

Radio Controlled Soaring Digest

October 2011

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Front cover: Tim Cone (USA) launches team mate's sailplane during the 2006 Viking Race at East Lomond in Fife, Scotland.
Photo by Pierre Rondel
Canon EOS 10D, ISO 400, f8, 1/1500 sec., 75mm

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Johannesburg South Africa

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Konica Minolta 7D, ISO 100, 1/200 sec., f11, 35mm

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In the Air

It's nearing the end of the somewhat weather-abbreviated flying season here in the Pacific Northwest, but we are looking forward to being present at two major events before the end of the year.

Central Valley RC is putting on the annual Fall Soaring Festival in Visalia California again this year. As usual, the event is scheduled for the first weekend in October, this year the 1st and 2nd. Although we have never entered, we've attended the FallFest for nearly a decade, provided models for other pilots (Dave and Brendon Beardsley), and have supported our granddaughter Alyssa's entries into the competition. RCSD will be there again this year, more than likely with camera always in hand. If you see us wandering around or relaxing in the Seattle Area Soaring Society tent be sure to stop and say hello.

We'll also be attending the F3J Team Select in Cocoa Florida, to be held the 28th, 29th and 30th of October, as Alyssa will be competing for a spot on the US Junior team. The Team Select is being run by the Indian River Kontrol Society (IRKS) and the venue is the Space Coast Aeromodeling Park (N28°23'27" W80°50'12"). We know the weather in Cocoa will be better than it will be in the Seattle area.

Time to build another sailplane!



2011 MGASA F3J
JOHANNESBURG, SOUTH AFRICA

Text by Lionel Brink, Chairman MGASA

Photos by Lionel Brink, Derek Marusich & Martie du Toit and Piet Rheeders

Photo by Derek Marusich/Martie du Toit

O P E N

In 2009 the Model Glider Association of South Africa applied to host the 2012 F3J World Championships. The result was that in early 2010, the FAI awarded this privilege to South Africa, and a number of activities were subsequently initiated, with latest being the hosting of the 2011 F3J Championship at the intended World Championship site, just a few miles east of Johannesburg, South Africa.

Although open to international attendance, the purpose of this event was to test the various systems that would be in place at the World Championships, with specific focus on redundancy and system backup (plan "B").

As with all events, organisation is key, but the camaraderie and subsequent enjoyments of all participants, helpers and visitors provide the ultimate measure of success. We were fortunate that all feedback has been extremely positive, which bodes well for the 2012 international event.



Location, location, location...

The location for the 2012 World Championships is a horse polo field that also doubles as the GEMS (Glenfields Eastern Model Soarers) club site. Only 15 minutes from Johannesburg, the primary site (S 25° 59' 44.17", E 28° 21' 59.38") is 400 x 350 metre of lawn, the field is approximately 1,600 metres (4,800') above sea level on the South African Highveld.

Sunrise for the event in August 2012 will be around 06h45 with sunsets at

approximately 17h45, yielding a pleasant temperature range of 6°C/43°F minimum to around 19°C/66°F maximum.

Whilst rain is not common during the period of the scheduled World Championships, an average of 6mm has been recorded over the past approximately 20 years, and is subsequently not too much concern to the organisers.

More importantly, the site is blessed with a vast openness – common to the African bush or “veld” to use the local term, with

a generally flat geography in all directions and as far as the eye can see.

Of some interest to pilots and (F3J/TD) organisers is that we ran winches alongside F3J towlines – maintaining the 15 metre corridor spacing required for F3J as per the CIAM F3 Soaring Class Rules to ensure no crossovers could result in crashes due to the aggressive and very fast launches required for F3J. It was very pleasing to note that not a single incident occurred; no “line to model” or “model to model” contact or even near-miss occurred during this one



New clubhouse under construction - should be ready for World Championships next year. Photo by Derek Marusich/Martie du Toit

day event, which was flown for the full six rounds planned permitting three pilots per team, suggesting that it is perfectly possible to run mixed launch methods of this nature.

The weather was also near perfect; the early morning starting off with challenging winds but good thermal activity until Round 4 which saw the wind drop significantly and the single largest number of throwaways being recorded too, as thermal activity reduced proportionally.

Good lift could be found, but was surrounded by real African style sink – utterly lethal! A number of pilots were caught out regarding this change in the weather, and the subsequent “walk of shame” fortunately did not result in any damages due to the generally flat surrounding areas and very few obstructions.

The change in weather conditions during the day is not uncommon for the area, but did require that the initial field layout be swung 90 degrees before the first round commenced at approximately

10h00 and then occasionally required some slots to be launched in almost 90 degrees to the prevailing wind (which would be addressed differently in the World Championship – at the discretion of the CD).

Proper lane markings and landing spots, with sufficient clearance to the tent village/club house and landing approach ensured no confusion occurred during this field swop-over.

The team responsible for the World Championships field layout, which



Derek Marusich launching. Photo by Martie du Toit

included the sunken spot markers, launch corridor lines, lane markings and towline stakes (as per FAI specifications) were all involved to ensure that they obtain practical experience of the site.

The Matrix

Whilst the F3JScore <<http://www.f3jscore.com>> program has been used since 2006 for a number of South African RC soaring events, it was decided to compare this against other available products and GliderScore <<http://www.gliderscore.com>> was selected due to its

ability to also process the 20cm landing scores and provide for a statistically normalised matrix, which included “grouping” reservation for teams of pilots assisting each other.

Even with the predominance of 2.4 GHz within competitive soaring competitions, the software provides for a simple mechanism of ensuring that frequencies are not duplicated within a flying group or slot and scoring was considered to be somewhat simpler than the F3Score application.

Both programmes will be employed to ensure redundancy at the 2012 event, which will likely be further backed-up by another independent scoring application!

Onsite laptops - it is critical to have redundancy amongst these - running from small generators provided the scorers with more than enough opportunity to capture scores between rounds, and it is envisaged that mobile 3G connectivity will permit round-by-round updates during the World Championships although this was not tested at this event.



Early evening: Nan Models Explorer 3400 on landing approach. Photo by Lionel Brink

It was also not implemented yet, but an automated backup and recovery mechanism will need to be employed to ensure that the captured scores are secured between the laptops and can be reloaded in the event of any specific device hardware failure.

Scores were signed off by the pilots on small score cards - to be provided by the independent time keepers - which were then delivered to the data capturers by runners.

Pilots were also provided with summary cards to ensure that they could keep track of their results – but the organisers cautioned that only the signed score cards would be accepted for results / disputes and not the summary cards! This provides for a far more cost effective mechanism than a fully automated high tech approach, plus maintains transparency and an inherent level of redundancy.

For the record, scores were audited and made available in less than 15 minutes after the final round was flown.

Feedback from the pilots requires that the summary scorecards have the pilots names pre-printed on the front of the card instead of the inside, especially if the team manager is juggling three of these during the event, and that the independent time keepers are fully trained in identifying potential issues that could result in penalties, these to



Launching on the buzzer. Photo by Derek Marusich/Martie du Toit



Craig Goodrum setting up transmitter, Rudi King holding model and Nigel Wilkinson looking on. Photo by Derek Marusich/Martie du Toit



Rodney Goodrum ready to head out onto field from the ready box. Photo by Derek Marusich/Martie du Toit



Left: Towmen waiting for the signal to run. Photo by Piet Rheeders

Opposite page, clockwise from upper left, all photos by Derek Marusich/Martie du Toit:

- Stephane du Ponsel waiting to launch for Alan Smith.*
- Alan Smith with Juanita Smith's Xplorer.*
- Evan Shaw with Piet Rheeders; own design F3J model, Thulani.*
- Chris Adrian with Johan Bruwer's Pike Perfect*



be escalated to the line judges/CD) as appropriate.

Safety first

I thought that the tall (over 6 metres from the ground) flag poles flying over the club house and tent area were a rather good idea (the pilot who unfortunately chose to run this gauntlet, unsuccessfully, probably differs from my opinion) as this would ensure that anyone wishing to “slope” off any lift the club house structure might provide would have the risk of striking a grounded object in the

designated safety areas and the resulting penalty would probably see the end of any WC aspirations.

Based on wind direction, the landing spots were also spaced to ensure that the safety area would not be overflowed - after all, we have the space available for the field layout. If sufficient entries are received, we all recognise that this is likely to be a function of the global economy, it is envisaged that the entire tented area will be covered with a huge “shade net” to provide not only some

comfort from the sun, but also a safety factor for people involved/spectators and models lying in-front of the team’s tents.

High fidelity

The sound system as installed was short of the intended number of speakers for the 2012 event, but was still very clear on the flight line, exactly where it needs to be, and will be enhanced with a large double sided LED countdown display later in the year.

These multiple horn type speakers, ideally one speaker per launch lane,



Team headquarters. Photo by Derek Marusich/Martie du Toit



Jason Webber showing the seniors how it's done! Photo by Derek Marusich/Martie du Toit

provide for a high level of redundancy in component failure and the traditional “sound wave” delay often seen across long flight lines was never a factor.

The wireless microphones worked, but did seem to be very sensitive regarding feedback/static and will need some “fine tuning” for later events – of course the more traditional “wired” standby mike worked perfectly.

The organisers intend providing speakers for the spectators / tent area to provide feedback / overhead safety warnings.

The countdown timing application “F3J Timing” was relatively flexible, and although the oldish PC’s suffered from rather run down batteries, once the small generator was fired up, these ran without hitch and considerably eased the CD’s load.

During the one slot we were without power, the standby “manual” system of the CD calling time worked perfectly without losing anything more than a few minutes in the overall schedule.

Feedback from the local pilots suggested that the final 10 seconds should be counted down rather than the beeping tones we used, which will be tested at the upcoming F3J team trials in October 2011.

Overall

An excellent event that was very well managed and run, providing an ideal opportunity to test the various systems and their backups with overall success.

Some changes were identified to ensure an even smoother running



F3J gliders in the ready box. Photo by Piet Rheeders

World Championships in 2012 and I am confident that the South African organisers will host a true world class championships.

As is tradition with South African competitions the prize giving was informal and well attended, but was approached differently: instead of the same top pilots walking away with the loot, a selection was made by the organisers of deserving individuals who did not make the top five positions – this all made possible by the generous donation of prizes from local hobby shop Mad Models <<http://www.madmodels.co.za>>:

1. Most capable thermal flying of the day by Evan Shaw - who spent almost four minutes circling a tiny bubble at 10 metres or less.
2. Most capable Newbie being Garrin Smith for his first ever event and performing very well.
3. Less than perfect “arrivals” by Rodney Goodrum and Piet Rheeders who selectively identified the only vertical objectives anywhere on or around the field to fly into.

Additional sponsorship was also received from other local companies, including AMT Composites who provided the flag masts and might even be involved in the on-site repairs tent to be made available during the World Championship event.



Wolfgang Steffny assembling his glider. Photo by Piet Rheeders



Evan Shaw holding on to Piet's Thulani at the countdown. Photo by Piet Rheeders



Three 'ships in the same thermal. Photo by Piet Rheeders

Also, Sanitech sponsored the loo which included hand wash facilities and towels, making our day a lot more civilised and will likely be the same service provider for the World Championships.

Special mention must be made of the ever calm but supremely capable Gordon Brown (nope – not from 10 Downing Street) who ensured the event ran smoothly,

Martie du Toit ran the on-site tuck shop, Evan Shaw and his very capable team laid out the field (twice!),

Herman Weber and his team manufactured the stakes / turnarounds,

Craig Goodrum manufactured the sunken spot markers,

Cian and Jessie Stockton ensured that the scores were captured perfectly,

and Michelle Goodrum made sure that the organisation was awesome.

On behalf of the MGA and 2012 event organisers, we are all looking forward to hosting the 2012 F3J World Championships in South Africa, were we intend to provide a uniquely African experience without compromising on international quality expectations!

See you in 2012!

RC Soaring and Sailplane Safety Checklist Items

Compiled from many people, sources, and other checklists by Loren Steel, Seattle Area Soaring Society, June 2011

List is in no priority or sequence

1. Become familiar with the AMA safety code <http://www.modelaircraft.org/files/105.pdf>
2. Make sure your identification label is placed on your plane where it can be easily seen (AMA#, name, address, contact info, etc.)
3. Check with other pilots regarding frequencies. Place your AMA card on frequency control board even when using 2.4GHz.
4. When sharing a frequency with another pilot, it is essential that you have continuous conversations throughout the flying session and set up a sharing procedure that works for both of you. Don't assume they other pilot knows you are on the same frequency.
5. Check receiver battery levels before and continuously throughout the flying session. A battery tester in your pocket is a great idea.
6. Turn on Tx before Rx and turn off Rx before Tx
7. Tx model select set to the right plane
8. Conduct Tx range check as recommended by your transmitter manufacturer. Do a Tx range check for each new installation of a transmitter/receiver combination and perform a range check after a serious crash or radio installation change (such as repositioning the antenna(s) or adding new servos/ other devices
9. Verify battery and Rx hold down are secure and reliable
10. Linkage continuity check, i.e. check all control surfaces to see that there is no linkage disconnect; slop; control horns secure; clevises closed
11. Anti rotation pin(s) in place
12. Adequate tape on wing panel joints
13. Rubber band wing hold down; adequate number and good condition of rubber bands
14. All retaining bolts in place and secure
15. Hatches, cowls and canopies secure

16. Tow hook secure, is not bent and will not rotate; tow release working properly
17. Shake the whole airframe to listen for anything rattling
18. All electrical connectors secure
19. Servo/control throws in the correct direction
20. Wiggling sticks to confirm Rx power is on
21. Perform hand toss to check trim. Hand tosses should be done away from vehicles and other pilots, particularly for maiden flights. Tossing over tall grass is a good idea too.
22. Antenna extended
23. Verify ground level orientation and conditions to avoid over flight of buildings, parked vehicles, spectators and other pilots, pit area, trees, no-fly zones, location and clearances for landing approach, wind direction, etc.
24. Coordinate with other pilots flying at the field, don't just walk out and launch, you may not know exactly what's going on at the field without talking with the other pilots
25. Use the same launch and land areas and orientation as everyone else
26. Fly with a spotter/helper whenever possible and discuss how best to cope with anything that appears unsafe.
27. When flying hand launched planes, be certain the sky immediately above you is clear of aircraft before launching. You may need to remove your hat to look for other low flying aircraft coming over your head from behind you.
28. When flying hand launched planes, check that the area around you is clear of pilots and spectators before launching.
29. Launch and land into the wind
30. Minimize distractions when preparing to launch and immediately after launch
31. Air space check for nearby planes and possible over flight of launch area

32. Check-in and comply with Contest Director or Safety Officer if you want to fly as a non-competitor during an organized event
 33. Yell out, "LAUNCHING..." before releasing plane
 34. Land immediately if your transmitter low battery alarm sounds
 35. To avoid mid-air collisions, consider following the blue sky rule: maintain blue sky on all sides of your airplane, this helps to avoid a collision. If another plane is approaching your blue sky area, make maneuvers to avoid them.
 36. When entering a thermal with another sailplane, attempt to fly in the same rotation as the other plane. This will minimize the changes of a head-on collision. It is the responsibility of the new comer to the thermal to match the direction of the other planes. If there are a number of sailplanes in the same thermal all going different directions, attempt to fly in the same direction as those planes at your immediate altitude or plan to exit the group and fly elsewhere.
 37. Make maiden flights and first flights after a repair far away from other pilots and vehicles in case something unexpected happens
 38. Wear your sunglasses and hat
 39. Correct problems and concerns before launching
 40. If in doubt about anything, ask for information and assistance before launching
 41. Conduct the same, thorough safety procedure every time you plan to fly until you have a mental checklist that automatically ticks itself off
 - 42.
 - 43.
 - 44.
- Additional safety items unique to you, your plane(s), your club or flying site:
- 1.
 - 2.



if you don't have a better sailplane than me, you'd better be able to find a better thermal.

Gordy Stahl, gordysoar@aol.com

Be a better pilot.

There was an email thread started by a young man in Florida asking for sage advice about which sailplane he should buy for competition. He was looking for the best sailplane for the least money.

Of course it started the usual wars over which model was the best, and that got me thinking.

It reminded me of the early Icon molded unlimited sailplane days. A model that cost almost double the going rate, designed by Joe Wurts and Don Peters at Maple Leaf; almost \$2,000 for the airframe and a multi-month waiting period.

A really good pilot from the Chicago area, and an Icon fanatic, posted a note on the RC Soaring Exchange every few months or so about how he'd just got the latest "lightest" version of the Icon.

Pilots paid big money for it, and for good reason. Joe and Don packed a lot of magic in that airframe for its day.

What many of the pilots thought they were getting was automatic contest

minutes and landing points, but what they found they got was another expensive sailplane that they didn't know how to put into good air and hadn't developed a tight landing pattern to insure their seconds to the mark and nose near the spot. And in spite of the Icon's amazing design, their scores stayed about the same.

On some level they felt it wasn't them missing the time and the landings, and it couldn't be the Icon!

It must have been some mysterious CG spot, aileron mix, or crow setting. Or if only their transmitter had more multi-point elevator to flap. Or maybe a dot of lead on the model's butt or in its nose must be the key! Or maybe it was the launch release technique! If they could only get that cool monofilament-line javelin toss working on braided winch line, the look of their pose alone intimidating the other pilots into confusion during the launches. If only they get it set right all would be "wood"!

That Chicago pilot knew the secret! It was all about airframe weight, right?

Kennedy Composites' Supras - a true technological mile marker in our hobby's history - were introduced during the winter and a modeler with internet and time on his hands created a spread sheet to collect data of each kit component's weight, as if it was of some actual value to getting 10 minutes of task time or putting the nose of the model on a spot.

Guys, how'd that work out for ya?

Reduce F3J and TD down to their basics. It's up to the model's pilot to find 10 minutes of lift as soon as possible right off the launch, develop the patience to stay in it, learn and develop a habit of a landing approach box / pattern as small as possible and then learn to put the nose on the money spot.

So what I told that young man was "If you don't have a better sailplane than me, you'd better find a better thermal."

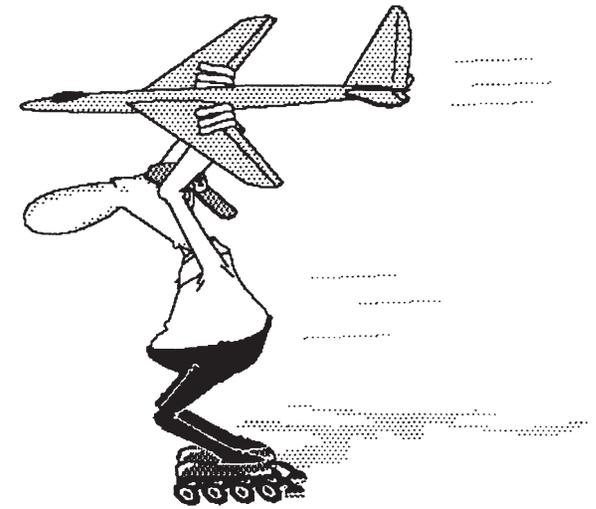
The sailplane IS important but only if the pilot has the skills and practice to take advantage of that sailplane's capabilities.



The LSF5 Win System

“I Beat Gordy!”

Gordy Stahl, gordysoar@aol.com



The basis for the LSF5 Win System started while I was working on LSF4. During the first four LSF levels, “wins” are not part of the tasks, and until LSF5 should be avoided!

I’ll admit at the time I didn’t know that important fact but sort of got forced into not winning when club mate Ben Wilson created some buttons featuring my face and the words “I Beat Gordy” on them. He did it as a way for us to raise some money for sailplanes, radio goodies, etc., for our then little guy Lee. Lee was and is a natural stick and he was consuming skills as fast as we could teach him, but his family financials didn’t leave room for expensive contest toys and a fund raiser made sense.

The idea behind the button was if a pilot outscored me in a contest he qualified to get a button. A small donation was

hoped for, but in fact none was received. Instead the RC soaring community stepped up with molded sailplanes, Horizon Hobbies’ John Dinitz gave 9303 transmitters and receivers, and a good deal of money, too!

Considering the Buttons Fund Raiser, clearly winning during LSF4 for me could not be a goal. The side affect was that I had no pressure to win, I just had to fly contests a lot.

Don’t get me wrong, I wasn’t about to throw a flight on purpose in order to sell buttons, but I realized that I could handicap myself by never using a skilled pilot as a timer (no extra air reading helper), by never going to other pilots’ sailplanes who were in good lift, and also by not going to the obvious “reads,” or parts of the field that had been consistently producing lift areas.

I didn’t fly any different than if I was out to win, but instead of watching the score board I focused on finding my own air, tightening up my landing pattern, basically working on locking in good contest habits. I spent a lot more time talking to the great pilots, watching their thumbs and sailplanes, discussing practice strategies, set ups, etc.

I soon began to realize that there was a sort of “shelf-life” to a pilot’s sharpness. Great contest pilots of the past were more laid back about the game, and I also observed that there is also a certain period of opportunity for a guy to get his wins. So it became very clear that at the completion of LSF level 4 I had better be ready to get those wins immediately.

The result of all those things coming together made it possible to realize a method of personal training, a

preparation system, for middle of the pack pilots (LSF4) to earn those 20+ pilot contest wins.

Let's stop a second to remember that none of the LSF tasks happen by accident. It takes preparations for every single task from LSF1 to LSF5 - batteries, witnesses, etc. So why should the contest wins be any different?

One comment about the sailplane.

IF the pilot believes that there is some value to one sailplane over another which will aid him in earning his LSF5 wins, he will not win his LSF5 contest tasks.

The latest "red" sailplane actually gets in the way of a "pilot" winning his LSF5 contest wins. You see, the LSF5 contest wins are done by the "pilot" not the model. Regardless of the model you have, you still have to end up with a score that is higher in the computer than the rest. Your tool isn't going to do that FOR you.

I'm not saying that one model doesn't have some design advantages over some other, I'm saying it just doesn't matter when it comes to your LSF5 contest wins.

(Okay, so lets not get silly, you do need a sailplane up to the job. Going for an Unlimited or F3J win with a Gentle Lady isn't realistic.)

And I'm not saying don't sharpen your tool. If you are reading this likely you are at LSF3, LSF4, or working on LSF5, so you have studied articles in RCSD, have quite a bit of contest experience and understand competitive sailplane set ups. However, if you believe that there is some performance advantage to some mystical CG setting, likely you still don't get it. Regardless of CG, you need to find 10 minutes of air and put the nose on the spot, on the second.

The Difference Between Your LSF5 Wins and Winning Majors, Nationals and World Contests

Only the most competitive and talented contest pilots win those kinds of events, and likely that's not you.

League of Silent Flight
c/o AMA, POB 3028, Muncie, IN 47302-1028, U.S.A.

Soaring Accomplishment Program - Voucher for Level I II III IV V

Thermal Duration	I	II	III	IV	V	Witnesses	Date
Minimum required time	5 minutes	15 minutes	30 minutes	1 hour	2 hours		
Actual time					2:10	Paul & Heather	2/16/07
Actual time					7:00	Fred & Betty	2/18/07

Slope Duration	I'	II'	III'	IV'	V'	Witnesses	Date
Minimum required time	15 minutes	1 hour	2 hours	4 hours	6 hours		
Actual time					8:14	Don & Susan	4-28-07
Actual time					12:00	CE & etowson	4-26-08

*See Soaring Accomplishments Program Requirements summary.

Spot Landing	Distance	Witness	Date	Distance	Witness	Date
Level I: 5 at 3 meters (9.84 feet)						
Level II: 10 at 1.5 meters (4.92 feet)						

Goal & Return	III	IV	V	Witnesses	Date
Minimum required goal	1 km (0.62 mile)	2 km (1.24 miles)	10 km (6.2 miles)		
Actual goal distance			10.1 Km	AMA 411219 Gregory B. ... ASA 411219 ASA 411219	2/12/06

Comp. Requirements	II	III	IV	V
Minimum No. of entrants	5	10	15	20
Minimum performance	1 place or 3,000 points	2 places or 4,500 points	1 win and 2 places or 6,000 points	3 wins and 12,000 points

Minimum of six contests required	Your score - winning score	x 100 x	No. of final ents. - stndg + 1	= Points	Official/Location/Date
	4400 - 4400	x 100 x	30 - 1 + 1	= 3,000	Rich Kelle, Culbuck, Tennessee 11/21/06
	4349 - 4349	x 100 x	25 - 1 + 1	= 2,500	Rich Kelle, Culbuck, Tennessee 11/21/06
	5426 - 5426	x 100 x	44 - 1 + 1	= 4,400	Henry Butler, TATAS, 10/18/06
	3876 - 3876	x 100 x	25 - 1 + 1	= 2,500	Rich Kelle, FSS1, Culbuck, TN 10/18/06
	3531 - 3531	x 100 x	24 - 1 + 1	= 2,400	Rich Kelle, FSS1, Culbuck, TN 3/18/07
	1503 - 1503	x 100 x	40 - 1 + 1	= 4,000	John L. ... TATAS, 10/13/06
				Total points: 18,800	

All correspondence to the LSF should include at least \$2.00 in stamps or check.

I hereby certify that all requirements recorded on this voucher were performed by me in full accordance with all criteria of The League of Silent Flight Soaring Accomplishments Program.

Name: Gordy Stahl
Address: 9303 Lebanon CT, Louisville KY
City: Louisville KY
State: KY
Zip Code: 40299
Date of Sign: 2/26/07
FAI (AMA) No.: 7305
Region Operator's Lic. No.: 8552

Gordy's LSF5 plaque

So while I wish you luck getting one or three of those for your LSF5 wins, be realistic.

LSF5 pilots are not the best contest pilots in the world. Instead we are the kind of pilots willing to work hard to do well.

Likewise those competitive and talented contest guys don't have the ambition, interest or need to go through the steps in order to complete LSF5. Their interests are solely in the competitive side of soaring. Its why they can be heard asking, "How the heck did he ever complete LSF5?"

LSF5 doesn't make us great contest pilots, it just makes us really good soaring pilots. It takes talent and focus to be a world class competition pilot. It takes preparation and persistence to complete LSF tasks.

Definition of the term "pilot" in the context of this article – I am not referring to the guys who are attending the contest to enjoy a day of competition flying. When I refer to "pilot" in this article I mean a guy who has decided to prepare for his LSF5 contest wins.

Defining a contest flight

There are three components to a contest flight: the launch, the flight, and the landing. At least that's what pilots think who don't win LSF5 contests. In fact there is a critical fourth part that so many pilots discount or think they can vary.

1) The launch

The launch is the least important part of the flight. If a "pilot" thinks he needs the penultimate launch, he's not going to be winning his LSF 5 contest tasks.

Develop a consistent launch; make sure your model's tow hook is in the best position, that you have just enough camber to keep the line taught, no more. Why yes, there was an *RCSD* article about that! Contact me if you missed it.

Choose where you are going to go directly after launch and go there no matter what.

You have to make bad choices to learn how to make good ones, but if you say I'm going left, then go right, you haven't made a decision and you don't know if left was in fact the right place.

Choose your spot and go there, good or bad.

Never go to other models during practice flights. Go anywhere but to where there is a hawk or other ships showing air.

You learn nothing if you do and you are doomed to that consistent one bad round.

After making all my times at the recent F3J in the Rockies, I reviewed how I decided where to go on launch. I admitted that (1) I didn't allow myself to go where the rest of the launch group went, and (2) in fact I was out of practice and unfamiliar with the site. I didn't really

know where to go, so I just randomly picked a spot close to the launch area and one that I hadn't gone to before. I was determined to find air there and, good or bad, it was my decision. Imagine how sweet it felt that I did in fact make all my times!

2) The Flight

Develop a Ten Minute Habit!

Find 10 minutes of air right off the launch, then develop the patience to stay in it.

I call it a "Ten Minute Habit." Too many guys think they need to practice working lift, so during practices they'll sky out, get bored after three minutes then come zooming down to, you know, find another thermal. Then when they get to a contest and the CD calls for a ten minute task they get nervous because they've only developed patience for a three minute flight.

But if the CD calls for an eight minute task and they have a ten minute habit, they walk to the line relaxed because "eight's easy."

The trend in competition is to zoom downwind, up wind or sideways a mile to find lift or to follow the pack. Stop that! Stop following the pack. Pick your own air and live with the decision. Yes, you might lose, but in order to become a pilot you need to be able to do it all yourself. If you rely on following others, then your fate is left up to their "luck." You don't win LSF5 contests that way.

Choose a spot that you are going to go to, preferably as close to the launch area as possible unless there is a clear read away (bird), then go there. If it doesn't work for you, move, but only after you have gone to the spot you decided on before the launch.

Remember, practicing for getting those LSF5 wins means losing a few contests. Never ever waste a win on a contest with less than 20 guys flying. Those are practice contests, used to hone your decision making skills. Never ever go to someone else's air in a contest less than 20 pilots, do that and you seal your fate to never develop the skills needed to win a 20 man contest.

Use a count down clock! Its just plain stupid to care about where you have been, your focus has to be on what's left.

And do I need to repeat that you have to practice with a Talking Timer at this point? Why a Talking Timer? Because you want to emulate contest conditions during your practices and you will have a person "talking" the time to you during a flight. No, I didn't say some recorded count down, I said Talking Timer. Why? Because during and at the end you can also see the time left. They are all of \$15 and found on the internet easily.

The "One Minute Press" - Flight Task Practice When There Isn't Ten Minute Air (for you)

Let's say the air isn't there for ten minutes. Put up three flights using your Talking Timer "counting up." This is the only time any clock near you on a contest flying field will be counting up. Try hard, really hard, to eek out ever possible second of flight time.

And yes, you still have to make a 100 point landing on a tape every practice flight!

Try to beat the previous flight of those three flights. Find the average of those three flights, add one minute and that becomes your contest task for that practice. You want to set a task that forces you to fly just a little bit smoother, smarter than usual. You need to develop/hone your piloting concentration habits to a fine edge so that when your model hits the landing spot you know that not one second of flight energy was left in the landing impact.

3) The Forgotten Part of a Contest Flight – The Approach Box

There are all sorts of approaches used to set up for a contest landing. Most of them are goofy and won't produce any consistency. And you need to be consistent for all the rounds of a LSF5 contest. Any landing approach pattern that allows variables to add or subtract seconds is simply unacceptable to an aspiring LSF5 pilot. An LSF5 contest pilot needs to remove variables down to the second, so an approach that starts way off to one side, then goes way deep -

creating a huge box of chance... Get it? The wind, visibility, all sorts of factors will change the time result with that kind of approach. You have to "close the box."

The best approach pattern would be over your head at 5 seconds, turn 180 degrees at 3 seconds, then land. How many seconds could you be off with that pattern? What affect in seconds could the wind or other factors have on the clock?

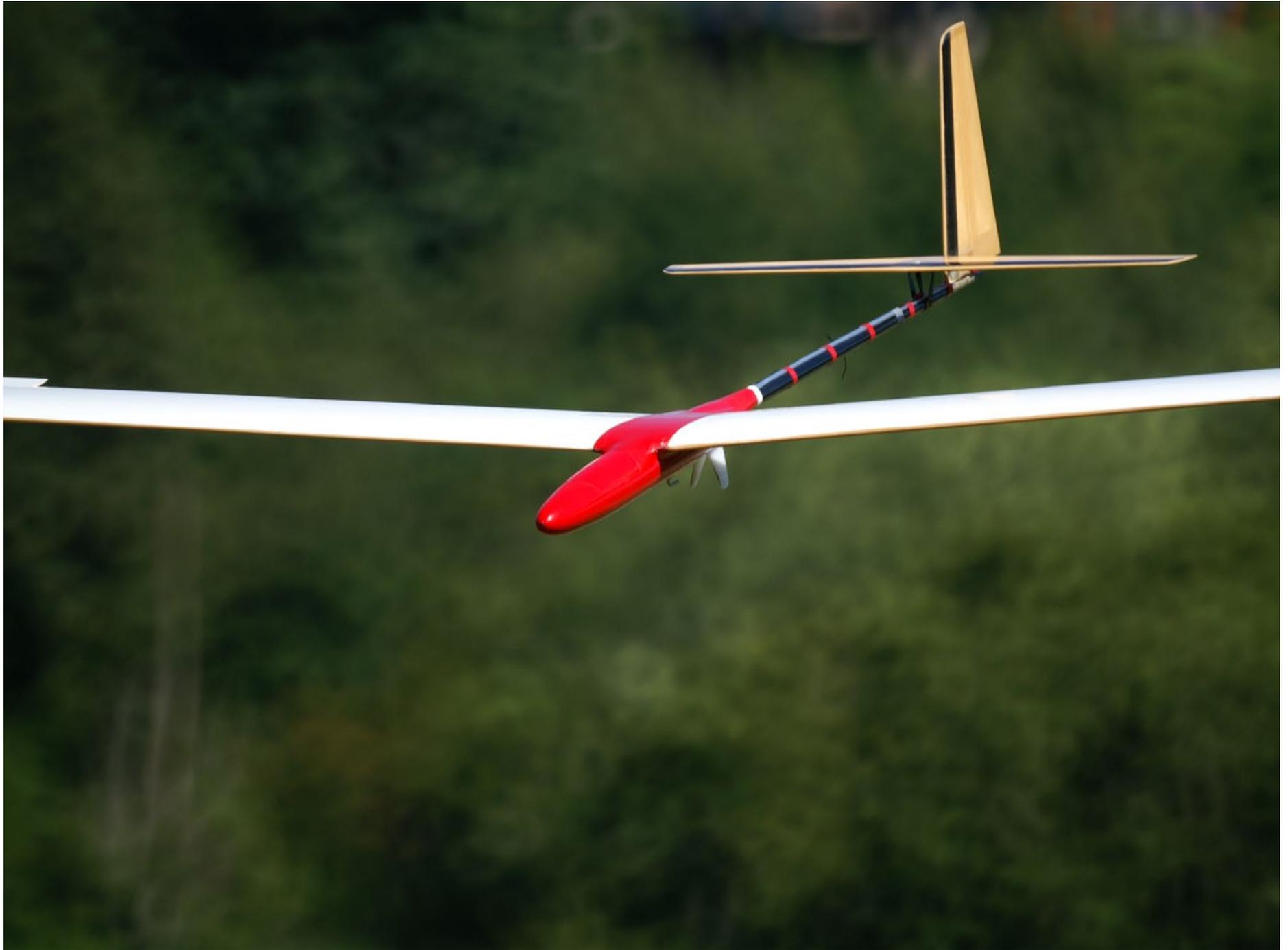
Okay so that pattern is too small of a "box" to be safe or realistic, but compared to the size of the box you are currently doing?

Use the simple pattern of 30, 20, approach.

Circle around close behind you (upwind) so that you can pass over head. Your head is roughly 8" in diameter, so that means you have a slot/lane to fit your fuselage through of 8". Over your head, not over your shoulder or the other pilot's heads. Over your head means that! At 30 seconds exactly, pass your model over your head roughly 100' high.

Your model's fuselage should track a line created by the landing tape directly down wind. Your "goal" is to not vary off that line any more than +/- 2 inches.

At 20 seconds, turn your model 180 degrees so that the nose and fuse are back in that 8" slot directly on line with the landing zone tape as if it's a very skinny runway. Open your flaps fully to



bring the model to a near stop, then retract them to about 30 degrees-ish in order to cause the model to approach to the spot. If you find yourself trying to use your flaps like brakes, you won't win LSF5 contests.

Have a personal goal of +/- 10 seconds, keeping in mind that there are 100 points just lying on the ground for you to pick up. Don't leave any of those landing points on the ground in exchange for a few seconds!

By the way, your subconscious mind will not allow you to continue to leave more than a second or two in time, so don't worry about ending up being 10 seconds short or long.

If you find yourself wanting to argue with the instructions in this system you won't win your LSF5 contest tasks but you will feel "right." Or take a look at this article by my friend Fred Sage <<http://www.torreypinesgulls.org/landing.htm>>. It explains three different approach patterns to insure timely arrival and correct model energy control.

4) The Landing

Landings need to be automatic, not some last second improvisation with flaps pumping, rudders wiggling, elevators swishing, and culminating in a "Gordy's sound of a screen door slamming" ending.

During your approach your model's fuselage should complete a "line" of sorts created by your transmitter antenna, the landing tape which should be situated directly upwind creating a runway line and again, your fuselage.

Pilots who feel their rudders aren't large enough to direct the model to the spot don't win LSF 5 contests.

You have to take using rudder, ailerons, etc. as much out of the process as possible. If you are "piloting" during the approach, you won't hit the 100 with consistency.

Physically say these words to yourself at the approach turn, "Get on line!" And repeat it during the approach. Ask your timer to say it if he sees your model drifting off that runway line. Your



Gordy doing some tinkering at the flying field.

only job should be to put that nose on the spot, on the second. Repeat and repeat that pattern during your practices.

The Talking Timer... get one!

It is not LSF5 landing practice unless you have a talking timer "talking" every time because you need to emulate contest conditions exactly, and you will have a timer talking to you during your flight, right to the landing.

Do not ask any timer to stop talking during the final count unless the contest rules forbid it. But to prepare for those cases where your timer isn't allowed to talk the last 10 seconds, absolutely have the timer talking during practice so that your subconscious mind learns the count without a timer verbalizing

it. Winning LSF5 contests is about developing the habits that produce tight scores. Habits.

5) Scout the Tasks of Your Upcoming Contest!

Find out what the tasks will be and use them as your practice format. That way when you get to the contest, it's just another day for you. Set up the same landing task tape and fly the rounds and record the scores! The pilot who walks away with his LSF5 win will be the pilot who did the best preparation.

6) The Sailplane That Will Win It For You

There are models that have proven themselves across the USA to have a little more of what it takes to get the job done. The Sharon was the clear leader once it came with an X tail. The Supra continues to have the right stuff - durability to make it through the season and performance to match conditions. Beware the latest thoroughbreds which make the game interesting to the top pilots, you want the steady work horses. You can't buy your way into the winners circle, and you don't want to be worried about a shiny new "red" sailplane getting dinged.

A perfect example of this was the original Icon. Pilots who got them fully expected to just show up at a contest and have the CD just hand over the trophy. After all, there was no way the others would have a chance. When that didn't happen and

the Icon owners didn't win, well it kept its owners from ever realizing just how wonderful the Icon actually was and still is!

The sailplane does make a big difference, but only in the hands of a pilot who has the skills and practice to use the features and values of that new "red" sailplane. Learn your sailplane, get duplicate back up, and set it the same.

6) Keeping Track of Your Practice Results

So many pilots put up a dozen flights then leave the field feeling good cuz they got their 10 minutes on some of the flights or hit 95+ within a second or two on "some" of the landings. They don't win LSF5 contests. Why? Because at a contest every consecutive flight will be recorded and is part of the day's score. not just the good flights and landings.

Whether it's Weight Watchers or your business mileage for the IRS, they both make you keep a log book. Keep a log book of your practices.

And do not "fun fly" your contest ship! That inserts an attitude that there can be flights that don't count, and if you are seriously interested in getting those pesky LSF5 wins completed all of your flights have to count.

You do not have to fly against other pilots during practices! Remember, you are only flying the "tasks," so you can fly them with or without other pilots. You can not "beat" another pilot in soaring,

so flying against other pilots in practices is only a distraction.

7) Choosing Your Timer

Guys, it's time to grow up. The LSF Task program is about you. It is the steps to train you to become a sailplane pilot versus the guy who can avoid hitting trees during a Sunday club flying.

It is very important during LSF1, LSF2 and LSF3 to have a competent thermal pilot as your timer/instructor, but during LSF4 and especially LSF5 tasks, it's time to push yourself out of that comfortable nest to train your own wings for flights. LSF5 should be yours, not ours. If you have had your best bud calling for you, tell him to stop - now. If you have been choosing top contest pilots to call air for you - stop that, too.

If you have won a flight because of the guy standing next to you, you and he won it. That flight was yours to complete, his well meant and likely welcome input stole that flight from you. After you've landed and you can't say if you would have had the same result had he not been guiding you with great air and strategy information, then it wasn't yours, it was "ours."

Take your lumps. Make some bad decisions so that you can not make them when your "co-pilot" isn't there to do some of the work for you.

I was lucky. My travels meant I didn't have a consistent flying partner to time

for me, and usually the good pilots around were already committed to timing for their buddies, so that left me with who ever I could find to read the watch. The key phrase being “read the watch.”

I remember an early morning flight I had at a TNT. Mike Smith was available and I needed a timer. It was cold and breezy and I wasn't feeling particularly confident as the model I was flying was new to me. There were no thermals to speak of, but there was an area that was buoyant if flown smoothly to get the time. Prior to launch he simply said, “You know where to go and what to do, just go do it.” That was enough to settle my butterflies and I put in a nice flight with a great landing.

At a recent F3J in the Rockies, I had decided to go to my own air every flight. Since I was a visitor to the team, I hadn't flown with the others more than a couple of times in the past, so really didn't have any close connection soaring-wise with them.

Our team captain Kelly was/is easily the most experienced pilot on our team so he assumed the role of thrower/timer/caller. For my flights he simply offered time and reminders of where lift had been found, where others were headed, and if there was anyone upwind doing well - when I asked. I was in the zone, picking good air and getting all my times, but the thin air of that high altitude was really getting to me physically, and so on one flight I went to where I felt there

was air and began loitering around. Kelly noticed that it was nothing more than marginally buoyant and likely I was not going to fare well. He made a single comment to wake me up. “Are you sure you want to circle there?” It was just enough to get my concentration back, my plane became my focus again, and a simple read off one side of the model was enough to indicate the right move for a max.

All You Need is 20 Man Contests!

My travels allowed me to attend lots of contests, and lots of 20+ man contests around the country. If you really want to complete your LSF5 journey, then you'll have to do some traveling. Map out where those kind of contests are being held. Texas, Arizona, Florida, the Eastern Soaring League and the Ohio Valley Soaring Series as well as those in California and the Northwest. I can tell you that many have put off that travel and they have lost their competitive edge and the opportunity for 20 man contests locally.

We each do have a contest win shelf life. Get those other LSF levels out of the way as soon as possible, and if you need those LSF5 wins, map out a plan for yourself.

Follow my system, get those wins.

Do You Actually Have the Skills and Talent to Win Contests?

If you have completed LSF4 the answer is yes. You'll surprise yourself at just how good you really can be once you get focused and have a plan. It will be the other guys who end up with that one bad round instead of you.

Summary Reminders of Sure Ways to Avoid Winning Your LSF5 Contests

- Believe that one model or another will get them for you.
- Spend a lot of time dive testing for some mystical CG setting.
- Agonize over your launch procedure.
- Don't develop a 10 minute habit.
- Don't use a Talking Timer during practice.
- Believe that if your model was lighter than everyone else's model, you'd win for sure.
- Believe that if only you could get a higher launch than everyone else, you'd get those wins.
- Don't use an inch per point landing tape during practice.
- Don't record your landing scores during practice.
- Don't follow the tips on the landing approach, and don't work on closing the landing pattern box.
- Vary your landing approach to fit your mood, the wind or the field layout.
- And the number one way to avoid ever getting those LSF5 wins... Use an expert pilot as your air caller.



Bob Summers flying his "8."

Summary Reminders of Sure Ways to Insure Winning Your LSF5 Contests

- Forget about goofy wastes of time topic things like CG or airframe weights.
- Develop a 10 Minute Habit
- Use a Talking Timer during practices set to count down
- Always set up an inch per point tape for practice
- During practices, choose where you are going to go directly after launch and go there! Regardless of some other clear cue.
 - Do not allow your timer to fly your flight. Tell him to give you the time when asked and information about models upwind of you when asked.
 - Stay focused, sit down between flights, don't talk to anyone. Watch the air and other models of every flight group you are not in. When you see the group skying out, feel what the air is doing

on your skin, determine which way its blowing, look at any surrounding trees for movement during that thermal and others. Use that information to make your launch direction decision.

Suggested RCSD "Gordy's Travels Articles to Read to Aide In Getting Rid of Myths and Misinformation about RC Soaring.

- Gordy's Balancing System
- Hang Tail
- Return to Balance and Trim

Too Far Back

- Getting Your Head-ing Straight, On Contest Landings
- "Nose Heavy Planes Are Easier To Fly"
- Task Practice
- Task Flying

If you don't have the back issues and can't find them in the on-line Archive, contact me directly.

Time is passing for some of you, your eyes and reflexes aren't getting better, and the ability to find those 20 pilot contests isn't getting easier. You can keep doing the things you have been doing and getting the same results or you can change. If any of you has questions or want to discuss the points I have shared in order to aid your personal efforts, feel free to contact me directly.

Many pilots have helped me by sharing their observations, by their unselfish publications, and by me observing them. I'm lucky to have been able to visit sooo many fields around the USA and outside its borders. Guys like Colin Lucas, Doug Pike, Carl Strautin, Phillip Kolb, JoJo Grini, Arend Borst, Daryl Perkins, Joe Wurts, Ben Clerx, Larry Jolly, Mike Smith, Rick Eckles, Rich Burnowski... guys most of RC Soaring only get to read about. I have had the opportunity to actually ask the dumb questions and get real answers.

A year or so back, I posted a note on the RCSE that I'd be going after my eight hour on our club slope in Frankfort Kentucky. It had never been done prior but I believed in it. Bob Summers contacted me from Toledo Ohio asking if he could

join me for the task since he needed his. It was a long drive for him and he was not a spring chicken any more. I asked why he hadn't got it done years back and his reply was the same; he had other things to do.

The day before he was to join me, he called saying something had come up and he was going to bale on the offer. I pointed out that he didn't have it done because something had always come up, but that he wasn't so young and now was the time with the forecast calling for two days of perfect air.

He thought about that and said he'd be there, and yes he did get it done. You never saw a happier guy the second he landed after it was complete! He passed away before he had a chance to get more of his tasks done, but he went with his "8" done.

The LSF5 wins are different than all the other tasks. None are easy, but the wins involve others, lots of others. You can't afford to not be as prepared as possible when a 20 pilot contest presents itself. Slope winds come and go, two hour thermal flights are a no brainer in the spring or late summer, the G&R mostly involves choosing the right course. But the wins, they take 20 pilots who all intend to get their win. It will be the LSF5 aspirant who is most prepared who ends up taking the three.

Why Me?

As in "Why is GordySoar qualified to write these tips?" Because for the most part of my LSF soaring, I was with new friends, I didn't have a weekly club mentor to help me learn new things about the hobby. It took me longer than most to improve my scores because of it. But it also gave me a perspective and proof that there was a system that could produce LSF5 contest wins. (I have nearly 20 LSF5 wins after completing LSF4.) I tested the system and it produced one of the quickest LSF5 journeys ever.

It's a systematic approach to achieving your contest win goals.

It works, if you work it.

Again, if you want to chat, need clarification or want help preparing for your LSF Tasks, feel free to contact me directly.



Southern Fling 2011



5th/6th November 2011 Christchurch



**WORLD CHAMP &
CHAMPION TEAM**

2011 NZ F3K TEAM



Wigram

Flying starts 9.30am each day.

Flown to F3K rules.

Saturday night meal & F3K seminar featuring 2011 World F3K champ Joe Wurts.

A chance to build on the growing interest in F3k.

NZ F3K Team will be there!

All are welcome, lets make this an event not to forget!!

Entries to: **John Shaw 021 339477 or j_ashaw@xtra.co**

