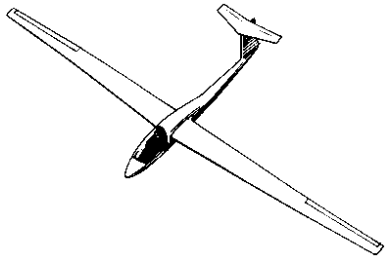
CLARENCE SILENT FLYAIR



BI-MONTHLY NEWSLETTER OF THE CLARENCE SAILPLANE SOCIETY

Nov/Dec '01

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From the Editor

- Marty Timm

This edition of the newsletter wraps up the 2001 season with election results, photos of the holiday party, flyer of the year results, a poem by Frank Zieminski, and much more. Enjoy!

- - -

At the December meeting Everett McQuaid approached me and offered his services in assisting with club newsletter duties. I'm looking forward to working with Everett. He has experience preparing newsletters for other clubs he's belonged to.

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If you've been trying, unsuccessfully, to connect to the club web site on the Internet, please try the NEW address listed at the top of this page. The new address is almost identical to the old one. Only the ".com" has changed to a ".net". Let me know if you continue to have difficulty.

If you find a "Membership Renewal" form attached to this newsletter, that means that we do not have a record of having received your dues for 2002. If you have not renewed, please send your dues and the membership renewal form to:

Dan Oehman
5665 Salt Rd.
Clarence, NY 14031

Please make checks payable to "Clarence Sailplane Society".

Keep your membership up to date! If you have not done so already, renew today!

President's Report

- Marty Timm

I am sad to report that club member Lester Murowski, passed away early in November. I had the pleasure of flying with Lester several times. I recall him as a kind and gentle man with a love of flying model airplanes. He will be missed.

- - -

At the December meeting the attendees approved a motion by Don Chudyk to vote individuals to a board of executives without nominating them to a specific post. The elected officials would then decide amongst themselves what positions they would fill.

In the process of investigating the legalities of voting on such a motion, it was discovered that the club constitution calls for the position of "Flying Site Committee Chairman" to be one

Upcoming Events

January 17	Meeting - 2002 Calendar of Events
February 21	Meeting - Building Contest
March 21	Meeting - Finishing Contest

of the elected officers. This office is not charged with finding flying sites. Rather, it is charged with being "… responsible for flight and program safety during all Society activities…". The elected officials have decided that this office will be filled this year.

Your CSS officers for 2002 are as follows:

President:
Marty Timm
Vice President:
Bill Pike
Secretary:
Roman Paryz II
Treasurer:
Dan Oehman
Newsletter Editor:
Marty Timm
Competition Coordinator:
Tom Koszuta
Flying Site Chairman:
Tom Koszuta

This marks the end of Paul Bolis' and Jim Roller's terms in office. Jim has been Competition Coordinator for longer than I've been a member of the club. I would like to thank both of these individuals for their contributions, and I'd like to ask everyone in the club to join me in thanking Jim for more years of great service than I can remember.

The people indicated above are in office to serve you and to make sure that CSS is the kind of club you want it to be. Give them your ideas, share with them your thoughts, and give them your feedback. This great club belongs to its members and is nothing without them.

- - -

At the December meeting I read a lovely Holiday greeting card from Rita Kirk. For those of you that were not at the meeting, the card read, "Wishing you ideal flying weather and a Merry Xmas. - Rita Kirk". Thanks, Rita.

- - -

Time to ante up! Last year Uwe was good enough to take charge of collecting for use of the Rainbow Lake slope soaring site. I have not spoken with him about doing so again, but I hope I can convince him to take this responsibility again. If you fly at Rainbow Lake (you know who you are…) please have your donation ready for Uwe as soon as possible.

- - -

By the way, as this newsletter goes to press, I got an update from Harold on his knee surgery. He is currently at Brothers of Mercy Rehab working on his recovery, but he expects to be home in by the second week of January. Please join me in wishing Harold a speedy recovery and return to flight readiness.

A trip to Rainbow Lake

A poem by Frank Zieminski

Trips to Rainbow Lake are long drives
Well worth it, if the glider survives
With our backs to the trees
We hope to fly as long as we please
Gathering around the starting rock
Now to put up the old windsock
A group of merry men
The are just like kin
If you are new
Someone will help you
The clouds hanging in a restless sky
An occasional hawk goes soaring by
Over clouds, in time we will rise
Floating aloft is no surprise
The radio frequency is in tune
We know we can shoot the moon
Nature can play a trick
The right time of day, we have to pick
The rocky road is steep
We hope the cows are asleep
A rocky road lined with trees
A cover for a westerly breeze
Looking down in the briar patch
Waiting for a glider to catch
Looking down into the valley
Hoping that there, we don't have to sally
The trees will call
For a glider to fall
Where will it land?
Not in the sand
But in a mighty tree
Can we set it free?
And when the wind stops
Time for lunch and pops

Upcoming Events in WNY

The Niagara County R/C Model Flying Club will be holding the Balsa Dusters 37th Annual Auction and Raffle. They will be raffling off a Hanger 9 Piper Cub including a Magnum 52 four-stroke engine and Hitec Focus 4 radio.

Date/Location:
January 20, 2002
Fraternal Order of Eagles Hall
3330 Lincoln Avenue
Lockport, NY
(1.3 mi. east of Transit Rd.)

Doors open at 12:00 noon
Auction starts at 1:00
Admission: $3.00
Children under 12 free

Upcoming Events Elsewhere

The Northern Connecticut Radio Control Club is holding an auction Sunday February 10th at Vernon Center Middle School, 777 Hartford Turnpike, Vernon,

CT. Admission is $6. For additional information call (860) 745-7325 or check out their web site at www.ncrcc.org on the Internet.

2001 Clarences

- Lyn Perry

"The Year in Review, in Which the Usual Suspects Are Rounded Up And Random Prizes Awarded"

FEBRUARY: GPS (Grumpy Pilot Syndrome) is rampant, so two of our intrepid members decide to go slope soaring. The problem: where to go? Uwe heads for Rainbow Lake, while Richard (Speedy) Grady opts for Canada, and, in his hurry to arrive, gets a speeding ticket. Richard's consolation for this? A Deputy Sheriff's badge he can show the next Mountie to pull him over.

APRIL: Comic relief at our Spring Opener: Don folds his Dove; Roman III dorks the Meteor on landing, severely disrupting the servo tray, cracking the fuselage and shattering a wingtip; and FOTY forever Jim Roller (a noted teacher, responsible for the education of our children) miscalculates his target time by 1:02 over what he really needs (at a 5 point/second penalty), flies beautifully to almost perfectly hit his time and thus takes himself well out of trophy contention. For Jim, a calculator to go in his field box.

MAY: Going against Shakespeare's advice to "neither a borrower nor a lender be", Uwe allows Frank Zbytek to fly his big electric. Frank puts it into a tree on landing, breaking up everything. At the Lockport contest, Roman launches with everything reversed, and qualifies for repeat offender status, having done this on several past occasions as well.

JUNE: We celebrate Harold's Wonderful Week.
June 6th - Harold Flies the Hour; or, That's the Spirit! 1:05+
June 7th - Harold has a Flyaway; or, Lyn Takes the Sticks! - With what seems to be no control of his good Spirit (brushless motor, etc.) and my altimeter aboard, Harold hands over to me as the plane goes way over Abbott Road at the corner. I decide that rudder is gone but elevator seems to respond, so I use spoilers to help turn the plane and lots of luck, bring it back on our side of the world, even lifting up and over the running track fence to a perfect landing. The rudder servo is later found to have failed inexplicably.
June 8th - Harold Says Bad Words, or Don Finds a Prop!
June 12th - Harold tries a Polish range check and forgets his lunch; we share.
June 13th - Harold dumps his Elfi on launch.
This guy is so enthusiastic that twice this season he's not been able to start his car for the drive home 'cause he's drained the battery charging electrics - my definition of a real flyer!

Also in June on a great Sunday; Finally taking one turn too many for his aging eyes, Frank loses his Pulsar up and out; it's soon discovered in one of the entrance driveways to the stadium across Abbott Road with a crunched nosecone. Marty flies his CDL 51 minutes for a personal non-slope record, Jef Balon's Aspire goes 20 minutes plus with Don assisting, and I trip over the parking-lot fence holding two planes. I save the CDL, but put my hand through the Soarwatt fuselage, necessitating repair (I shouldn't have bothered, as Frank takes

my wing off when I try to hog part of his thermal next time up).

JULY: At our Ed Waters AMA-sanctioned contest; Spirits at first uplifted, then come crashing down! Both Marty and Tom fold Spirit wings upon vigorous winch-launching into a stiff wind. In addition, we have what is probably the most spectacular encounter of the summer: Dr. J. Meets the Magical Magnetic Tower! Before, during, and after pictures are awarded in a lovely commemorative frame.

AUGUST: Uwe can't stay away from Rainbow Lake, even on not-windy days; he goes out, launches his electric Pulsar, and after three climb-outs and a one-hour plus flight, loses all control and the plane crashes. We can't understand this: how could he run the motor/receiver cells down enough to lose it? Uwe doesn't know either, but does say that, toward the end, he kept hearing a "beep, beep" sound from his transmitter, which he ignored! For Uwe, a somewhat louder low-battery warning horn for his transmitter, to be placed on the antenna.

SEPTEMBER: At our annual Electric Fun Fly, Marty loses sight of his CDL on the verge of a record flight, and Richard "Rescue" Grady finds the remains an hour later in the middle of the parking lot on his way out. For Marty, better glasses; for Richard, a rescue set.

More next year, folks - stay tuned!

The Year in Review

- Jim Sonnenmeier moves to Erie PA. Being the glutton for punishment that he is, he contines to fly with us.
- CSS forms a Flying Safety Committee comprised of Jim Roller, Frank Zbytek, and Tom Koszuta.
- Club member Sheldon Mosler's land is insured with the intent of having a fun fly at his place in Forestville. Unfortunately, we never got it organized.
- Several Members represent CSS at the RCCR Great Electric Fun Fly.
- Paul Bolis gets married!
- George Pack and the Flying Site Search Committee obtain permission to fly on Clayton Thompson's land on Herr Rd.
- Club Member Lester Murowski passes away.
- CSS starts 50/50 raffles at meetings.
- A new method of electing officers is adopted, requiring members to vote candidates into office, but not to a specific position.
- Harold gets both knees replaced, becoming CSS' first "bionic" member.
- Jim Roller ends his historic reign as Competition Coordinator. Thanks for everything, Jim!

Flyer of the Year Results

Thanks, once again, to Roman for all his hard work compiling competition statistics and publishing the Flyer of the Year results. This year Roman went above and beyond the call of duty and also compiled statistics for the last 10 years (Flyer of the Decade) as well as statistics for the life of the club (Flyer of the Millennium?). Summaries of the results follow. If you wish to have a copy of the full

detailed version that was handed out at the December meeting, please contact either Roman Paryz II or Marty Timm.

2001 Flyer of the Year

Expert

#	Pilot	Score
1	Roller	3904
2	Timm	3141
3	Perry	2798
4	Sonnenmeier	2451
5	Chudyk, D	1772
6	Paryz II	1228
7	Decker	817
8	Paryz III	303

Sportsman

#	Pilot	Score
1	Koszuta	2059
2	Ziegelmueller	872
3	Ogren	434
4	Zbytek	307

Congratulations to Tom Koszuta for winning the Sportsman Class. He now joins the ranks of the Expert Class pilots.

Flyer of the Decade

The following is the top 20 finishers for results compiled over the last 10 years.

(P=points; E=events)

#	Pilot	P	E
1	Roller	78021	90
2	Paryz II	41830	56
3	Perry	38417	48
4	Chudyk, D	32095	50
5	Krystaf, T	31413	49
6	Rash	26717	35
7	Sonnenmeier	26005	35
8	Grigg	20961	30
9	Dezik	15818	19
10	Timm	15058	27
11	Paryz III	12917	21
12	Meidenbauser	12720	19
13	Irvine	7735	13
14	Mandel	5195	10
15	Kester	4966	9
16	Kirk	4754	7
17	Decker	4538	9
18	Koszuta	4075	7
19	Oehman	3633	7
20	Hauth	3258	4

Flyer of the Millennium (Plus 2001)

The following is the top 20 finishers for results compiled over the life of the club.

(P=points; E=events)

#	Pilot	P	E
1	Roller	95561	112
2	Paryz II	93653	121
3	Perry	78477	103
4	Sonnenmeier	68664	95
5	Chudyk, D	59559	94
6	Krystaf, T	53961	87
7	Meidenbauer	51766	80
8	Dezik	40713	57
9	Vitale, M	36569	64
10	Grigg	35824	51
11	Kirk	30094	49
12	Waters	27673	55
13	Rash	26717	35
14	Halifax, P	16360	25
15	Winiecki	15792	18
16	Timm	15058	27
17	Paryz III	12917	21
18	Kingsley	12166	20
19	Tinker	8654	13
20	Irvine	7735	13

Clarence Sailplane Society Safe Soaring Standards

[Ed. - *The following* draft *from Tom Koszuta is offered for the members' review and comment. If, after feedback is provided and incorporated, this document is deemed to be acceptable to the general membership, it can be voted upon and established as our "standard"*]

General - This document is intended to outline safe soaring procedures for our primary flying sites, specifically ECC South Campus Field and the slope site near Rainbow Lake.

The standards have been designed to take into account the differences between the several classes of models that our members fly - non-powered, hi-start or winch launch sailplanes; hand launch sailplanes; electric motor assisted sailplanes; electric motor powered airplanes and slope style aircraft.

This mix of airplane classes presents a challenge to operating several craft safely because of the unique capabilities and requirements of each type of craft. Examples of this are the requirements for a launch corridor for hi-start and winch, the need for a hand launch pilot to launch, fly from, and land in the same area on the field, and the ability for an electrified airplane to launch from anywhere. Additionally, we need to take into account that most of the aircraft can land silently anywhere on the field, and that the timing for that landing is only partially within the pilot's control.

All persons at any flying site need to be in well-known areas to prevent injury to persons and damage to property. When unforeseen conditions arise communications become the key to keeping people and property safe. The modest size of our flying sites dictate that designated areas are smaller and closer together than desired, making adherence to the rules and communication of intentions and situations more important.

The basic premises of this document are to provide:

1) Basic communication requirements for all persons at any site;
2) Well planned and thought out areas for launching, flying, landing, standing and parking;
3) Frequency control;
4) Pre-flight safety checklist for each craft;
5) Guidance for working with new pilots while becoming proficient.

Areas for launching, landing, flying, standing, and parking

Rainbow Lake Slope Site:

Parking is limited to the road by physical constraints.

The flight line is designated as starting at "the rock" and extending 10 feet uphill of that area. The flight line is basically constrained on either side of the rock to 50 feet from the rock to avoid the final approach areas. Pilots with planes in the air must remain in that area, preferably in a straight line to prevent obstruction of vision by other pilots and should remain in easy communication distance of each other.

The "pits" are located at the uphill side of the flight line. This area is reserved for modelers and their aircraft, toolboxes, etc., while not flying. A significant buffer should be maintained between the pilots and the pits to avoid trip hazards and distraction of the pilots with planes in the air.

Spectators should remain in the pits, or farther up the hill.

Launching should take place to the far right or left of the flight line and slightly ahead of it. The pilot should announce his intention to launch so other pilots can avoid the launch area. When the launch lane is clear, the pilot will announce "launching" and launch his aircraft. When the launch has been completed and the plane is flying in comfortable control, the pilot must return to the flight line, behind the rock.

Landing is to take place across the hill and at least 20 feet in front of the flight line. The pilot must announce his intention to land before positioning for final approach. The beginning of final approach should take place at least 200 feet away from the pilot station to insure that a down wind turn does not push the aircraft into the flight line, and allow enough space to enter into the landing lane. When successfully lined up for final approach, the pilot must announce he is landing. Recovery of the aircraft should be announced to the flight line.

Slope aircraft are often fast and significantly ballasted. Extra caution should be observed when performing aerobatics, and high-speed passes should remain at least 100 feet in front of the flight line. Flying over the flight line is prohibited.

In the event of an unplanned landing and ensuing recovery, the pilot must inform the flight line that he is crossing in front of the flight line. Other pilots on the flight line should refrain from aerobatics and high speed passes until the "downed" pilot is safely behind the flight line.

ECC South Campus Site:

General:

The openness of the field and the ability to park on the South field edge and just off of the East field edge makes the use of common sense important, especially by the first to arrive at the field each day.

To avoid potential danger on every flight, everyone should attempt to maintain significant lanes for launching and landing. This can be accomplished by parking and maintaining a pit area that is not directly downwind of the center of the field. Pilots should strive to leave the launching area and take up a position cross wind of the launch, preferably in a small group to allow easy communication of intentions and situations. Pilots of electric, winch, and high start launched aircraft should strive to respect these lanes. Electric launches should take place at least 25 feet from the established pit area. No planes should ever be launched without warning or from a position where the aircraft has to fly past another pilot.

Pilots of hand-launched aircraft should take up a position crosswind from the established launch/land lane while flying. The hand launch pilot must be certain that, with every launch, his launch lane is free of other aircraft.

Pilots should strive to keep their intentions known to all while they are launching, flying, landing, or otherwise entering the field. Announce intentions in a clear voice, loud enough for the others at the field to understand what you are going to do next. By announcing when you are launching, you will provide a warning for pilots

with planes in the air to give way while you clear the lane and/or have a line in the air. By announcing that you are landing you provide warning of low flying aircraft. By announcing that you are recovering an aircraft from the field or otherwise entering the field, you provide an opportunity for other pilots to warn you that they are about to land or otherwise compromise your safety if you proceed.

Landings should be accomplished without flying over the established parking area for the day, established pilot line for the day, or established pits for the day.

All spectators should remain in the pits, or in close proximity to a club member. Members should provide guidance to spectators and request that they remain clear of the established flying lane of the day.

Pilots must maintain a distance from the Communication Tower such that there is no mistaking we are avoiding the tower.

Pilots must provide warning of abnormal flight conditions, such as control or wing loss, as soon as possible and as clearly as possible to other pilots.

Yield right of way to all full-scale aircraft.

Pilots should strive not to test the limits of vision or control range while flying model aircraft. We are flying over a very limited field in a residential area with busy streets.

Frequency Control

On most casual flying days, there is not a frequency control board available. The first pilot should set out a frequency sign up sheet and indicate which channel or channels they are using. If you are signing up with the same channel as someone else, inform that pilot that you are both operating on the same frequency and maintain contact with that pilot. You may work out a time sharing scheme to both of your liking – 15 minutes will be the default. Contest or otherwise organized events will likely have a frequency control board available. You may only energize your transmitter when the pin for your frequency is in your possession.

Pre Flight Check

All aircraft should be checked for airworthiness before launch.

1) Range check per radio manufacturer.
2) Confirm control surfaces respond in the proper direction to controls and that the correct model is selected, if applicable.

Confirm that all parts of the airframe, wing, and stabilizers are secure and that the control surfaces are secure.

Sailplane Design

By Don Stackhouse

From the
AMA National Newsletter

A recent post on RCSE was

Photos from the Herr Rd. Flying Site

Courtesy of Bill Pike

asking whether a lighter design is always better than a heavier design. Don Stackhouse of DJ Aerotech, famed designer of a number of successful Hand-Launched Gliders, posted an interesting reply. I am printing his post here for the edification of members who may have missed it or do not have Internet access. It is obviously biased toward DJ Aerotech Designs, but some interesting design issues are discussed. For what it is worth, the article follows.

Regarding all this controversy about "is there such a thing as 'too light!'?" the answer for an individual design is "yes," but for an overall competition class it's "not necessarily."

For example, the Chrysalis Hand-Launched Glider was designed for folks who wanted to try Hand-Launch Gliders for a very small investment, and didn't want to have to invest in exotic ultra-micro radio gear up front before they had decided if they wanted to make the commitment to go into Hand-Launched Gliders big time. With that in mind, I gave it enough wing area to be able to do a tolerable job of thermaling while lugging around full-sized servos and a 250 mAh battery. It will fly okay if you build it at 13 ounces flying weight, and fly much better (including launch height) at about 9.5 to 11 ounces. It will float like a dandelion seed at seven to eight ounces, but penetration and launch height will both suffer. There's just too much wing area.

On the other hand, when we designed the poly Spectre, we estimated what finished weight was possible, and designed the wing around that weight and around the capabilities of the airfoils we had available at that time. It launches and penetrates very well at six ounces flying weight, and of course floats extremely well.

The low speed performance is due to the reduction in induced drag. Assuming that the planform, twist, airfoils, etc. are all reasonably well matched, the induced drag essentially comes down to how much lift you need to carry the weight you're trying to support, and how much air you're grabbing to make that lift from. The amount of air the wing is using to make that lift depends on the air density, the airplane's airspeed, and the wingspan. The air density is already determined by where we choose to fly, the airspeed is pretty well determined by the amount of wind we expect to be able to penetrate, and for most competition classes the wingspan is set in stone by the rules of that class, or for things like Open class, etc., by the need to have adequate maneuverability. The only parameter left that we can significantly change to minimize induced drag is the weight.

In order to get adequate penetration and launch at this low weight, we then need to keep wing area down and wing loading up. Part of the trick then is in coming up with the airfoils that can handle the low Reynolds numbers that naturally result from low wing area at a fixed span. And of course we can't even begin the wing design without a decent estimate of the airplane's final weight.

Photos from the November 2001 Meeting

Bill Pike with Firefly

Lyn Perry with Watts Up

Tom Koszuta with F86

In the case of the Spectre VR and poly Spectre VR (a presently experimental two-channel version of the VR) Hand-Launched Gliders, we had the data from the original poly Spectre HLG to give us a better estimate of the possible flying weight, and we also had some new airfoils (the DS9101 family and its derivatives) that helped the wing's capabilities. This allowed us to better match the various parameters of the entire design, resulting in performance improvements over the entire operating envelope. Mike Garton had some interesting speculations in one of his recent articles in *Model Aviation* about how he thought we optimized the aspect ratios of the different Spectres. It was a valiant attempt, but well off the mark. The different aspect ratios really reflect the chronological positions of the different Spectre designs in our somewhat evolutionary exploration of the Spectre concept. Each design gave us a better idea of what was possible and reasonable in terms of finished weight and overall performance capabilities, which then allowed us to do a better job of optimizing the design. We still have some cards we have not yet played in that game, and further room for future development.

A two-channel poly Spectre VR at 5.1 ounces will outlaunch, outrun, and outfloat a 5.9 ounce two-channel poly Spectre, and of course leave an eight-to-nine-ounce, two-channel Monarch 'D-lite' or a 10-ounce Chrysalis in the dust, at BOTH ends of the speed range. This is possible ONLY because the poly VR was optimized to fly at that weight.

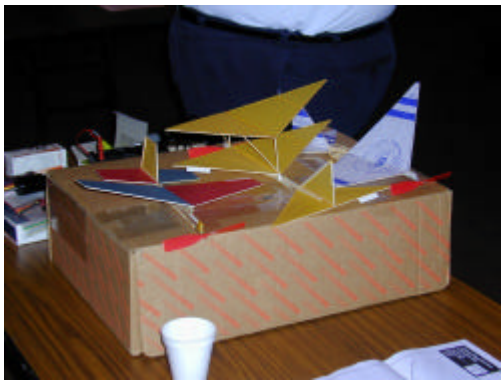
Like the adage says, no man (and no single design parameter) "is an island." You cannot successfully optimize one parameter of a design without considering its impact on all the other parameters of the design.

From *Thermals*
Rocky Mountain Soaring Association
Jim Monaco, editor
Aurora CO

Photos from the December 2001 Meeting

Dr. "Santa"meier does the honors

Jim Roller shows his new Joe Wurts D-S plane



Jim Sonnenmeier's tiny planes