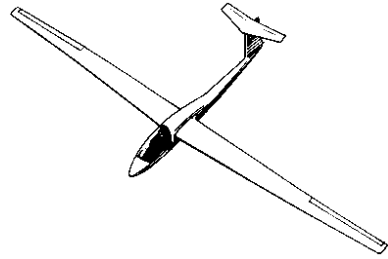


# CLARENCE SILENT FLYAIR



BI-MONTHLY NEWSLETTER OF THE  
CLARENCE SAILPLANE SOCIETY

Mar/Apr '99

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## From the Editor

- Marty Timm

### Don't Forget!!!

This could be your last newsletter if you haven't renewed your membership for 1999. Please send your dues to Dan Oehman if you have not done so already. We will be reviewing the membership list before the next newsletter goes out. Remember, also, to renew your membership with AMA so you have the necessary insurance when flying at a C.S.S. flying site.

### Spring Opener

Elsewhere in this newsletter, you should find a flyer for CSS' first competition event for 1999. I'll be the CD for the event and, like last year, we'll be running two classes, Open (any sailplane) and RES (Rudder-Elevator-Spoiler). The RES class is growing in popularity across the country, giving pilots the ability to fly their

favorite di/poly-hedral ship without all the rules and restrictions of Nostalgia class.

A plane qualifies for RES if it's wings have a fixed (non-movable) trailing edge and the plane is flown using only rudder and elevator inputs. Spoilers are optional. There will be no restrictions on the type of tow-hook employed. If you're unsure if your plane qualifies for RES, check with the CD before the event.

Last year's event was

weather-delayed twice, but was well attended and enjoyed when we finally held it. Hopefully, we'll have better luck with the weather this year.

### Thanks!

Special thanks to Don Chudyk and Lyn Perry for their articles and Roman Paryz for his pictures. Your contributions to this newsletter are greatly appreciated.

## Upcoming Events

April 15	CSS Meeting Clarence Town Park Building <b>In UPSTAIRS room!!!</b>
April 25 (rain 5/2)	Contest - Spring Opener CD - Marty Timm
May 16 (tentative)	Lockport Contest
May 20	On-field meeting
May 22	Indoor Free-Flight Ralph C. Wilson Fieldhouse
May 22	John Grigg AMA Hall of Fame Induction Dinner
May 31	3 <sup>rd</sup> Annual Bob Jaques Memorial Day Fun Fly CD - Dave Decker

## From The Flightline

- Lyn Perry

At this writing, we're halfway through March, and I, for one, am tired of looking at fields of snow instead of green - maybe St. Paddy had something after all! Our flying season should be starting soon - yes, Virginia, I know that some of you intrepids have been out there, braving the weather and logging 40+ minutes

while I've been sniffing - and I hope to see in the air some of the gorgeous creations we've had at our meetings recently.

Our request for an AMA sanctioned contest on July 25th has been approved; all paperwork is back to me, and we're set to go; we'll be flying Standard and Open classes, although the tasks have yet to be determined. Trophies for all (or at least First and Second in class)!

Finally, let me once again pitch the League of Silent Flight (LSF) to you. LSF is an international organization that sets individual achievement goals in the soaring realm. Membership is free, and the accomplishments give meaning to your soaring skills, whatever the level. If you've not yet become a member, please see me and I'll get you started - good fun!

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### Building Contest Report

- Marty Timm

The February CSS meeting is generally one of my favorites. I just love to see the balsa framework of a plane that's ready to cover. This year's event had only a few entrants, but the workmanship of one was extremely noteworthy. New member Frank Calvarese showed up with his SoarWatt built as a hand-launch glider. Frank's workmanship was excellent and without a doubt he deserved the first-place he earned in the contest. Here are the results:

1<sup>st</sup> Frank Calvarese – SoarWatt  
2<sup>nd</sup> Richard Grady - Snipe

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### Covering Contest Report

- Marty Timm

WOW! It looks like the 1999 flying season is going to be great! How's that for optimism? I just attended our March meeting and was in complete awe of the number and variety of planes that our prolific members are preparing for this season. Don and Vince each had beautiful Defiants. Warren Laufer brought a Gentle Lady with a really professional covering job. Frank Calvarese added yet another Spectra to the club. Frank Zbytek and Uwe displayed an immaculate pair of HL Darts. I displayed my Fun-1 finished just hours before. Fran Miller showed off his 60" flying wing called an "Air Ratchet".

Our members have done an outstanding job of preparing their planes. The hardest part was trying to select a winner of the covering-finishing contest. Any of 3 to 4 planes could have easily taken first place. When the votes were finally tallied, the winners stacked up like this:

1<sup>st</sup> Don Chudyk - Defiant  
2<sup>nd</sup> Vinnie Rasp - Defiant  
3<sup>rd</sup> Warren Laufer – Gentle Lady

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### Soaring Safety

- Marty Timm

It's that time of year when we all start thinking about flying. We start watching the weather and wind forecasts, waiting for that perfect day to start enjoying our hobby again. But there are a few things we could be doing between finishing up that winter project and taking our first springtime flight. This is the perfect time to do a few pre-flight checks on the planes in our hanger to make sure that problems have not developed over the winter months. The

following is a list of a few simple checks you can do to make sure your planes are flight-ready when the right day arrives:

1. Check your receiver and transmitter batteries. Make sure you have at least 1.4 volts/cell (just after charging). If you get 1.3 volts/cell or less, it's time to consider a new battery. Another test would be to switch on your transmitter and receiver and make sure the batteries work for at least 2 hours.
2. Power up your transmitter and plane and wiggle your sticks. Make sure left stick moves the rudder or aileron in the correct direction and down stick moves the elevator down. Nothing is more frustrating than to do a winter repair only to find out that you hooked things up backwards after you launch.
3. While you're powered up, do a range check. Walk 100 feet away with the transmitter antenna down. You should still have positive control. If your plane has a motor, try this with the motor running.
4. If your model is of the frame and covering variety, get out your iron or heat gun and tighten up the covering. Those winter sags don't just look bad; they reduce the strength of the structure. While you're at it, check for warps in the wing.
5. Give your plane a general once-over, looking for binding hinges, loose tape, cracks in the frame or fiberglass, decayed rubber bands, loose glue joints, damaged electrical wires, etc. If you fly electric, don't forget to inspect the

drivetrain-spinner-prop for cracks, damage, or imbalances.

Other than patched covering, your plane should be as sound (even if not as pretty) as the day that you first launched it. Anything less may be asking for trouble.

### UFO Spotted in Clarence

- Marty Timm

If you missed the March meeting, you missed an exciting demonstration of a UFO by Chris Zak. What's a UFO you ask? Well, it's an electric powered saucer-copter type of aircraft made by a company called Area-51. It has rotors like a helicopter, but it has 4 of them instead of one or two. It's symmetrical like a flying saucer, but doesn't have a body. It takes off and lands vertically, and is fully controllable by R/C. Well, take a look at the pictures, they do a better job of describing it than I can. Here's the technical scoop:

- 4 rotors
- 4 electric motors (like speed 400s)
- 4 speed controls
- 3 gyros
- 8-cell 600 Mah battery pack
- Typical 4 minute flight time

Chris gave us a demonstration right in the meeting room. He showed his mastery of this aircraft by taking off from the floor, hovering, and generally flying around the room for a couple of minutes, then landing. He later followed this up by doing the same from one of the tabletops. Great flying and a great demonstration. Here are some photos:



On the display table



Flying



Hovering at mid-height of the meeting room!

### Some Motor-Prop Static Test Results

- Don Chudyk

Now the '98 flying season was without a doubt a very good year for flying and many interesting models. Thanks, Uwe, for the chance to fly your F-5B Ellipse. I've never experienced a glider that retained so much energy as this one has. Then Bill Hauth demo'ed his falcon 550 with a Max-Cim geared brushless powered pure-vertical climbing hot rod. Dave Decker's Falcon 550 with an Astro FAI-15 with Robbe gear drive was also impressive in the climb. Let's not forget about our two premier newer modelers and their Spectra's. Harold Becker's is powered with an Astro FAI-15, on a 10-cell 2000 Mah battery with a 2:1 in-line gear, swinging an Aeronaut 11"x6.5" carbon prop at 37 amps. Now John Wisniewski is using an Astro Sport 15, 2.38:1 std gear, on a 10-cell 2000 Mah battery with a 14"x9.5" Cam prop at 28 amps. John's climbs are very impressive with near vertical ascent. Harold is close behind and needs a new Cam prop and a few amps to better match John's climb performance. But that's another story. Anyway, Harold and John are both very happy with their models and both are getting 5-7 climbs per charge. To say both are happy, I'd have to say "yes and no", because; Harold's building a new Spectra wing with flaperons, and John has a Falcon 550 style wing also with flaperons for his spectra.

All I can surmise is that both of these two individuals liked the way Vince Rasp's electric Spirit 100 with Flaps slowly lands at almost 6 pounds of model. Don't ask where the

damn motor-prop data is, it's somewhere, but you should understand why there is a requirement for it.

So sometime in late '98 flying season, Vince strains the electric Spirit through the track fence at ECC, needing only another 0.9875 inches (within +6, -0 inches) approximately in altitude to clear the fence. Remember, that's approximately the height that the model needed, judging from maybe 100-200 feet away. Now Vince is saying he needs a new electric for the '99 season and I say that

I was thinking of building Tom Hunt's Defiant. It's 96-98 inch span, about 660 sq. in. wing area, compared to a Spirit 100, which is at 946 sq. in., or a 2M Spectra at 676 sq. in. But Tom Hunt built his for limited motor run events at 40 to 45 oz. Total flying weight using an Astro 05G on a 7-cell 900 Mah battery swinging a 13"x7" Aeronaut prop, and pulling 50 amps. Vince and I agreed that for our sport flying that an Astro 15G on a 10-cell 2000 Mah battery, flaperons, and 1/16 rather than 1/32 inch wing sheeting was the

way to go. Well, there were a few more changes, the 7.5 inch wing chord was increased to 8.0, and the S7037 was changed to an S3021, 1/8 rather than 3/32 inch fuselage sheeting, and a 5/16" deeper fuselage for the 2000 Mah batteries.

Sometime around X-mas, Vince returned the plans along with his airfoil templates. His Defiant definitely looked great and with an estimated finished flying weight of 4 pounds plus a few ounces was good. The big question at that time was what prop to use with his Astro Sport

Prop	Amps	Volts	Watts Input	RPM	Est. Thrust Ounces	Battery (cell-Mah)	Remarks	
Astro FAI 15-G (2.38:1)					Designed for: 8-10 cells, 35-45 Amps, 480 input watts			
M.A. 12x8	0 51.6	14.0 10.3	0 531.5	0 6800	0 50	10 cell – 2000 Mah	Check on Motor Adv.	
No Prop	0 7.8	13.3 12.7	0 99.1	0 -	0 0			
Aeronaut 12x7	0 40.4	13.3 10.7	0 432.3	0 8300	0 51			
Cam 13x7	0 44.0	13.3 10.0	0 440.0	0 7400	0 55			
Aeronaut 14.25x7	0 51.3	13.1 9.9	0 507.9	0 6000	0 55			
Cam 14x9.5	0 51.2	13.7 9.8	0 501.8	0 6000	0 52			
Astro Sport 15-G (2.38:1)					Designed for: 10-12 cells, 18-25 Amps, 370 input watts			
M.A. 12x8	0 23.4	13.2 11.3	0 257.4	0 5700	0 35	10 cell – 2000 Mah	Check on Motor Adv.	
No Prop	0 3.2	13.1 12.7	0 40.6	0 -	0 0			
Aeronaut 12x7	0 18.4	13.5 11.5	0 211.6	0 6800	0 34			10 cell – 1700 Mah
Cam 13x7	0 21.4	13.5 11.7	0 250.4	0 6600	0 44			10 cell – 2000 Mah
Aeronaut 14.25x7	0 24.7	13.3 10.7	0 264.3	0 5400	0 45			10 cell – 1700 Mah
Cam 14x9.5	0 29.3	14.2 12.0	0 351.6	0 6000	0 52			10 cell – 2000 Mah

Notes for above table:

- Astro Whatt-Meter used between battery pack and ESC (Electronic Speed Control).
- Used MX-80 Speed Controller with BEC (Battery Eliminator Circuit)
- Aeronaut 14.25"x7", is actually 14"x7" prop on a different length yoke to fit 1.75" rather than a 1.625" diameter spinner.
- Thrust coefficients for the Cam props ere estimated to be equal to the Top Flite Power Pt props.
- The first set of numbers for each prop documents the voltage with the motor off.

15-G on 10c-2000. I told him, based on what John had done, the Cam 14"x9.5" was just right and mentioned that. I'll need to check what to use with my Astro FAI 15-G on 10c-2000. Thought we'd never get to the reason for this Motor-Prop data. Never say never, it's a truism, just like "Trust Me."

So here's the tabulated data, Vince provided the two Astro 15s, speed controllers, and batteries; while Bill, Dave, and John lent their props for these tests. Included are Astro's "Designed For" parameter which is the safe maximum static levels for these two motors. Note that the FAI 15-G motor is max'ed out at 51 amps statically during these tests with the 14" diameter props. The amps, volts, and RPM were recorded within 10-15 seconds of turn-on. The same battery pack charge was used for several test points (prop changes). Watts and estimated thrust were calculated. Thrust calculations are based on Donald W. Brook's, "Prop-Talk", a very easy to read and understand model prop book.

For those of you interested but not aware, the static data represents the maximum the motor experiences, as the model begins flying, the amps and thrust values reduce while the RPM increases. The important item is motor longevity. The people who write articles generally say the amps reduce about 10 to 15% from static values once the model is flying.

Let's stop here with this data, otherwise I'd have to get more technical. Remember, this is a hobby for enjoyment, but if you like to experiment, have at it.

## Marty Timm – Where Are You

- Don Chudyk

Feb 27, 1999 at ECC, 1300 Hrs., 45°F, blue sky, light variable wind, only a few clouds. Frank Zbytek is up-start launching his hand launch glider, Harold, Vince and I are topping-off the batteries. Maiden flight day for Vince's Defiant. It came in at 70 oz., 710 sq. in., with an Astro Sport 15-G, MX080 ESC, 10c-2000 Mah matched cells and a Cam 14.25"x9.5" prop. This translates to a wing loading of 14.2 oz./ft<sup>2</sup>, initially 350 watts or 80 watts per pound power loading.

Over the years, authors have come up with some general guidelines for selecting electric motor systems which goes approximately like this:

Watts/Lb.	Application
50	Hand-Launch
60+	ROG models
80+	Mild aerobatics
90+	Vertical aerobatics

Harold's and John's Spectras are: 61 & 58 oz., 13.0 & 12.4 oz./ft<sup>2</sup>, 400 & 350 watts, 105 & 97 watts/pound respectively. Very impressive numbers and the climb capability of these Spectras indicate just that. (Harold, you still need a better prop.)

So how did the maiden flight of Vince's Defiant go? It's a real keeper, climb rate and climb angle was great, flaperon control with coupled rudder – glide – landing with 80° flap, all just great. Can't wait to fly mine. The flaperon control into and out of a turn helps with the wing leveling. These are not as fast to respond as normal ailerons would be, but they are effective. The first flight lasted 29

minutes, but you had to get over 400 feet. It did only five climbs on this battery charge with some reserve for landing.

Frank wasn't able to find much at 100 foot launching altitude, but Harold, on one flight, after 40 minutes, landed and still had two climbs left in the battery. A great day. Frank had said that Marty was there earlier but went home to repair his phono switch problem. A few days later, I found out through the grapevine that Marty did get back to ECC and FLY. How about some info, Marty.

## I was there, but where were all these Defiants?

- Marty Timm

As Don said, 45° F and light winds in February. I'll take it. The kids and I showed up at ECC shortly after noon to try out the new EPP Highlander. I got the plane all assembled, and switched on the power, only to find that, for some reason, the power wasn't getting from the phono-jack switch to the receiver. A voltmeter showed the required number of volts at the charging jack, but since all the electronics were buried (no hatch) in EPP foam, I resigned myself to shop-surgery to diagnose the problem.

I had other things to accomplish that day, so I packed up the plane, but just as I was about to leave Frank Zbytek and Harold Becker drove up. I said my hellos and proceeded to leave. Later that same day, at about 4:00PM, I returned to an empty field with my trusty Electron-400. I got two nice flights, 14+ minutes each, before the temperature started to drop and the wind started to pick up. Don was right, the lift started at

400', but with a 60" wingspan, I didn't want to fly much higher than that. I was able to work some wave-lift coming off the trees at the South end of the field, but the plane would rapidly loose interest in that and head back down.

All in all, I can't complain. Any day I fly in February is a good day.

**April Mail-in Contests**

- Marty Timm

These are the first of our "mail-in" contests. Fly these tasks at your convenience during the month of April and notify me of your results. I'll publish the results and announce the winners in the next newsletter. No entry fee required.

Thermal Duration

Task: Longest total time for any 3 consecutive flights. All 3 flights must occur on the same day. Launch must be via high-start, up-start, or winch. Timing starts when the plane is launched and stops when the plane lands (touches a land-based object). Flight time may not be the result of "slope" lift. Any size non-powered airplane qualifies.

Electric Thermal Duration

Task: Longest flight on a single charge of an electric-powered aircraft. Timing starts when the plane is launched and stops when the plane lands (touches a land-based object). Any size plane, any battery pack. (Extension cords may not be attached while the plane is in flight!)

The flight(s) of record must occur during the month of April. The contests will be scored on

the "honor system". Witnesses will not be necessary. Send your results to Marty Timm via phone, mail, or e-mail by May 5. Results will be tabulated and published in the May/June newsletter. Good luck, have fun, and send me your results!

**CSS EARLY HISTORY**

- Lyn Perry

[Marty has requested memories, reminiscences, remember whens, and so on, from our earlier years. I originally researched and wrote this piece for our tenth anniversary celebration in 1993; I think it's still appropriate today to look back at where we've been as we move into the future of our club.]

CSS proudly celebrates the tenth anniversary of its founding with this issue and series of Spring meetings. Area sailplane enthusiasts began flying together at the Kraus and Clarence Center soccer fields (while the fields were under development) in the Summer and Fall of 1982. The club formally organized in the Spring of 1983 at the impetus of Ed Waters, with the first meetings occurring at the Clarence Center Inn, then kitty-corner from the Clarence Emporium.

Minutes from the first meeting, taken by George Pack, look like this:

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Jan. 11, 1983 - Clarence Ctr Inn 7:45 P.M. Ed Waters started meeting, handed out proposed Constitution, application and tentative roster. Twelve people in attendance.

**By-Laws:**

Read and reviewed  
Election of Officers

**Nominees:**

President:  
Ed Waters

V. President:  
Bob Patchel

Secretary:  
Geo. Pack

Bulletin Editor:  
Roman Paryz

Treasurer:  
Dick Duve

Comp. Coordinator:  
Dave Millikan

All above elected.

Dues Collected:  
\$53.00; \$3.00 per member

Name:  
Clarence Sailplane Society

Newsletter:  
4 times a year (quarterly)

Meetings:  
6 meetings a year to include the annual meeting, Oct-March.

Place:  
Clarence Center Inn or as designated

When:  
Day - 2nd Thursday

Time:  
7:30 P.M.

Newsletter Name:  
The Silent Flier  
Shhhhh  
Thermal Busters' Gazette

Voted:  
The Silent Flyer Newsletter of the CSS

Issues:  
March, June, Sept, Dec.

Contests:  
LSF Monthly (informal)

Meeting Adjourned at 9:10 P.M.

Addition:  
Newsletter Name:  
'Clarence Silent Flyair'

CSS Organizational Meeting  
Tuesday, Jan 11, 1983

Attendance:  
George Pack

Tom Meidenbauer  
Harold Feger  
Gary Talboys  
Roman & Joanne Paryz  
Brian Wiesinger  
Dave Millikan  
Dick Duve  
Lee Dearborn  
Ed Waters  
Lyn Perry  
Bob Patchel  
Billie B. Kingsley

In Absentia:  
Preston Millikan  
Don Chudyk  
Eric Chudyk  
Bob Bosworth

Attendance for the second meeting, held on 10 February 1983:

Ed Waters  
Lyn Perry  
George Pack  
John Grigg  
Tom Meidenbauer  
Lee Dearborn  
Harold Feger  
Don Goodwin  
R. Duve  
Charles Weseman  
Gary Talboys  
Martin Bronisz  
Eric Chudyk  
Al Roberson  
Roman Paryz  
Ronald Morrison  
Don Chudyk  
Ralph Furness  
Dave Millikan

Attendance for the third meeting, held on 10 March 1983:

Ed Waters  
Richard Duve  
Eric Chudyk  
Tom Meidenbauer  
Bob Bosworth  
Don Goodwin  
Roman Paryz  
Lyn Perry  
Don Chudyk  
Bob Patchel

Dave Millikan  
Chuck Weseman  
Brian Wiesinger  
Martin Bronisz  
William Neumann  
Michael Bronisz  
Gary Talboys  
G. Pack

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### Classifieds

For Sale - contact Lyn

- New in Box House of Balsa (HOB) 2S Standard class built-up sailplane. 96" span, 792 sq. in, 35-41 oz RTF, clear plastic canopy; \$40.
- New in Box Sig Mini-Maxer FF Rubber ship, with rubber and prop - 23" span. \$7.50

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### Meeting Announcement!

The April 1999 C.S.S. meeting will be held upstairs at the Clarence Town Park Building instead of the usual room. Please note this on your calendar.

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### John Grigg AMA Hall of Fame Induction Dinner

There will be a dinner honoring John Grigg's induction into the AMA hall of fame.

When:  
Saturday, May 22  
5:30 PM - Cash Bar  
6:00 PM - Dinner

Where:  
Lockport Locks & Erie Canal Cruises  
210 Market St.  
Lockport, NY

Cost:  
\$16 per person  
Register:  
Marlene Nikoden

407 Willow St.  
Lockport, NY 14094  
(407) 434-8350

If you plan on attending, please register before May 13.

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### Announcement!

Lyn Perry has informed us that our agreement with Erie Community College to use the South Campus as a flying site stipulates that club members during their activities will consume no alcoholic beverages.

Please respect this rule and keep our club in good standing with ECC.

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### Schedule Change!

Roman Paryz has rescheduled his F1.5B contest **June 13**, (with a rain date of June 19). The fun-fly originally scheduled for 6/13 will be combined with the contest. Please make a note on your calendar of events.

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### New Members

CSS would like to welcome the following new members to the club:

- Frank Calvarese
- Ronald Wojcik
- Dave Kutina
- Robert Finley
- Frank Kalinowski

Welcome, and see you on the flying field.



Vince's Defiant – 2<sup>nd</sup> Place  
Flaperons, Sport 15G  
10c-2000, 14x9.5



Frank's HL Dart



Don's Defiant 1<sup>st</sup> Place  
Ultracoat, Flaperons, FAI 15-G,  
10c-2000, 14x9.5



Frank Calavarese's Spectra  
3<sup>rd</sup> Place - FAI 15, 10 cell, 13x7



Marty's Fun-1  
Neon Ultracoat and black 21<sup>st</sup>  
Century paint



Warren Laufer's Gentle Lady



Richard telling how NOT to  
fiberglass a wing joint on a Fun-1



Uwe with his HL Dart