

Towlines

The Newsletter of the Albuquerque Soaring Club

October 2008

President's Notes

By Bob Hudson

Well the Balloon Fiesta has come and gone and over all the weather was sort of okay. As you know we normally get at least some bad weather, because half the world descends on Albuquerque to view this, the most photographed sporting event in the world. You can also tell the Fiesta is here by the number of phone calls I get by people from out of town inquiring about soaring. This year I had a group of six wanting soaring rides and of course I referred them to Sundance and Rick had a hard time fitting them in, his schedule was so full. Oh well nobody said making money was easy...except Steve Wynn.

Speaking of the Balloon Fiesta, during the SSA Convention, the SSA started making "overtures" to the Balloon Fiesta people. They gave them a booth (free) to promote their sport. In exchange, the Fiesta folks offered the SSA a place to promote Soaring at the Fiesta. The SSA also suggested Bob Carlton might fly his jet glider over the field and put on a show. The idea was that we, the Albuquerque Soaring Club, would man the SSA display, what ever display meant. I was approached about the idea and I said that we would have to think about it and I would need the approval of our Club members. That was the last I heard about it from SSA.

In the mean time, the SSA contacted Howard Banks on the issue and he tried to steer them to me, due to the fact that he was the State Governor and could not talk for nor commit the Club. Even though Howard informed them that needed to talk to me, they continued to work with the Balloon Fiesta folks without contacting us.

Two weeks before the Fiesta, they once again contacted Howard and told him they had a ten by ten foot tent reserved for us. Howard forwarded this e-mail to me and at the same time informed the SSA once again that they needed to contact me. I met with our Board

and discussed this initiative with them and we decided that there was nothing we could do. First the Fiesta was rapidly approaching and we had no plan. What were we going to do with a ten by ten tent? We couldn't put a plane in it and if we displayed a plane it would have to be outside exposed to thousands of groping hands. Then there was the issue of who would man the tent. If we displayed a plane it meant that someone would have to be there before 4 am to start to put the plane together and to protect it. Then they would have to remain until after the activities to take the plane apart and put it back in the box. The biggest issue was where were going to get the people?

With the Board's blessing I sent a message that we could not support the event and, oh by the way, it would have been nice if we could have been involved in the discussions. The bottom line is thanks to the SSA not involving us, I am sure we are once again being touted as anti-soaring.

On a similar note, the year-long task force, assigned to make recommendations on how to make the SSA viable again, suggested that the Conventions be given back to the Clubs. The SSA board rejected this recommendation and in conjunction with the SSA's staff, has decided to go ahead and hold the next convention (2010) in Baltimore and to date, I understand, has not yet contacted a Club for involvement (very similar to how Albuquerque was handled). So much for giving it back to the Clubs and to following the Task Force recommendations. Of course the Task Force also recommended that they hire an Executive Director, but the SSA has ignored that also and continues to operate with no Soaring expertise in charge.

Not the most positive news from your President, but I thought you should be informed. Now go out and grab 700 kilometers

like Billy did the other day. That one scored for last year, but note: just after Z's flight the new OLC for 2009 has already begun.

Bob Hausner 1919-2008

Bob, who was active in ASC from around 1990 through 2002, passed away in Santa Fe on March 29, 2008. He was 89.

During WW II Bob served in the U.S. Army Air Corps as a B26 pilot in North Africa and Italy, completing 40 combat missions. He was awarded the Purple Heart.

After the war, Bob earned a scholarship to the University of Illinois and received a degree in Architecture. He was a very successful Architect and was registered in 35 states.

Bob loved to fly and became a glider pilot in the Chicago area in his 50's. Soaring became his passion. He and his wife Ann retired in New Mexico where the gliding was better. He helped with the 1996 Standard Class Competition at Moriarty. Bob concluded his soaring by donating his Ventus to the Southwest Soaring Museum.

He is survived by his wife, Ann Wilder Hausner of Santa Fe, son William of Madison, Wisconsin and daughter Nancy Abernathy of Jericho, Vermont.

Bob and I along with two others shared hangar space in the "Jones" hanger. Bob was always willing to help shuffle the sailplanes. He was a good soaring buddy and will be missed by many. -- **Don Kawal**

Personal Limitations *By Billy Hill*

It is of utmost importance that prudent pilots thoroughly assess the situation or circumstances under which they are willing to commit themselves to being tested by the forces of nature. Before strapping into a club glider, or for that matter one's own sailplane, an important part of the preflight is a risk assessment. This can be as simple as watching the conditions develop at the airport.

In this case I'm talking about the cross wind component. The reality of what conditions exist should be compared with that of the forecast conditions. As a general rule the diurnal effect will cause the winds to increase in velocity. If a general change in the airmass

is approaching, then the winds will also shift in direction.

If a more experienced pilot, or better yet, an instructor has already been flying as the conditions deteriorate, the wise pilot will ask him/her for an assessment of the risk factors involved in flying under the prevailing circumstances.

As a general rule, when you find yourself asking yourself or perhaps another if the prudent thing to do is to go flying, then more often than not the answer is no.

The above was sparked by a conversation which took place on the line at Moriarty a while ago, so I've asked *Towlines* to re-run a piece on personal limitations.

[The article, from Towlines, January 2007, which is timeless, is reprinted below.-Ed].

Do you, for example, know what the DEMONSTRATED max cross wind component is on the G 103? Well actually there isn't one. In the hand book it says the APPROVED cross wind component is. No I'm not going to make it that easy for you, go look it up in the POH.

Tow Pilots, do you know what the maximum, (in the U S of A), demonstrated cross wind component is for the Pawnee? Hint, you won't find it in any of the paper work we have on hand as there is none to be found. The Aussies have come up with a figure of twelve knots at ninety degrees. I guess it would be safe to say that the same value would apply north of the equator as well, hum?

This begs the question, what is your personal cross wind component limit? That, dear friends, is a function of your currency, competency and proficiency in the aircraft in question. Your personal cross wind component limit should, for starters, not exceed that found in the POH of the aircraft in which you are about to commit aviation.

If you have not flown for a while – with the weather as it has been lately, who has – your ability to handle said flying machine is a function of the above mentioned, that is currency, competency and proficiency.

Were common sense to prevail, none of us would go flying if we thought safety was being compromised by pitting ourselves against conditions which might readily exceed our abilities, were common sense to prevail.

Hell, for that matter if common sense in conjunction with good judgment were the watch words with everyone who flew, the Feds would be out of business.

As we well know, pilots are prone to let their egos write a check their abilities are unable to cover. Hence we have accidents.

As regards cross winds, the WAG system of estimating the direction and velocity is only useful in that it should inspire us to wander up to Sundance and avail ourselves of the DIGIWIX equipment in order to determine the direction and velocity of the wind. Additionally the DIGIWIX will give us the gust factor as well as the actual cross wind component.

This brings us back to the common sense/good judgment issue. At this point the question we should ask ourselves is, do the cross wind conditions exceed our CURRENT capabilities?

Now is the time to listen to that little voice in our heads or to that feeling in the pit of our stomachs either of which may be attempting to wave a little red flag in front of our faces.

The problem now becomes do we interpret that flag as a warning, or do we charge after it like an enraged bull?

Should you choose option A and you are feeling the need for a bit to assistance, you might want to consider asking a CFI to ride with you. Whilst accosting said CFI you might consider couching the question in a manner which will allow your prospective mentor the option to back out if he/she is feeling a bit apprehensive about flying under the prevailing conditions. Although you may believe we CFI's walk on water, currency, competency and proficiency are issues with us as well. As an aside, it is also alleged that the Federal Government has certified us because we exercise a modicum of common sense and good judgment.

Should you choose option B and charge ahead, well what can I say? Good luck? Chances are, (and most assuredly CHANCE is the operative word), you will make a successful takeoff. But before you do, consider the following: Should you have an accident and should it be proven you have exceeded the cross wind component of the aircraft being flown, the insurance company in all likelihood will not honor the insurance claim. Secondly,

should that accident happen you might expect to be cited for violation of FAR 91.13. Don't remember what that one is? Consider the question as part of FAR 61.56.

Remember. Takeoffs are optional. Landings are mandatory. See you at the airport.

Class Wars

No, not the election, glider classes. There has been a lot of talk recently about the number of classes (six) that now have a world level contest. The always-inscrutable IGC (International Gliding Commission), which rules these things, is said to be contemplating the cancellation of one class in 2010.

The IGC is increasingly concerned about the cost of putting on all these worlds, and the difficulty in getting the people to run them, the towplanes and the rest. (Sounds like US contests.) This year the worlds was split into two, with Standard, Club and the World Class (PW-5s) at Rieti in Italy, and the three flapped classes (15M, 18M and Open) at Luesse in Germany.

John Good, contest pilot, former editor of Soaring, is about the best reporter on contest flying in the English language. Included in his daily web reports from the Luesse World Gliding Competition this year was a fascinating sequence of notes on the state of the three flapped classes. With his permission, *Towlines* prints those thoughts below.

With one class seemingly headed for the chopping block at world level, his reports are especially relevant. Seems that a lot of the talk at Luesse was that the victim could be the 15M class, given the rise in popularity (and performance) of the 18M class. But it could also be the Peewees, which raised only 18 entrants at Rieti. Or, says John, maybe it will be the standards. As he rightly says, the future is murky.

He begins with the 18 meter class.

Luesse thoughts

By John Good

18-Meter: The 18-Meter class is the one with which I'm most familiar, as I'm crewing for Doug Jacobs. This is also the newest of the three classes, and (significantly) the largest, with 50 gliders entered. Based on numbers and the current overall standings at WGC 2008, the state of the art in this class is either a Schempp-Hirth Ventus 2cx or a Schleicher

ASG-29: I count 19 and 13 of these, respectively. The newest sub-variant of the Ventus is the 2cxa, which has a slightly narrower (and some say sexier-looking) fuselage. We also have three LS-10s and one example each of the new JS-1 from South Africa, the non-motorized Antares, and the Glasflugel 304s.

I haven't heard any strong sentiment that there's much performance difference between any of the gliders in the top half of the score sheet. All of them clearly go astonishingly well – they are probably the equal of a good Open-class glider at speeds above 90 knots, which is where they cruise on anything resembling a strong day. If you look at results from this contest, you don't see a big difference between the best speeds in Open and 18-Meter class (on one day, the speed that won 18-Meter class would have placed a very solid third in Open class). A maximum weight of 600 kg (1323 lbs) is a big part of the reason – with modern airfoils, these aircraft can climb well even at that weight, and when they run their high wingloading (which significantly exceeds what's possible in Open class) makes them happy at impressive speeds.

Schempp-Hirth is now fitting a main wheel to their new gliders that contains a very effective disc brake derived from motorcycle technology (Doug's Ventus has one). It weighs less than previous styles, and the brake seems to be considerably more effective, as well as being easy to modulate. So in 2008 it can at last be said that for your \$100,000+ glider it's possible to order a brake better than that of the typical moped. (To be fair, Schleicher gliders have had effective disc brakes for many years).

Four of the first six places were taken by ASG-29s, with a Ventus 2cxa in second place and another in fifth.

Open Class: Given the cost and complexity of these giant machines, it's hardly surprising that this is the smallest class here – as it has been for a long time at World Gliding Competitions. Many observers expect this to continue, now that 18-Meter performance is so close. Based on overall results, the glider to have is either an ASW-22BL (nine are entered) or a Nimbus 4 (19). It's certainly notable that the ASW-22BL, easily the oldest design at this contest, won the top 4 places,

with two of the Nimbus 4Ms in fifth and sixth places.

In addition to the soundness of its basic design, this is also thought to have a lot to do with the fact that the 22 can achieve a wingloading about 10% greater than that of the Nimbus. Even with takeoff weights up to 850 kg (nearly 1900 lbs), with their giant wings spanning as much as 92 ft, modern Open-class gliders are really too light for all but relatively weak soaring conditions. In a world where material strength, runway length and towplane power aren't issues, gliders with wings the size of those on the Nimbus 4 would like to be flying at 1000kg or more.

Because weight isn't much of a penalty in Open class, plenty of these gliders include stow-away engines. When soaring conditions aren't quite sufficient to complete a task, the ability to fire up an engine and fly home under power can look very attractive compared to having to de-rig a giant glider in a remote field, trailer it home, and then re-rig it for the next flight. Of course, these engines aren't exactly cheap -- nor have their records for durability and reliability been exemplary – but compared to the truly shocking cost of a modern Open-class glider (got a spare quarter-million lying around?), the cost of adding an engine can seem reasonable, and its foibles a worthwhile tradeoff for the convenience it often delivers.

15 Meter: The score sheet for this class suggests that if you want to be competitive, you should probably be in either an ASW-27 or a Ventus 2. But it should be noted that neither Schleicher nor Schempp-Hirth is these days selling much in the way of 15-meter span gliders. They do sell a lot of 18-meter gliders that include shorter tips. But the number of pilots who buy these and then regularly fly with both spans is small. There are significant compromises: the fuselage that works at 18 meters is too long (and thus has too much wetted area) to be optimal at 15 meters. If you've paid the high price for 18 meters of span, why would you want to leave the long wingtips in the box? It's fair to note that Leigh Wells of Great Britain was toward the end of the contest in second place flying an ASG-29 at its short span (15 meters). But he is clearly an exception, being an unusually talented pilot - and a former World Champion -- yet even he

slipped to fourth overall.

Mention must be made of the Diana 2, being flown by Janusz Centka, the current 15-Meter World Champion. Janusz likens his airplane to a Formula 1 race car, flying in a fleet of high-performance sports cars. The Diana is indeed a radical design, and boasts a wingloading range better than any other glider here. His flight in the Diana on the final day of the 2006 World Gliding Championships is the stuff of legend – probably only a pilot of his caliber and experience flying a glider of this sort of performance could have achieved what he did (overcoming a big deficit to finish first). In the end, at this worlds, he could not overcome a more than 300 point deficit from earlier in the contest and came second overall.

The 15-meter class is now something of an orphan, despite the vast numbers of 15-meter gliders flying all over the world – probably more than in any other class. Manufacturers

are concentrating the lion's share of their efforts on the booming 18-meter class. No new 15-meter designs are even in the rumor stage. The end result at Luesse showed that there was no overwhelming winning type in this class. First was a Ventus 2a, then the Diana 2, another Ventus 2a, the ASG-29 in short wing form, another Ventus 2a in fifth and the first ASW-27 in sixth.

[Two added notes:

In the standard class there is only one type to buy, the Discus 2a, which won all six top places.

Just in advance of the Luesse contest, there was a flurry of gossip about a new-design vent from DG supposed to extract air from the cockpit in such a way to increase performance by 2.5% or more – as much as comes from many a new glider design. The LS-10s at Luesse were so equipped, but the chat evaporated with the gliders fairly lowly performance. Watch this space.-Ed.]