? At the Marlborough Aero Club, a Bristol Freighter, with two twin-bank nine cylinder radials with rotating sleeve valves! A MOST reliable freighter! Left: Southern Soaring's Office Below: Dawn at Omarama...





Virtual Soaring with X-Plane

Michael Ash

s winter drags on and we long for the towering thermals of summer, our desire for flight leads us in different directions. Some of us take vacations to warmer climates. Some of us bundle up in our warmest clothes and try to make contact with the wave. And some of us stay home and make curious glances at our computers.

X-Plane is perhaps the most advanced consumer-level general purpose PC simulator available. That's a lot of qualifiers: for almost any simulation task you can find a specialist simulation that's better, but X-Plane is pretty good at a huge range of tasks, and you won't have to sell any of your children to afford it. X-Plane can do a decent job at simulating a remote controlled plane, a re-entering Space Shuttle, and just about everything in between. Given where you're reading this article, I'm going to concentrate on how X-Plane is for soaring.

The first thing to understand about X-Plane is that Austin Meyer, the author, is... strange. He's very good, but sometimes has an odd way of dealing with things. For example, at one point he started thinking about hot air balloons. Ever since then, X-Plane's airspace has been full of them, whether in the middle of the ocean or just outside KDCA on a socked-in foggy morning. (Not to worry, they can be turned off.) Fortunately, he's hired some employees over the years who have helped temper his impulses. Soaring near Front Royal on a beautiful clear day.

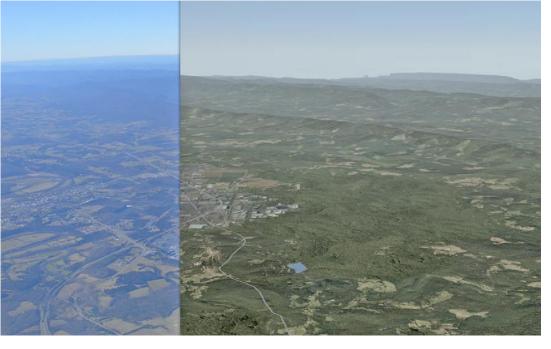
One of the distinguishing features of X-Plane since the beginning has been its flight model. Austin has a degree in Aeronautical Engineering and he knows how to make this stuff work. Unlike many other simulators, X-Plane actually determines how an airplane will fly by examining its fuselage, wings, etc. and seeing what effects the incoming air will have. It's not quite Computational Fluid Dynamics, but it's about as close as you'll get on affordable hardware.

The result is that basic flying feels very realistic. Slow flight, fast flight, turns, and stalls all feel very real. (X-Plane does not do so well with spins, unfortunately.)

To have a realistic flight, you need planes. X-Plane ships with a fair variety of aircraft but unfortunately only a single glider, a Cirrus. The good news is that X-Plane has a vibrant user community and various other gliders are available for download, including a Grob 103 and a Super Blanik.

Recently, X-Plane also got a major scenery upgrade with a huge amount of data compiled together for some amazing visuals. The downside is that worldwide scenery comes on seven DVDs and, when fully installed, takes approximately 60GB of hard drive space. Fortunately you can selectively install scenery just for the continent of your choice.

The upside of this massive scenery system is that X-Plane looks



Two pictures taken at about 8,000ft just North of Signal Knob. On the left, a picture taken with my camera from the club's ASK-21. On the right, a screenshot taken in X-Plane from the same location.

fantastic. Landmarks are easy to pick out. VFR navigation isn't too much harder than in real life. Unfortunately you're only looking through a small computer monitor instead of a canopy surrounding your head, so the feeling of being there isn't quite the same, but the days of having to navigate by instruments on the computer are long gone.

The parts that are specific to soaring aren't quite so good. X-Plane offers a choice of winch or aerotow. The aerotow simulation is serviceable, but sometimes ridiculous. The glider applies no forces to the tow plane, and the tow rope has infinite strength, so it's possible to literally let go of the stick and let the tow plane drag the glider into the air like a toy. The rope is also incapable of having any slack. Winch launching is probably similarly strange, but I have no real-world experience with winch launching.

There's also a third launch option, which is to place the glider directly in the air. Selecting the "Local Map" option will bring up an overhead map of the area, with the glider prominently displayed. From here, the glider can be dragged around the map and its altitude, airspeed, and heading selected. This is perfect for practicing patterns and landings without having to go through a launch every time.

Thermals appear to be an afterthought. In the weather settings there are three for thermals: tops, coverage, and climb rate.

Once these parameters are set, thermals will be present in the simulated world. They aren't associated with any terrain or with any clouds. Even on a beautiful day with lots of cu's, you just have to blunder into the thermals.

Ridge soaring is simpler to simulate and better done. When flying over slopes, X-Plane seems to perform a simple calculation on the glider's altitude, the wind speed, and the direction and steepness of the slope to come up with a vertical wind speed. It may not always be completely realistic but it gets the job done fairly well. Sadly, ridge soaring seems to be somewhat broken in the last couple of releases of X-Plane. Ridge lift works in some places but not others, and one of the places where it doesn't work is our own Massanutten ridge. The author is aware of the problem and hopefully it will be fixed soon. There is no attempt to simulate wave soaring.

Aside from soaring, X-Plane does a good job of showing weather. If you're connected to the internet, it's possible to check a box and have X-Plane automatically download METARs for your area, then adjust the weather to fit what's really out there. If the weather isn't good, uncheck the box and adjust it yourself. Wind, clouds, storms, temperature, pressure, and visibility are all fully customizable.

To really get good visuals, you'll need fairly hefty computer hardware. X-Plane can run with less, but what you see won't

be nearly as pretty. The full requirements can be found on the X-Plane web site, along with a demo. The demo is an enormous download, but it will show you exactly what you can expect from your hardware before you spend any money on software.

You'll also need some extra equipment. It's possible to fly using just a standard computer mouse, but this is unpleasant to say the least. A good joystick is a must, and a serious user will probably want rudder pedals as well. The X-Plane web site carries a selection of sticks and pedals, and of course many other stores carry them. You can easily spend much more money on the equipment than on the simulator itself.

X-Plane can be a solid distraction from months of winter. It doesn't get soaring exactly right, but overall it does a good job. And when you fancy something different, X-Plane will let you fly a Cessna, a 747, a helicopter, or a P-51.

The X-Plane web site is located at http://www.x-plane.com/ and offers a free demo and an online store. X-Plane is \$49 with scenery for one continent or \$69 with worldwide scenery, and it will run on Windows, Mac OS X, and Linux. For more resources, http://www.x-plane.org/ hosts a lively discussion forum and a large number of third-party scenery and airplane downloads.

Happy flying!

The default Cirrus glider comes in for a landing at Front Royal with the Blue Ridge in the background.







Dean Carswell presents ...

Bob Wander prepares to pontificate...

Joe Parrish and Piet Barber refresh....

Photos by George Hazelrigg



Flight Instructor Recertification Clinic (FIRC)

George Hazelrigg

hey say there are 101 ways to skin a cat. Problem is that none of them are particularly appealing to the cat. It's not that different with flight instructors. No, not skinning them, but renewing their certificates. A flight instructor rating has a life of only two years. Then it has to be renewed. And there are different ways to renew it, although most of them are not all that appealing to the instructor. But one way can actually be a somewhat pleasant experience. That is to attend a Flight Instructor Recertification Clinic (FIRC). Such clinics are held at the SSA convention.

But that can be a bit inconvenient for many of us. So, thanks to Jim Kellett and others such as Glenn Collins from M-ASA, we have an alternative. The Soaring Safety Foundation also sponsors FIRCs that are run by Bob Wander and feature well known names like Dean Carswell. It's an arduous two days, from 8 AM to 5 PM, but a worthwhile and even, at times, entertaining experience.

The goal of the FIRC is not to teach us the materials we will teach, but rather to give us approaches to teaching it better. And throughout, the emphasis is on your safety. This latest FIRC was held at the M-ASA clubhouse at Frederick Airport January 27 and 28, and it was attended by about 25 instructors from the greater DELMARVA area. Several Skyline instructors attended, and others came from M-ASA, Shenandoah Valley Soaring, Tidewater and even the Philadelphia Gliding Council.

So next time you hop in the glider in front of an instructor, keep in mind the effort that he or she (yes, the FIRC included two women instructors) puts in off the field to keep proficient. We really do have an outstanding cadre of instructors, and an outstanding instructional system.

Safety Corner

Richard Freytag, SSC Safety Secretary

In the years that Skyline Soaring Club operated out of New Market Airport, VA there was, to my knowledge, only one premature termination of tow (PTT). In the nearly equivalent number of years at Front Royal (KFRR), we have had at least five (5) PTTs due to turbulence. All of these PTTs have happened below 1500' and, happily have ended without incident.

Because our runway sits about 4 miles directly to leeward of the Massanutten Ridge we have the pleasure of consistent rotor right where it is most certain to hold our attention - low and on tow. Even very experienced power and glider pilots have added meaningful minutes of turbulence "training" at KFFR. If you have not had the pleasure, you will after only a moderate number of flights on breezy days.

However, you are in luck for there are places where turbulence gets worse - far worse; and one, Petersburg is close by. Like the world famous Minden, NV, our very own Petersburg, WV, sits downwind from high ridges generating very strong wave and rotor-induce "full wash cycle" turbulence for your learning pleasure. The tow pilots are only half kidding when they rate days as "one handers" and "two handers." If they have to hold on with both hands then its time for you to get off tow.

Petersburg has the kind of turbulence you MUST learn to handle. The turbulence on wave days is so consistent at Petersburg that it is an ideal training ground for pilots wanting to fly safely at KFRR on a "good ridge day" (18-25 knots from the WNW). I repeat, if you are relatively new to gliding you will eventually encounter SEVERE turbulence in flight. Gliders with their low wing-loading greatly amplify the experience. The best place to learn about in flight turbulence in gliders is NOT alone in flight at Minden like (ahem), I did. The stress inhibits joy ... and learning.

The best way to learn what the word "turbulence" really means and how to deal with it is in the air with an experienced instructor in a familiar club ship in a rotor considerately positioned at a safe altitude. Only an experienced instructor can show you which turbulence is flyable, when conditions require caution, and when you are better off staying on the ground. You need to be there and live it to learn - no books suffice.

Mr. Shane Neitzey has extended you an open invitation to add an important notch to your soaring glasses. Count your blessings on the way to Petersburg. It will make you a safer pilot and some day, eventually, you will be very, very glad that you did.



Last Shot Across the Tow Plane Bow

Dick Otis

regret I'm on a 4 hour drive out of the CA high desert enroute to Pt Mugu, CA. Any input for this issue will necessarily be short and sweet. Thanks to everyone who sent positive feedback on last month's second tow plane article. I did NOT make the motion at the annual meeting for several reasons, the meeting was running late, I had another meeting to make, no one really asked for new (or old) business discussions, and out President made a definitive state-

Make It Easy On Yourself

Ron C. Miller

hen we were living in N. Virginia, my son entered his teen age years. I got involved in teaching soaring, and in giving rides in the gliders out in the country some 40 miles West of the DC area. The operation requires several ground personnel, and is a perfect job for young people. So Ron would work at the operation the same days I did.

The students came from all walks of life, and I found that most of them were not interested in doing their assigned homework. In the air, I found that the students didn't want to pay attention to the "rules"/ procedures/ directions/ and would get

Aeronautical Rodents

Or, Why We Shouldn't Leave Edible Trash in the Hangars...

aybe rats (or mice or chipmunks) can't fly, but apparently they love hangars .. and they can apparently easily detect even traces of food in a sealed garbage can! Here's a can from Hangar 5 (you can't see the hundreds of little plastic chips on the floor around it!) that at one time contained a paper bag with the scraps of someone's lunch. Unfortunately, they can't read – the lettering on the handle in the photo says "press here to seal, lift to open'....so they created their own little rodent-door in the lid. Now that bag inside the can contains 'rat-processed' scraps (rat poop) but no scraps...

A good reminder to never leave edible scraps in the hangar, even in the trash!—Jim Kellett

Wish You Were Here?

Fred LaSor

ere's a pretty picture of a lazy lenticular over the Carson Valley on Christmas day, 2006. December was the busiest wave month I've seen in the two years I've been here, and January has been kind of dead in that category. Looking at the weather, I'm thinking January will wind up with two-three good wave days.

After last month's accident Fred writes: I'm doing ok -- my student says he still has backaches and doesn't expect to be back flying for several weeks. Photo by Hugh Milne

ment early on that the club could not afford another tow plane.

Of course the comments were also made that the Club is in good financial health, but then we also raised tow and ASK-21 rates. I regret not having the debate after I set everything up ahead of time. My back up plan was to suggest a tow plane lease. Bill Vickland has his Citabria for sale for under \$50K, or we might convince him to rent it to the club. If you support these ideas (or not) please let your new BOD, which includes multiple tow pilots, know your viewpoint.— Richard the Instigator. via Desert Blackberry

PS: Are there any rich philanthropists our there, here is your chance. I will provide you all the free instruction you want!

themselves in trouble - usually in the landing pattern.

Unlike a power plane that has an engine, a glider has no engine, and the pilot must deal carefully with his assets namely: altitude, position and speed. For example, they would neglect doing the pre-landing check list until they were in the landing pattern where they already had their hands full. Time after time I would have to take over control of the aircraft to avoid disaster.

Quite by chance I discovered a magic phrase that got them to think ahead. It was: "Make it easy on yourself." They liked the idea of making it easy—giving themselves a break seemed to be much more attractive than doing something only because the instructor said so. My original saying was: "Make it easy on yourself—by getting the landing check list out of the way so you can be free to concentrate on the landing pattern."

I soon applied it to other areas of flight as well.





Skylines wishes to express belated thanks to Bill & Lynne Garvey Wark for providing their Canary Cottage home, warm hospitality, food and drink to SSC's annual Holiday Party.



Once again, we all owe Shane a big thank you for the use of his shop. The heat, lights, and water bills are not trivial, nor is the time Shane and his crew spend to get the place ready and to clean up afterwards.-Fred Winter

A big second from me. Shane's support of the club has been truly outstanding.—George Hazelrigg

Restless Wheels in Manassas route 28 have 50 mm trailer balls for \$19.95. You have to ask at the service window because they aren't on display; the ball is hidden away in a supply cabinet. I tried it on my Komet trailer and it fit's perfect.—Frank Banas

For those of you who don't know yet, Shawn and I are expecting. and we're due in February! That's February of "this" year, not next year! It's an interesting story which we're willing to share for those who want to know.

Our daughter is due on Feb. 12, which also happens to be Shawn's birthday. We have decided to call her Melanie Sharon... do not hesitate to call us. 703-920-5614.

Shawn and I are looking forward to introducing Melanie to all of you. - Rebecca Pickrell rebeccapickrell@yahoo.com

Editor's note: see Skylines August 2006http://skylinesoaring.org/NEWSLETTER/2006/August/ Strange New World—if there's any doubt we're living in a new communications era check this out: http://www.chinatoday.com/arm/

A cat survived three weeks in the pressurized hold of a United Airlines plane before being discovered in Denver. Pumpkin was dehydrated and almost starved but is expected to be fine.—AVwebFlash 13.04a

U.S. Pilot numbers dip below 600,000 – Despite aggressive action -- including a whole new certificate classification -- to attract more people to flying, the number of certificated pilots in the U.S. dropped to 597,109, according to year-end preliminary stats released by the FAA. Rather than attract new pilots, the new Sport Pilot certificate appears to be extending the flying activity of older pilots. The average age of pilots as a whole was 45.6 years while the average of the 939 sport pilot holders was 52.9 years. AOPA's mentorship program, Project Pilot, is reporting some success in encouraging people to learn to fly and there are plenty of instructors waiting. More than 90,000 pilots, almost one in six, are instructors.-AVwebFlash 13.04a

FAA: Plastic Pilot Certificates mandatory in 2009-Your paper pilot certificate will be suitable for framing -- and not much else -- likely sometime in 2009 as the FAA puts every pilot on plastic. The new, more forgery-resistant certificates were introduced at EAA AirVenture in 2005 as a security enhancement. The FAA published a http://a257.g.akamaitech.net/7/257/2422/01jan20071800/edocket.access.gpo.gov/2007/06-9989.htm notice of proposed rule making (NPRM) Friday that will make them mandatory two years after the final rule is adopted. A comment period lasts until March 6 so the final rule could be adopted as early as this coming spring. Those holding mechanic or flight engineer certificates will have five years to convert, but student pilots won't be affected. - AVwebFlash 13.02a

Martinsburg Picked For Corporate FBO—Arcadia Aviation is building a \$20 million corporate aviation center at Eastern West Virginia Regional Airport (MRB) in Martinsburg, W. Va., just outside the Air Defense Identification Zone (ADIZ) that surrounds Washington, D.C. The company announced...that it will initially build a 20,000-sq.-ft. hangar and administrative offices, but future plans call for purposebuilt facilities that can handle Boeing Business Jets, 757s and other airliners. Arcadia also operates the full-service FBO at the airport. The airport will have no problem accommodating the big iron Arcadia hopes to attract, thanks to the West Virginia Air National Guard. The Guard is currently extending the main runway (8/26) in advance of taking delivery of C-5 Galaxies. The Guard currently operates C-130s. Arcadia hopes to break ground on the expansion early next year. (2007)-AVwebFlash 12.48a

If there are no dogs in Heaven, then where they went.-Will Rogers



when I die I want to go

SKYLINES

February 2007

Skyline Soaring Club, LLC

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