President's Prerogative

George Hazelrigg

Allow me to begin this month's President's Prerogative by introducing your new Board of Directors. Remaining on the Board are Shane Neitzey, Kolie Lombard and me. Shane you know as an instructor, tow pilot and designated examiner. Shane has years of flying experience, and he brings a passion for safety. Kolie also has years of experience, and he is the owner of an LS-3. He works as a consultant to the FAA. I bring 40 years of experience in aviation, as an engineer with an engine manufacturer, an airframe manufacturer, with NASA/JPL and as a consultant to the FAA. Joining us are Chris Groshel, Rick Harris and Fred Winter. Chris is in charge of aircraft maintenance for MCI and has some impressive aircraft under his care. Chris owns his own airplane as well. Rick brings management experience and the student's perspective to the board. As for Fred, there is no way I can exaggerate his contributions to our Club over the years. He owns the ASK-21 and leases it back to the club. He is an outstanding glider pilot, and a mentor of ridge flying. We have a great deal of talent in our Club, and the membership has chosen an outstanding Board. I look forward to working with the entire Board over the next year, and I expect great things from everyone. But I also want to thank the departing Board members for their devotion to the Club over the past year: Richard Freytag, Chris Williams and Frank Banas. They all put in a lot of time to make it possible for us to fly.

Next, let me remind you that we will have our annual safety meeting at the airport on Saturday, February 19, beginning promptly at 10 AM. The annual safety meeting is our one required meeting each year. You must attend. But, if you cannot attend, we will tape the meeting, and you must "attend" by watching the tape before you can fly with the Club after the date of the safety meeting. And, for added incentive to come, we will begin our flying season immediately following the safety meeting. We have three speakers this year. The meeting will start with a short presentation by Shane on premature termination of tow (PTT). Next, Bill Vickland will talk to us about accidents he has witnessed, and he will draw lessons from each. Finally, Geoffrey Hazelrigg will take us down to the hangars and talk about ground handling. Last year we suffered excessive damage to our ships from carelessness in ground handling, and we want to start this year with everyone up on the correct procedures for taking aircraft out of the hangars, putting them back, off-field retrievals, driving the tow car, and getting set up for ops.

Finally, I plan this to be my last year as President. This is not a dynasty, and I look forward to turning over the leadership of the Club to "new blood." But I do want to leave the Club with my legacy. ***First,*** it is my goal to establish a stable base of operations for the Club. I am hoping that will be at Front Royal. We are working with other users of the airport to assure that we are a good neighbor and that we have friendly relations with other users of the field. We will all need to pay particular attention to our operations this year, and do our best to be courteous to other pilots and guests. ***Second,*** I want to establish a more regularized set of procedures for introductory memberships, guests, conversion from probationary membership to full membership, and other such actions that have, in the past, been poorly defined and carried out. ***Third,*** I want to better organize our ground operations, with formal DO and ADO training. ***Fourth,*** I want to better organize our hangar space and maximize the utility of the hangars to the Club. ***Fifth,*** I want to get a youth program started so that we can encourage more young people to enter our sport. ***Sixth,*** I want to improve the organization of the Club to reduce the extreme burden that has been placed on a few of our members. We can all thank Bob Collier time and again for his contribution as Treasurer. We need to lighten the burden on people like Bob. Please consider volunteering your talents in areas of your expertise. Seventh, I will encourage Piet Barber to continue the great work he and his staff of instructors has been doing, and put an emphasis on graduating students with their ratings. And finally, I will continue to work to strengthen all aspects of safety surrounding our operation, from opening the hangar doors in the morning, to closing them in the evening.

This is your Club. It's a great club because you make it that. We fly your equipment. Together, we all care for your equipment. You have a substantial investment in your Club, and together we want to reap the benefits of that investment.

Happy flying season, 2005.

Climb Performance and Handicapping

Judah Milgram

The promise of a Mueller-Vickland fly-off (or is it an LS-8 vs. 1-26 fly-off?) got me interested in the subject of glider handicapping. I'd always wanted to go through the exercise and see if I could come up with numbers similar to those Carl Herold's or the Deutscher Aero Club's.

It seemed to me that handicaps should reflect the climb performance of the glider in question. Especially in this case, because of the 1-26's oft-touted ability to core tight thermals at low airspeed. As far as I can tell (e.g. from Ref. 5), the Carl Herold (SSA) handicaps do not reflect this, but assume that all gliders climb at the same rate. On the other hand, I am given to understand that the DAeC indices (on which the OLC is based), *do* attempt to model this. I decided to try to incorporate thermaling ability in my handicap numbers, but doing this turned out to be much more involved than I first realized, and I thought it would be useful to put my notes together for *Skylines*.

These are the questions:

1. when flying a circle of given radius in still air, what is the combination of airspeed and bank angle that yields the lowest rate of sink? For handicapping, we'll assume that the pilot flies this "optimum schedule" of airspeed vs. bank.
2. assuming the pilot is flying this "optimum schedule" in a thermal of given lift vs. radius profile, what is the optimum solution (airspeed, bank, radius) to maximize the rate of climb? This is what tells you how to fly in a thermal. Never mind that thermals seldom look exactly like the models we'll be using — this is just a handicapping exercise. That said, there is still some useful insight to be had.

While we're at it, we'll consider these additional questions, although they don't have much to do with handicapping per se:

3. when flying a turn with given *bank angle*, what airspeed minimizes the rate of sink? This is probably never the right question to ask — the only reason to bring it up is to point this out.

4. For completeness: when flying a circle of given *airspeed*, what bank angle minimizes the rate of sink? This one is easy: zero!

Basic turn relationships

Steady turns are defined by radius r, airspeed V, and bank angle φ. Given any two of these, the third can be computed. Specifically:

$$V = \sqrt{rg\tan\varphi} \quad (1)$$

$$r = V^2/g\tan\varphi \quad (2)$$

$$\varphi = \arctan\left(V^2/rg\right) \quad (3)$$

In addition, the load factor n_z in a turn is $1/\cos\varphi$,and the lift is $n_z W$. For a given turn, this lets us find the level flight airspeed at which the glider would have the same lift coefficient:

$$\bar{V} = V/\sqrt{n_z} = V\sqrt{\cos\varphi}$$

This says that if you fly a turn at airspeed V at bank angle φ, you'll be operating at the same lift coefficient as you would in level flight at airspeed $\bar{V}$. So for example, if your level flight minimum airspeed is 30 kt, in a turn that same lift coefficient would be achieved at 30 kt/$\sqrt{\cos\varphi}$.

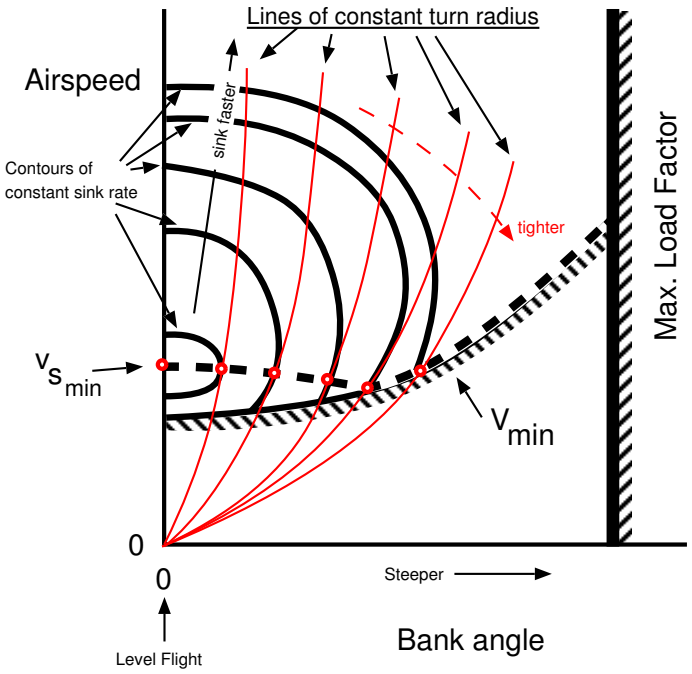

Figure 1: Typical turn polar (full airspeed-bank map)

Sink rate in a turn from the Level Flight Polar

The bad news is, there seem to be no experimental data available for gliders in turning flight. This means that sink rates in turns have to be estimated from polars measured in straight-and-level flight.

Skipping the derivation, the approach I used was:

1. compute $\bar{V} = V\sqrt{\cos\varphi}$
2. look up the sink rate $\bar{v}_s$ in the measured polar at airspeed $\bar{V}$
3. compute the $L/D = \bar{V}/\bar{v}_s$
4. the sink rate in the turn is then $v_s = V/(L/D)\cos\varphi$

There are some problems with this. It ignores the effects of control deflections and sideslip. The effects of yaw rate are neglected. Most important of all, it leaves out the influence of handling qualities. For example, some gliders just seem to "like" steep turns more than others. However, this is the best we can do given only the level-flight airspeed polar.

The "Turn Polar"

The level-flight polar we're familiar with is a plot of sink rate vs. airspeed. In turns, we have an additional independent variable — bank angle. So the "polar" becomes a "map" of sink rate vs. airspeed and bank angle. Fig. 1 shows a cartoon of such a map. Along each of the v_s-contour lines (black), the sink rate is constant. This is sort of like a topographic chart, with the "bottom" of the hill being the level-flight $V_{s_{min}}$ point. The red lines are lines of constant radius, based on equation 1. Note that these constant-radius lines are the same for every glider, regardless of performance. As we go to the right of the chart, these lines represent steeper and steeper turns.

Question #1 asks: along any one of these lines of constant radius, where is the point of minimum sink rate? Without going into the math, this occurs at the point where the constant-radius line is

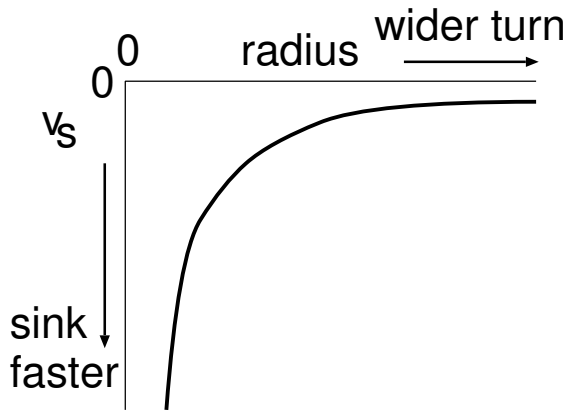

Figure 2: Typical turn polar (sink rate vs. radius)

exactly tangent to a constant-v_s contour. The red circles in Fig 1 show these points, and the dashed line indicates the locus of the minimum sink points as the turn radius is varied.

Initially, for very shallow turns, the optimum solution may call for a *slower* airspeed than the level flight $V_{s_{min}}$. This happens when the tradeoff favors the increased drag of flying "behind the curve" over the effects of bank angle. As the turn is tightened up, the best airspeed decreases, until the minimum airspeed line is reached. This line might be due to stall, buffet, or simply lack of data in the measured polar. At this point, slowing down is no longer an option, and the best airspeed follows the V_{min} line.

As we'll see, slowing down below level-flight $V_{s_{min}}$ only makes sense in shallow turns, and there may be other reasons not to do this, for example handling qualities and concern over stalling. Some polars don't even show a "backside" below $V_{s_{min}}$, either because there isn't one or (more likely) they didn't bother to measure it. Even in steeper turns, where the optimum would seem to be to fly at V_{min}, some gliders will do better at a slightly higher speed, for reasons mentioned above. Again, this is a handicapping exercise, and we have to base everything on the available performance data, i.e. the level-flight polar.

The dashed line gives us the optimum "schedule" of airspeed vs. bank as the turn is tightened up. If we plot the sink rate along this line as a function of turn radius, we end up with another version of the "turn polar", shown in schematic form in Fig 2. This tells us the best sink rate we can achieve as a function of turn radius, assuming the pilot flies the optimum turn solution.

Note Fig. 2 predicts that for very steep turns, the sink rate really takes off. This is why some tow pilots like to come down in steep turns (though some discourage this, for other reasons).

While we're at, let's think about Question 3, which asks how to minimize the rate of sink for a given *bank angle* (not turn radius). By visualizing a vertical (constant bank angle) line in Fig 1, it's not hard to see that, for a fixed bank angle, the airspeed that produces the minimum rate of sink generally leads to suboptimal airspeed/bank angle combination, i.e. one that is off the "optimum schedule" line. In other words, if you find the optimum airspeed/bank angle combination for a turn of given radius, the airspeed will *not* be the one that minimizes the rate of sink for that bank angle. That's why Question 3 is the "wrong question".

Thermal Models

The simplest thermal models assume that thermals are perfectly circular, with strength varying as a function of distance from the center.

The results I'll be showing here are based on the four Horstmann thermals [2, 7]. These are labeled "A1", "A2", "B1", and "B2" according to their size ("A" = narrow, "B"= wide) and strength ("1" = weak, "2" = strong). These models were based on flight test measurements made in Central and Eastern Europe and may not be representative of the ones we get west of the Mississippi. For that, we could use the Carmichael models [1, 7] but let's save that for another day.

The Horstmann model specifies the thermal velocity at a specified radius, and a linear velocity gradient with radius. When we add the climb velocity of the thermal to the sink rate of the glider, we get a chart of climb performance, for example Fig. 3. Fig 3 tells us what we already know: the climb in a thermal is optimized by flying at a particular radius, with the correct bank angle and airspeed. If we fly a wider turn, we lose because we end up in a weaker part of the thermal. If we fly too tight a turn, we *really* lose because of the detrimental effects of bank angle and airspeed. If the turn is too tight, we stop climbing altogether.

The best rate of climb indicated by Fig 3, along with the airspeed/bank angle combination required to achieve it, provide the answer to Question 2

Getting down to cases

As promised, we'll consider the SGS 1-26E and the LS-8A. For grins, we'll also throw in the Schleicher K-8b (the "European 1-26", or maybe the 1-26 is the "American K-8", depending on your outlook).

Measured polars for the three gliders are shown in Fig. 4. The SGS 1-26E and LS-8A data were measured by Dick Johnson, Refs. 3 and 6, respectively. The 1-26E was measured at 620 lb. gross weight, and the LS-8A at 736 lb. I don't have a lot of faith in this LS-8A polar because it doesn't look much better than a Std. Cirrus, but it's close enough for now. The K-8b data were measured by Hans Zacher [8]. The gross weight corresponded (I think) to empty plus a 90 kg pilot.

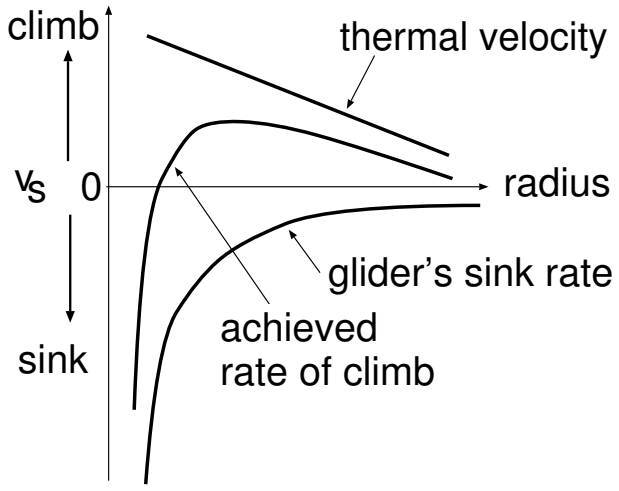

Figure 3: Climb performance in thermal

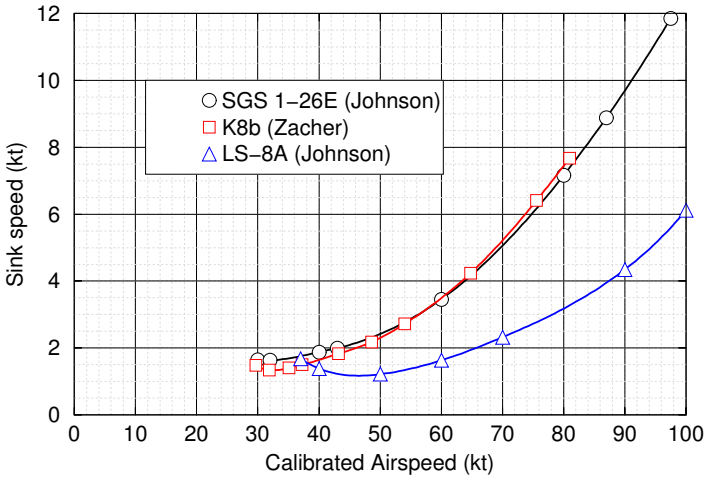

Figure 4: Polars for 1-26E, K-8b, and LS-8A

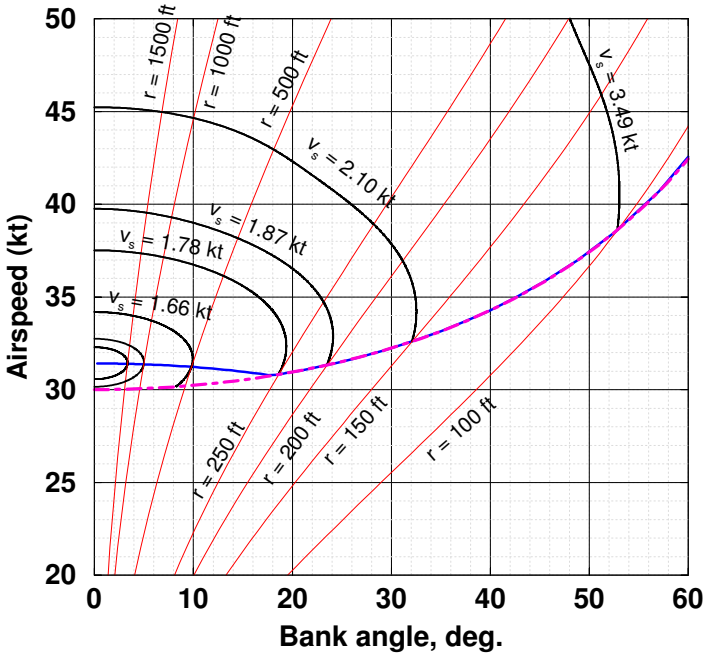

Figure 5: SGS 1-26E turn performance map

The symbols show the points I read from the published polars and used to fit cubic splines to the data. In the case of the LS-8A, I first had to draw a polar line through Johnson's data; he didn't do this himself, possibly because of the scatter. So bear in mind that the LS-8A polar is, to some extent, a product of my artistic interpretation.

In Fig. 4, the 1-26E and K-8b have very similar performance. The K-8b is a bit better at low airspeeds, the 1-26E slightly better at higher airspeeds. The LS-8A is much better than either of them (it ought to be!) and its advantage increases steadily with airspeed.

Figure 5 is the actual turn performance map for the SGS 1-26E based on the measured polar in Fig. 4. The red lines are lines of constant turn radius; the black lines are contours of constant sink rate, the blue line is the locus of optimum turn solutions, and the magenta line is the minimum airspeed. According to these results, up to about 18° bank, the optimum airspeed decreases slightly

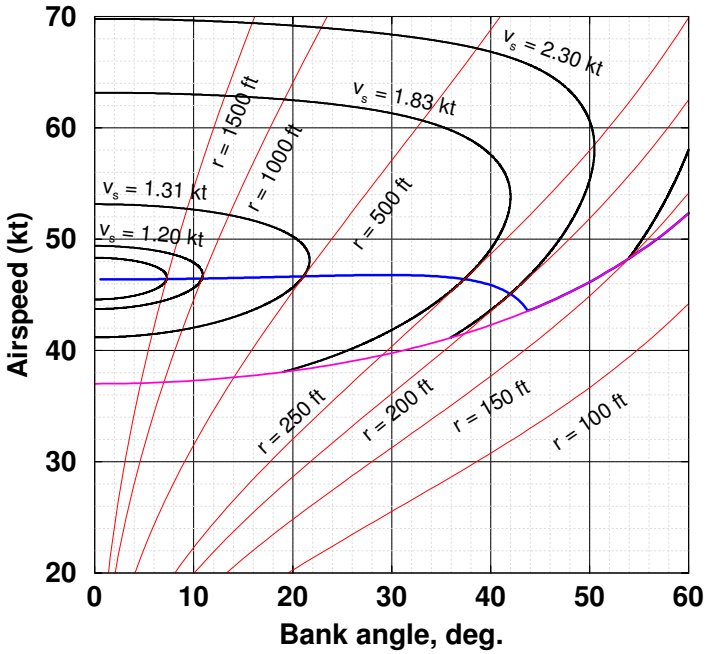

Figure 6: Turn performance map, LS-8A

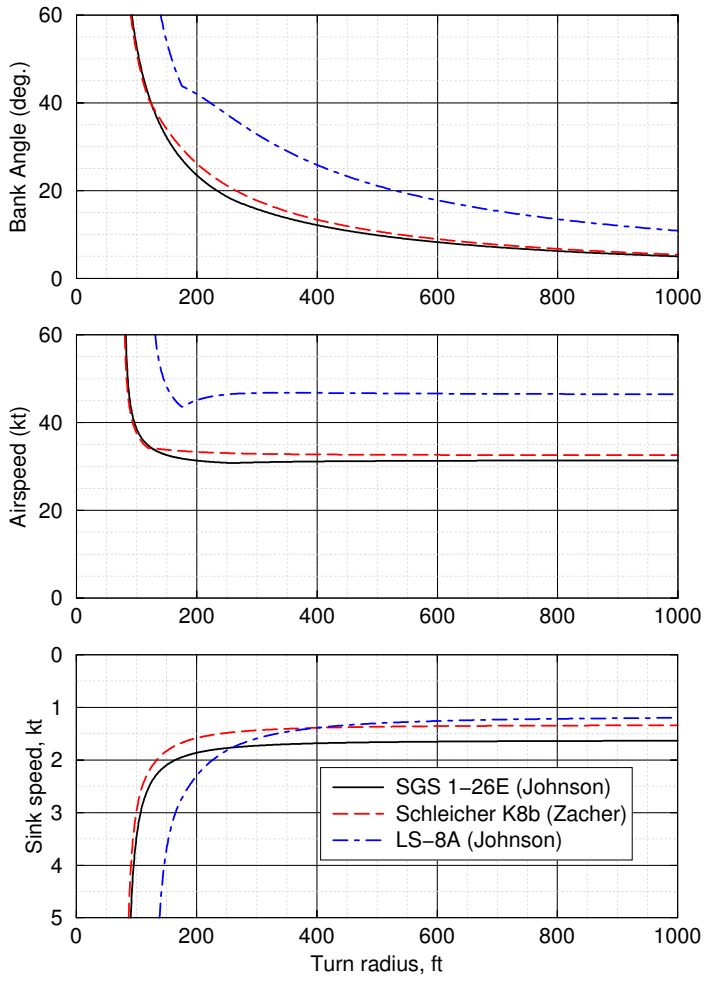

Figure 7: Turn Polars

		Optimum Climb Solution				MacCready Solution	
Glider	Thermal	V_c (kt)	Bank (deg)	Airspeed (kt)	Radius (ft)	V_g (kt)	V_{avg} (kt)
1-26E (Johnson)	A1	2.1	37	34	132	52	23
	A2	5.7	39	34	126	64	38
	B1	1.5	24	31	200	50	19
	B2	4.9	26	32	185	61	35
K-8b (Zacher)	A1	2.3	38	34	130	50	25
	A2	6.0	40	34	123	63	38
	B1	1.8	26	33	204	49	22
	B2	5.2	28	33	188	61	36
LS-8A (Johnson)	A1	1.1	42	45	197	56	24
	A2	4.5	43	44	182	79	47
	B1	1.5	31	47	319	58	29
	B2	4.8	33	47	294	81	48

Table 1: Climb and cross-country performance of the three gliders in each of the four Horstmann thermals

from the level flight minimum sink speed of 32.5 kt. At around 27.5° bank the optimum airspeed is back up to 32.5 kt. Said another way, if the idealized pilot is flying in an idealized thermal at anything less than around 30° of bank, she shouldn't be flying faster than the level flight minimum sink speed. Beyond this bank angle, the optimum airspeed increases steadily; at 60° bank our idealized handicapping pilot will be flying at around 42 kt.

Take these numbers with a grain of salt. If you're a 1-26 pilot, you might well disagree with them, and of course you should use what works best. This analysis is just for handicapping, and is the best we can do with just the level-flight polar.

The map for the LS-8A is in Fig. 6. The picture is similar, except the optimum schedule calls for a nearly constant 46 kt[1] up through around 40° bank, at which point there's a kink in the schedule as it approaches the minimum airspeed line. The kink is more pronounced than the one we saw for the 1-26E, probably because of the relatively wide "bucket" in its polar. This in turn could just be an artifact of the way I shot the line through the published points.

Fig. 7 summarizes the "turn polars" for the three gliders. The typical tradeoff between a relatively high wing loading, high performance glider like the LS-8A and lighter, lower performance gliders like the 1-26E and K-8b is evident. In nearly-level flight (very high turn radius) the LS-8A descends the slowest, followed by the K-8b and then the 1-26E. As the turn is tightened up, the LS-8A starts to come down faster than the K-8b at r = 400 ft, and faster than the 1-26E at around r = 260 ft. For turns tighter than this, the LS-8A really starts to suffer in comparison to the lighter, slower gliders.

The K-8b descends slower than the 1-26E, but unlike the LS-8A, retains this advantage even in very tight turns.

The figure also shows that, for a given turn radius, the best climb solution for the LS-8A has it flying faster and steeper than the lighter gliders. The kink in the LS-8A airspeed and bank angle curves at around r = 175 ft occurs at the place where the optimum schedule nears the minimum airspeed line in Fig. 6.

Figure 8 show the achieved rate of climb for the three gliders in each of the four thermals as a function of radius. Table 1 summarizes the best climb solutions from these figures, as well as the corresponding MacCready cross-country speeds based on the actual polars.

Some observations:

1. The K-8b, correctly flown, outclimbs both 1-26E and LS-8A, regardless of (Horstmann) thermal type.
2. In the narrow ("A") thermals, the K-8b and 1-26E both outclimb the LS-8A by 1–1.5 kt, despite having a higher $V_{s_{min}}$ in level flight. This is because their approx. 10 kt. slower level flight minimum sink speed allows them to fly tighter turns in the stronger part of the thermal, without the performance penalty that comes with excessively steep bank.
3. In the wide ("B") thermals, the lighter gliders' advantage largely disappears, because the LS-8A can fly a wider turn and still stay reasonably well in the thermal while taking advantage of its lower minimum sink rate.
4. The lighter gliders actually climb faster in the narrow thermals than the wide thermals, because of the way the thermal velocity profiles are defined (the "narrow" thermals are stronger near their core than the "wide" thermals). It may be that the Horstmann model wasn't intended for such tight-radius turns.
5. The average cross-country speed is very much a function of thermal type and strength. Different gliders are impacted by this to different degrees, so handicaps based on one set of weather conditions may be wildly off in others.
6. The optimum solutions (Table 1) suggest that there's seldom a need to thermal in a turn much steeper than 40° bank, at least with these gliders flying in these standard thermal types.
7. For a given glider, the optimum thermaling airspeed does not vary much from thermal type to thermal type. The optimum bank angle seems to be mainly a function of the thermal width ("A" vs. "B") rather than strength.
8. The LS-8A has its best advantage over the 1-26E with the B1 thermals, where it's 53% faster. However, the DAeC indices for these gliders are 108 for the LS-8A and 63 for the 1-26E [4][2] In other words, DMSt (and thus OLC) assume the LS-8A can *always* fly 71% faster (108 vs. 63) than the 1-26E. This is rather harsh to the LS-8A pilot, who as we see in the table might *never* be able to fly that much faster, at least not with the four Horstmann thermals. On a day dominated by weak/narrow (A1) thermals, a 1-26E, with a 71% handicap advantage, will *clobber* any LS-8A.

Regarding this last point, given that the 1-26E performs almost as well as the K-8b, the 1-26E index should probably be close to the K-8b DMSt index of 78. Setting it at 75 (for example) would put the LS-8A at 44% faster than the 1-26E. This is a little more consistent with the MacCready benchmarks in Table 1.

Over an OLC flight of 500 km actual distance, setting the index at 63 rather than 75 gives the 1-26E pilot an extra $500 \cdot (1/.63 - 1/.75)$ — around 125 km!

Implications for Handicapping

Given that, on some days, the 1-26E (when flown optimally) may enjoy a 1–1.5 kt climb advantage over the LS-8A, it would seem reasonable to try to capture this in the handicapping system. For example, the results in Table 1 suggest that on a weak day dominated by "A1" thermals, the K-8b actually beats the LS-8A in raw cross country speed! OK, by a knot ... but still.

On the other hand, handicapping gliders is a fundamentally uncertain undertaking. Handicapping cross-country speed alone ignores the fact that on some days the 1-26 (K-8, etc.) just won't

[1] Johnson has minimum sink for this gross weight occuring at 40 kt, but it's hard to determine from the data

[2] The 1-26E index isn't in Ref. 4; I have the number from the 1-26 Association web site.

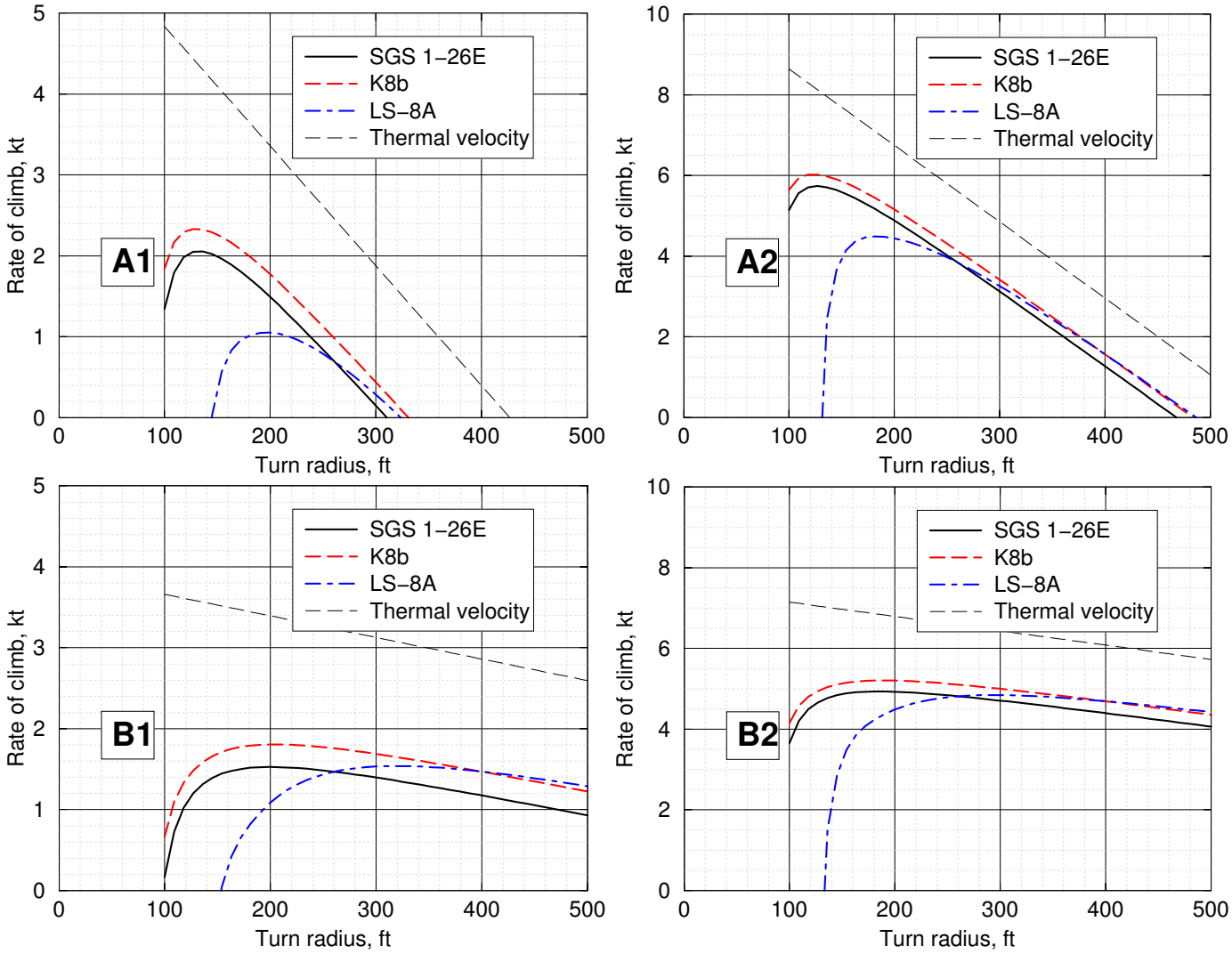

Figure 8: Climb performance comparison, Horstmann thermals A1 (narrow,weak), A2 (narrow, strong), B1 (wide, weak), and B2 (wide, strong)

make it to the next thermal, and doesn't have the same flexibility in choosing lift that the LS-8 does. And Fig. 8 suggests that there are going to be weak-lift situations where the LS-8 won't even be able to stay aloft while the lighter gliders might manage to get away. Although the calculations required to account for differences in climb performance aren't too difficult, making reasonable assumptions about the thermal strength and shape (to say nothing of possible streeting and wind) is probably impossible.

The good news is that nobody really expects handicapping to "work". No single handicapping system can be fair in all (or even most) conditions, but it doesn't matter because Sports Class is lots of fun and the good pilots seem to do well anyway.

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Book Review

Carlos Roberts

If you've been around soaring for a few years, chances are you know (or know of) Charlie Spratt. He is the competition director 'par excellence' of American sailplane racing. (While I've never been to a race myself, that's what I've always heard, and from many different people.) He has written several articles in "Soaring" magazine, and spoken at numerous SSA conventions and other events.

I just had the delightful experience of reading Charlie's book, "See ya' at the airport!". This is a short (158 pp) paperback published by the National Soaring Museum, and available from them by mail order or going to http://www.soaringmuseum.org/estore/begin.html . The price is $15.95, plus $7 for shipping.

The book is very light and easy reading, and has some hilarious stories involving sailplane racing. But some of the funniest stories are those of Charlie's life before soaring, which I think he was lucky to survive. If you're looking for some light reading involving soaring, this is worth checking out. Here's the official description of the book from the NSM web site:

"Following his many years as a gate keeper and contest director, NSM Member Charlie Spratt has written a book - the first to be published by the National Soaring Museum.

Charlie's stories contain a wealth of detail about soaring contests, people and sites, some still active and others no longer around. His writing style is straightforward and colorful. He has the ability to make us sit back and look at the soaring scene through his eyes. He gives us his insight and makes us laugh because we recognize it so well.

From his vantage point, Charlie is able to observe developments in U.S. soaring that are well worth documenting. His stories and anecdotes can truly be considered a chronology of recent U.S. contest soaring history and the NSM is proud to work with him. We hope this will mark the first in a series of successful soaring history publications."

Accolades for See ya' at the Airport!:

Charlie Spratt is the best CD I have ever flown under and that includes contest in many countries as well as five World Championships. Fortunately he writes with the same understanding and decisiveness he brings to contest directing. Soaring would be very much the less without his inputs, his experience, and his totally distinctive language. It's all here, told with his inimitable sense of humor. Enjoy!***—George Moffat***

The National Soaring Museum exists to record and relate the story of soaring in America. How better to do that than to publish a book by Charlie Spratt? Inspired by soaring and an inspirer of those who soar, Charlie is one of our sport's master story tellers. With this first NSM-published book, he has set the bar high. Good start, Charlie!—***Peter W. Smith,*** Director National Soaring Museum

"The Gate" has left his signature on many facets of US soaring competition, not the least of which has been his unmatched interactions with all the people who participated in some way. There will never be another Charlie and having this record of his involvement with the sport is another of his gifts to us all.—***Karl Striedieck***

ITALIAN WINGS

Bob Schwartz
Aviation Wings and Badges of WW2
http://www.ww2wings.com/main.shtml

The Glider Pilot badges are a tough one, they are so rare and they were such a clandestine unit that all we know about them is that they came in what are actually called "3 Classe" - prima classa is the one gull (called a "gabbione") and second classa, and terza classa for the 3. We must state (until I am able to get more info) this refers to the criteria of actual flying hours of training before being awarded the "brevetto". ... In the past, all of the airforce and wing collectors in Italy know them only as 1st, 2nd, and 3rd class Glider Pilots. I am aware only that the 3rd class wing was the most difficult to get, only awarded for pilots who succeeded in nighttime training and operations, including landing the craft at night.

The Glider school was at Novara before and during the war, but after September 1943, this closed. It re-opened in 1944 under the RSI Airforce at Varese. After the war, gliders were replaced by helicopters by 1949. Italians were one of the first nations to experiment with gliders, starting in 1904. Since the 1st Nucleus was formed in June 1942, that is the best approximate date we use for the issue of the wings.

Less than 250 glider pilots graduated from the Novara school and 10 Italian gliders took part in the C3 Malta Operation. Only one Glider pilot Group was organized, it was called the 1st Nucleus of Assault Gliders under command of Lt. Colonel Adolfo Contoli (later general).

"Sometimes the wings are called Brevetto A, B, and C.

There also existed the blue enamel badge for the lapel of the civilian jacket and a large one for the flying suit."—Rudy D'Angelo in response to my question about the three grades of badges

All three pins are from the collection of Rudy A. D'Angelo.

FIRC

George Hazelrigg

***The class** poses in front of the MCI Gulfstream G4*

***Bob Wander** discusses stall/spin accidents*

*Left to right: **Rich Carlson**, Chairman, Soaring Safety Foundation; **Dean Carswell,** SSF Trustee and President, Soaring Society of America; **Bob Wander,** SSF Trustee, professional soaring instructor, and "Renaissance Man with wings"; and **Dave Pixton,** CFI, Mid-Atlantic Soaring Association.*

What to do on a snowy weekend in January? A group of your instructors used the weekend to attend a flight instructor recertification class (FIRC). You might not know it, but a flight instructor rating (for gliders referred to as the CFI-G, Certified Flight Instructor-Glider) is valid only for two years. To remain an active flight instructor, one must renew the certificate. This can be done one of four ways: take the practical exam again (ugh!), take a practical exam for another instructor rating (the CFI-A, for example), present to the local FAA gods a record of your instructional achievements over the past two years (this is a win if you have recommended at least five students for their practical test with a success rate of at least 80 percent), or take a recertification class. Jim Kellett, through the Soaring Safety Foundation arranged this class. The class was run by Bob Wander and backed up with outstanding lectures by other soaring notables, such as Dean Carswell.

Our host for the class was MCI, arranged by Chris Groshel. The location was the MCI hangar at Dulles Airport. The facilities were outstanding, great hospitality arranged by Chris, and great

discussions, led by Bob Wander. Representing the Skyline Soaring Club instructors were Piet Barber, Dave Weaver, John Barry, Steve Lander and me, with instructor wannabes Richard Freytag, Craig Sutherland and Greg Ellis also in attendance.

A Curmudgeon's Perspective

Jim Kellett

From an article on Soaring Safety, Skylines 1999: (The Italics are mine— JCK)

You close the ***canopy,*** buckle up, ***run the checklist***. You are thinking "Gotta remember the ***soaring forecast***". Or maybe, "That rattle is getting worse." You are not thinking, "I am ***flying*** a metal and plastic Vehicle of Death!". . .

But changing things, safety experts say, is not just a matter of brushing up on ***spot landings*** and the protocol of ***right-of-way***. A national mind-set must be retooled.. . .

"We have to quit talking so much about our rights and start talking about our responsibilities" . . . We look at the whole way society views the licensing and accountability system, and it doesn't necessarily promote safe ***soaring.***". . .

What people need is practice in disaster, [he] says. They need to go into a deliberate skid, as [he] has her students do, learn what it feels like and how to get out of it. . . . Without that knowledge – without a little fear – nothing will change."

From an article on Auto Safety, Washington Post Magazine, December 13, 1998 page 12: (The Italics are mine . . JCK)

You close the ***door***, buckle up, ***turn the key***. You are thinking "Gotta remember the ***dry cleaning***". Or maybe, "That rattle is getting worse." You are not thinking, "I am ***driving*** a metal and plastic Vehicle of Death!". . .

But changing things, safety experts say, is not just a matter of brushing up on ***parallel parking*** and the protocol of ***four-way stop signs***. A national mind-set must be retooled.. . .

"We have to quit talking so much about our rights and start talking about our responsibilities" . . . We look at the whole way society views the licensing and accountability system, and it doesn't necessarily promote safe ***driving.***". . .

What people need is practice in disaster, she says. They need to go into a deliberate skid, as she has her students do, learn what it feels like and how to get out of it. . . . Without that knowledge – without a little fear – nothing will change."

Copy That! *Selected flotsam and jetsam from the editor's daily Tsunami of e-mail*

1. ***Did you know the Club*** maintains an "events" notice page on its website?? You can find "Events" on the left hand menu, or go directly to <http://skylinesoaring.org/EVENTS/>or even make it your default page (to make sure you don't miss any important upcoming Club events!)

2. ***The SSA website*** has buried one of the most interesting pages behind a non-intuitive series of hyperlinks–that's the program for the upcoming Convention in Ontario, CA! Skip the chatter and go directly to <http://www.ssa.org/online/schedule.htm> to find one of the most exciting programs ever (and I've seen 17 of them!!). Note especially the several sessions that focus on Club management and operations, and the Saturday night banquet speaker—none other than Mike Melville, the motorglider pilot who first flew Rutan's "SpaceShip One"!! (Yes, SpaceShip One is certificated by the FAA as a "motorglider"!! ***—Jim Kellett***

Our new e-mail address is: bsgogos@verizon.net.

The current address may be used until May, 2005.***—Bela, Susan Gogos***

Skyline alumnus Rob Burch, who was a police officer in Reston, Virginia before getting a promotion to a law enforcement agency in Florida last year, writes that he got his multi-engine rating. Just finished up instrument ground school.

Here's a shot of a new MEL pilot with a REALLY solid training background (i.e., he KNOWS what to do "when the engine quits"!)

The 2005 FAR/AIM is in stock and available from Sporty's for a special price of $7.98. This is an excellent opportunity to update your aviation library with the most recent version of a publication essential to every pilot. The 2005 version includes a combined FAR and AIM index and even includes the new Sport Pilot regulations. Changes and updates since the last publication are clearly marked for review.

As with every order placed with Sporty's Pilot Shop, the purchase of the FAR/AIM will enter you in Sporty's Super Sweepstakes, with the Grand Prize New Cessna Skyhawk to be awarded this September. Also, use your AOPA FBO Rebate Credit Card and receive an additional 5% discount.

Go to www.sportys.com/aim for details.

Significant Events

Craig Sutherland completed his PPL-G at Bermuda High and already has his sights set on his CPL-G and CFI-G ratings. Way to go Craig!

Please remember to send your "significant events" (with pictures if possible) to your award winning Editor for inclusion in Skylines. There has been a lot of internet interest in Skylines since Kolie convinced us to go online. Evidence shows that readership is increasing within and outside the soaring community. It's YOUR newsletter. We urge you ALL to contribute. pjordan@skylinesoaring.org

Here's some interesting short video clips of some umm...unusual aircraft and flights. From the Air & Space museum: http://www.airandspacemagazine.com/asm/web/site/QT-HR/menu.html The short clips include the following:

Eiffel Tower Fly Through - C-130 Landing on carrier - C-130 Take off - F-100 Trailer Launch - F-100 Launch Fails - F-100 Barn Launch - F-100 Launch Trim - Pogo Take off - Pogo Flight - Pogo Landing - Martin Mars Water Bomber - Beriev Seaplane ***—Carlos Roberts***

Frauke Elber of the Women's Soaring Pilot Association reports that the 2005 WSPA Seminar will be held July 11-15 at Airsailing Gliderport near Reno, Nevada, U.S.A. Check out the WSPA homepage at http://www.womensoaring.org/ or contact Terry Duncan at tduncan11@comcast.net. "Anybody is welcome."

The editor is building a list of email addresses and web sites that could provide articles and items of information. If you will forward the addresses of sites that need to be scanned for information of interest to a worldwide audience, that would be much appreciated. His email address: brain@towson.edu.

He is also interested in recruiting those who would like to serve as contributing editors to provide material on training, new products, safety issues, and what-have–you. If there's a topic that interests you and you'd like to routinely share information with the world, let him know.***—Val Brain,*** Editor, Gliding and Motorgliding International

"Please excuse Jennifer for missing school yesterday. We forgot to get the Sunday paper off the porch and when we found it Monday, we thought it was Sunday."

SKYLINES
February, 2005
Phil Jordan, Editor
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Skyline Soaring Club, Inc.
http://www.skylinesoaring.org