

# Towlines

The Newsletter of the Albuquerque Soaring Club

September 2004

## *From the President* By Kathy Taylor

A committee consisting of Tom Tichy and Don Kawal has been looking in to the club finances to be sure that our fees are adequate to cover our expenses. They have discovered that we have a deficit that we would like to make up by increasing tow fees. Under this proposal, \$2 would be added to the hookup fee and 10¢/100 feet would be added to the altitude fee. This would make a 2K tow cost \$22 and the minimum tow (to 1400 ft) would be \$18.40. A 3K tow would be \$28. We will be voting on this fee increase at the OCTOBER club meeting and we will need a quorum, so please attend. The OCTOBER meeting will be held at the club house at 9 AM. We will serve refreshments at that meeting.

During the September Board of Directors meeting we had an informative presentation by Ash Collins on the different types of transponders and kinds of information available from each and the costs. The Board is considering whether we should install transponders in all of our club aircraft. If you have some input on this subject, talk to any Board member.

The club's new insurance policy contains a large increase in the deductible amounts. The "in motion" deductible is now \$1000 and the "not in motion" deductible is \$250, increased from \$500 and \$100, respectively. The Board has voted to have the club pick up the deductible over \$500. This means that the responsible member would pay a maximum of \$500.

The SEPTEMBER club meeting will take place on Wednesday, September 29, at 7 PM. David Pauly will talk about soaring

meteorology, a topic that is near and dear to the hearts of soaring pilots. We will also be reviewing the requirements of our agreement with the FAA to operate in the wave window. If you expect to be doing any flying above 18,000 ft this winter, please be sure to attend. The location of the SEPTEMBER meeting has not been confirmed.

## *ASC Cross-Country Standings*

*By Brian Resor*

We're on the final lap of the 2004 ASC Country Contest and in some cases we have ourselves a close race! Pilots are sprinting hard to the finish of the season and as a result the standings have been shaken up a bit. Scores are based on the total of the 5 best handicapped OLC distances.

Since last month, Billy has claimed another 800km flight to take a powerful lead. Howard took third place from Brian by 2 points on 9/7 and then really finished him off by flying a 630km flight to near Fort Garland and back on 9/11. Cumiford is next on Brian's tail currently trailing by only 12 points. Mark Mocho has come to life and claimed several great flights, including a 500km O&R to Culebra Peak CO on 9/11.

In the Silver class we have no major updates. Silver class pilots, it's not too late in the season to boost your score. Remember that the whole purpose of this contest is really to constantly have a way to monitor your performance as you try to improve your skills.

As of September 14, the overall ranking of "Albuquerque Soaring" (which includes

our friends who fly with Sundance) was 4<sup>th</sup> in the WORLD. Keep in mind that the Europeans had flown all winter in the southern hemisphere *and* they all have at least twice as many pilots competing as we do. The 2004 OLC season ends October 11th. Let's get out there and finish with a bang! As of September 14, 2004. Position Pilot Glider Score:

**GOLD CLASS**

1 Bill Hill Discus 3332, 2 Mitch Hudson Discus 2722, 3 Howard Banks ASW-20 2551, Brian Resor Std Cirrus 2434, Jim Cumiford Ventus 2422, Kathy Taylor ASW-27 2079, Mark Mocho Pegasus 2006, Angel Pala DG 800 1767, Jim Wier ASW-20 1745, Bob Knight DG 600 1238, Lee Goettche Pik-20 1027

**SILVER CLASS**

1 Steve Schery, Russia AC4b, 1909; 2 David Harmony, Ventus, 1209; 3 Ryan Thomas Std Libelle 1002; Fred Watson, Ventus, 427; Murat Okandan, Nimbus 2, 531; Renny Levy, SGS 1-26, 170

***Membership Roster***

You might have noticed that the latest roster is not included with every issue of *Towlines*, as there is not one with this issue. Sometimes the amount of material submitted is enough to fill all the pages available for the monthly mailing (6 page limit on the newsletter and 2 page limit on the billing). An up-to-date roster is *always* available in the members section of the website. [www.abqsoaring.org](http://www.abqsoaring.org)

Along those lines, if the information on the roster is not correct, please let Brian Resor know ([resor@netzero.com](mailto:resor@netzero.com)). We are using email more and more frequently lately to make announcements for club business, so make sure that if you have an email address, it is included correctly on the roster.

***Your Mother Doesn't Work Here***

No-shows for Ops duty is once again becoming a noticeable problem. The board has been spending a considerable amount of energy trying to come up with a solution -- the \$75 fine is obviously not a deterrent -- and would like to get input from members. What ideas do you have?

A club only works if all the members play their part. In ASC's case, that is frankly not a lot for most members. There is duty perhaps three times a year and a call to come help clean up the hangar or club room once a year, when the absentee list is by far the majority. The heavy lifting falls on a relative handful of members, instructors, tow pilots and the handful who are always willing to do whatever is needed -- and we all know who they are. The rest of us are a pretty shameful bunch if truth is spoken.

ASC dues are modest by most club standards and so are tow fees, despite the latest proposed increase (recall fuel prices and what it costs to fill your gas tank). And the benefits are many, not only gliders to fly, but BFRs, endorsements, check outs and mentoring, are thrown in. And then there is access to a computer

**2004 Board of Directors and Appointed Officers**

President-Kathy Taylor (505) 672-0152	Vice President-Pete Vredenburg (505) 286-7961	Secretary -Brian Resor (505) 323-1579	Treasurer-Tom Tichy (505) 822-7946
Director at Large-Mitch Hudson (505) 881-5323	Director at Large-Jim Wier (505) 292-0190	Chief Instructor-Jim Miller (505) 883-3066	Chief Tow Pilot-John Farris (505) 797-2279
Chief Operations-Mike Kleinfled (505) 281-7908	Safety Officer-Billy Hill (505) 286-7628	A/C Maintenance-Bob Hudson (505) 281-9219	Fac. Maintenance-J. D. Huss (505) 899-9169
	Insurance-Don Kawal (505) 856-9043	Newsletter-Howard Banks (505) 821-2651	

with all the latest software.

So it is time to put on collective thinking caps and come up with some workable solutions.

### ***Check lists are important***

We all know that they are and yet we all forget something sometime. Come to the field without the chute or battery, forget to turn on the oxygen. Lee Kuhlke, well known contest pilot with Black Forest Soaring has a whole collection that cover everything, from the number of pee bags per contest, the things to go in the trailer or car, even how many socks to take. The



A beautiful cloud street took several pilots to Wheeler Peak and beyond into Colorado on Sept 11, 2004

whole set of his lists is on the club web page free for us to use. If you have any suggestions or additions, email him at TK.

### ***Situational Awareness and Blind Spots*** *By Carl Ekdahl*

“The pilot must have a three-dimensional sense of awareness and feel time, distance and relative motion as if they were part of his soul; only if you have a feeling for what is going on around you can you take action and make

correct decisions.” : from “*Air-to-Air Tactics*,” by Randall Cunningham, US Navy

So, what do the words of a Viet-Nam ace have to do with cross-country soaring? What Cunningham is describing is Situational Awareness, or SA for short. In his book, “*The Ace Factor*,” Mike Spick concisely defines SA as “the ability of a pilot to keep track of events and foresee occurrences in the fast-moving, dynamic scenario of air warfare.” Substitute “cross-country soaring” for “air warfare” and you have your answer.

What I am going to talk about in this article is a little discussed, but very important, aspect of SA – blind spots. That is, developing an acute awareness of what can’t be seen and taking positive corrective action. Blind spots can be loosely grouped into three categories – physical, physiological, or psychological. Let’s now take a look at some examples in each of these categories. The challenge to you, the sailplane pilot, is to find even more examples and take the appropriate action.

Ah, but you say, “I can see the wings of a low sailplane in front of me on one side

of the cockpit or the other!” Wrong. It is easily shown that your 2 foot wide cockpit, three feet from your nose, will completely obscure a 15 m wingspan less than 100 feet away. It is also easily shown that a pull up at sea level beginning at 100 kt IAS and ending at 70 kt IAS will gain more than 200 ft of altitude, quickly putting you in harm’s way. Now, here’s a pop quiz: how much more altitude will that same pull up gain at our ‘typical’ 15,000 ft cruising altitude? \*

**Physical Blind Spots:** There are two notorious blind spots in modern sailplanes. One of these is to the front and down, and the other is to the rear and up. These areas of severely restricted vision, along with the modern practice of dolphin flight, are a perfect setup for mid-air collisions when flying cross-country with others. The situation to be aware of, and avoid at all costs, is that in which one sailplane is cruising directly in front of, and slightly below the other. That is, the lead pilot is in the “forward-down” blind spot of the trailing pilot. Conversely, the trailing pilot is in the “rearward-up” blind spot of the lead pilot. Neither can see the other. If the lead pilot hits a band of lift and does a pull-up, it is quite likely that as he slows down in the pull up he will be directly in the path of the trailing pilot.

This setup is especially dangerous when running downwind, because the thermals may be leaning with the wind, and the pilot ahead of and below you may sense them earlier than you and initiate a pull up long before you. Finally, you must be exceptionally wary of this threat when on assigned tasks, because several other pilots can be near you on the same track; headed to the same turnpoint or cloud.

The lesson here is to clear your blind spots while cruising, just as you were taught to clear your turns when you were a student. Be aware of who might be ahead and below by occasional s-turning. (I do this while turning to follow “leads of lift.”) If you do sense someone in one of your blind spots, move off to the side. It also helps to keep track of those lower than you when left that last thermal. (You do keep track of everyone in the gaggle that can be a threat, don’t you)? And, please, please check six before pulling into that cool zoomie.

These two physical blind spots also need SA attention in thermals, especially when joining a thermal, and when leaving. Joining from the outside, rather than

zooming up into the pack, will give you a huge SA advantage. Before you contemplate pulling up into the gaggle, think about that blind spot behind and above you. By the way, I much prefer the European phraseology of “joining” (rather than the American “entering”) because it more accurately conveys the proper sense of ownership – the newcomer is the guest.

Tightly thermalling gaggles can be a true test of a pilot’s situational awareness skills. I have a racing buddy who once told me that he really loves to gaggle, because keeping track of the threats reminds him of the fur balls he experienced as an F-4 pilot. Eyeballs out, audio on, and always be conscious of what may be hiding in those two blind spots!

**Physiological Blind Spots:** Once, in a long-winded budget meeting, I heard the remark that humans haven’t been down out of the trees long enough to think about anything more serious than where their next banana is coming from. There is more than a grain of truth in that. Over hundreds of thousands of years mankind evolved a set of sensory perceptions that served him well in the hunter-gather era, but have not evolved since. One of these is visual sensitivity to motion, especially in our peripheral vision. Many a sabre-tooth missed lunch because of this.

Unfortunately, this sensitivity comes at a cost, which is a pronounced *lack* of sensitivity to stationary objects. Hey, a tree is no threat to a hunter-gatherer, so filter it out! The problem here is that the worst collision threat to a pilot is another ‘apparently’ stationary aircraft, whether it be a sailplane or a Boeing 737. It is a simple exercise in geometry to show that the aircraft that will collide with you is stationary in your field of vision! This is true whether the aircraft is approaching head on or from any other angle.

This threat is particularly insidious when running cloud streets. Head on traffic

under gloomy cloud streets while flying OLC or other pilot selected type tasks is not only possible, it is probable. Good radio communications while running a street is a must for the practitioner of SA, but you cannot count on everyone else keeping track, or even having a functioning radio. At our altitudes, closure speeds can be well over 250 kt, and the threat can grow from a dark speck to a 15 m span in less than ten seconds.

For the practitioner of SA the rule is simple: the worst collision threat is the aircraft that appears to be stationary. And the expert practitioner will always keep in mind his inbred physiological handicap for detection of this threat. Eyeballs out, audio on, radio on!

**Psychological Blind Spots:** Finally, we come to what may well be the most dangerous class of blind spots; those which are of the making of our own minds. One psychological blind spot that I won't dwell on because it is so obvious is the "it can't happen to me" syndrome. Believe me, wander down this mental path and it will!

But there are even more subtle psychological blind spots. One of my favorites is "I'm so low that no one else could possibly be down here near me." I like to think that we all practice good SA under normal thermalling conditions, keeping our heads on a swivel, keeping track of anyone that could accidentally pose a threat, and continuously forecasting the consequences of our actions. But what

about when you are down low, really low, over what appears to be the backside of the moon? Is there a tendency to speculate that "no one else could be in this mess," and get heads down on the variometer? I believe that a much better way to think about it is, "if I'm in trouble, there is a darned good possibility that others are too." And remember that it is an experimentally proven fact that there is a physical law of attraction between a sailplane in trouble and a circling sailplane! Moreover, the strength of this attractive force has been shown to be inversely proportional to altitude. So keep a vigilant scan outside while you are struggling to climb out of that hole. Eyeballs out, ...

A variant of this particular psychological blind spot can easily occur when landing out. There are so many things to consider – wires, fences, field condition and slope, wind direction, etc. etc., -- that it is easy to forget that if conditions are so weak that you are landing out, others might be doing the very same thing. And, they may even be contemplating landing in the exact field that you are! They may even have a failed radio and be setting up a right hand pattern, while you (of course) are setting up a left hand pattern. The SA lesson here is to never let your mind trick you into letting down your guard against the unexpected, and always, always clear your patterns. In conclusion, develop a keen awareness of these three types of blind spots as you sharpen your own "ability to keep track of events and foresee

### ASC Cost Structure

	<b>Dues, Fees, and Rental Rates</b>	Aircraft rental	Non-Owner	Owner
Monthly dues	\$53.50-Executive \$34-non-owner \$25-Owner \$24-Family \$6.50- Associate ( Associate pays full dues any month flown)	2-33, 1-26	\$10/hour	\$16/hour
Initiation Fee	\$300 capital contribution + \$150 advance payment toward dues and flying.	Libelle	15	21
Missed Duty	\$75. Ops, Tow pilots, Instructors. Executive members exempt from duty.	Grob	18	24
Demo flights:	30 minutes or shorter duration. Billed to Demo Pilot at non-owner rate.		20	26
Tows	\$8 plus \$0.50 per 100'. 1400' (\$15) minimum	Minimum, all	5	5

occurrences in the fast-moving, dynamic scenario of cross-country soaring.”

*\*Pop quiz answer: A pull up at 15,000 ft will gain more than 60% more altitude than at sea level, simply because of the roughly 2%/thousand ft increase in TAS over IAS. This comes as a great surprise to many low-landers when they first visit our neck of the woods.*

This article is based on the many safety talks Carl has been asked to give at the pilots' meeting which takes place each morning at SSA-sanctioned contests.-Ed.

### **Club website**

Two important updates to the web site have been made by Brian Resor.

He has placed electronic versions of useful information in the members' section. First, an electronic copy of the membership application. Brian suggests you print it out for when you meet potential new members. It is not in the public part of the site since it is a requirement that potential members contact an existing member in order to learn about the club and then apply. Second, you'll find an electronic copy of the membership manual and bylaws. You can always rely on this copy as the most up-to-date.

Brian has also added a trial version of a chat room, also accessed via the member section. It is there for your use.

### **ASC Operations Schedule**

		<b>OPS 1</b>	<b>OPS 2</b>	<b>Tow</b>	<b>Instructor</b>
4-Sep-04	Saturday	Martinez	Lubitz	Carlton	Miller
5-Sep-04	Sunday	Ekdahl	Sigala	Hill	
11-Sep-04	Saturday	Gallegos	Kawal	Schery	Buehre
12-Sep-04	Sunday	Okandan	Farris	Thomas	
18-Sep-04	Saturday	Kahl	Watson	Stogner	Collins
19-Sep-04	Sunday	Ferguson	Guillory	Tichy	
25-Sep-04	Saturday	Huss	Heerman	Wadsworth	Weir
26-Sep-04	Sunday	Goettsche	Hudson R	Wright	
2-Oct-04	Saturday	Alkov	Banks	Hill	Willam
3-Oct-04	Sunday	Denman	Cumiford	Schery	
9-Oct-04	Saturday	Devine	Graeber	Carlton	Daffer
10-Oct-04	Sunday	Friedel	Trammell	Stogner	
16-Oct-04	Saturday	Bilan	Sharp	Thomas	Collins
17-Oct-04	Sunday	Brothers	Travelstead	Tichy	
23-Oct-04	Saturday	Walker	Walker	Wadsworth	Buehre
24-Oct-04	Sunday	Harmony	Greig	Wright	
30-Oct-04	Saturday	McKnight	Bloch	Carlton	
31-Oct-04	Sunday	Buenafe	Guillory	Hill	Taylor
6-Nov-04	Saturday	B Wilson	McGhin, B	Schery	
7-Nov-04	Sunday	Woods	Lubitz	Thomas	
13-Nov-04	Saturday	McGhin, T	Sigala	Stogner	
14-Nov-04	Sunday	Martinez	Gallegos	Tichy	
20-Nov-04	Saturday	Stewart	Kawal	Wadsworth	
21-Nov-04	Sunday	Okandan	Travelstead	Wright	
27-Nov-04	Saturday	Kahl	Watson	Carlton	
28-Nov-04	Sunday	Vreedenburg	Levy	Hill	

Contact Mike Kleinfeld with questions about Ops scheduling