# The Frequent Flyer

The Monthly Newsletter of Caesar Creek Soaring Club

October 2003

Uncommon History: A Wright Brothers Primer, Part 1

By Thomas Turner

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Editor's note: This is the first of a three-part article reprinted from ipilot.com

This Centennial of Flight finds me grateful to the Wrights for their ability to attack dangerous trialand-error with analytical science and ultimately open the door to the world of flight we so enjoy. It was a longer road than most might imagine, full of fascinating history few people know...

We all know the story of how two bicycle-shop brothers from Ohio built and flew the first successful heavier-than-air aircraft from the dunes of North Carolina on December 17, 1903. From our vantage point of a century later, though, many of us fail to appreciate the meticulous work that led to the dawn of aviation ... much of it done not by the Wrights themselves, but those who had come before.

This is by no means to diminish the exacting science and "out of the box" thinking done by the brothers Wright, for it was they (like all good scientists) who combined the knowledge and experience of their predecessors in new ways, invented a means of controlling bank for turns, and took the intuitive leap to add a moveable rudder, as an afterthought, that was the key to successful, three-axis control. Then, since no engine was available that met their need for lightweight power, they commissioned an expert to build one for them. Only then was the "miracle at Kitty Hawk" attainable.

#### SIR GEORGE CALEY

Sir George Caley is considered the father of modern aerodynamics. In 1799 he designed an airplane that essentially set the standard for most successful aircraft to this day. He replaced moving, birdlike wings with a fixed monoplane wing, movable tail control surfaces, and a separate (from the wing structure) propulsion device. The 1799 machine would have used oar-like "flappers" under the wings for propulsion...if it had worked.

In 1853, Caley built a more successful towed glider design that carried the gentleman's coachman aloft behind a team of horses, testing his employee's loyalty and exhibiting some measure of stability, if not independent propulsion and control.

# **Upcoming Events!!**

Fall Clean-up October 18, 2003 Time: 10:00 a.m.

Annual Octoberfest Hayride and Party October 18, 2003 Time: Following Clean-up Day

> Caesar Creek Soaring Club P.O. Box 918 Waynesville, Ohio 45068 (513)932-7627 See our website at:

http://www.wrightdesigns.com/ccsc

Caley also evaluated various wing designs with a device that was whirled around manually to simulate relative wind (similar to the U-Control airplanes many of us got nauseous with as a kid). With this crude "wind tunnel" testing, he made the first scientific observations of the effect of wing camber on lift.

#### **HENSON'S AERIAL STEAM CARRIAGE**

Building on Caley's work, Englishmen William Sanford Henson designed his Aerial Steam Carriage in 1842. The craft, first in history to feature propellers as the primary means of propulsion, called for a wingspan of 150 feet and a 25- to 30-horsepower engine driving two propellers.

Henson patented the device and partnered with countryman John Stringfellow to improve the engine. Meanwhile, Henson chartered the Aerial Transport Company with lofty plans of flying cargo to China.

Unfortunately for Henson's investors, the Carriage was never built. Henson lost interest (as did the Company's stockholders!) and left England for that home of fleeing malcontents, America. Stringfellow indeed improved the engine design and test-flew models with mixed success, including the first recorded triplane design.

#### THE FIRST MANNED, POWERED FLIGHT

In 1874 Felix Du Temple's steam-powered monoplane became credited as the world's first powered aircraft to fly with a man aboard. The tractor monoplane employed dihedral and other aerodynamic refinements for stability ... and a retractable tricycle landing gear.

In Brest, France, the du Temple airplane lifted a few feet off the ground and flew with a sailor aboard as "pilot." The flight originated on a downslope, not level ground, and there was no real control system for the passenger-pilot. Hence, this "first" is not considered to be the beginning of successful, manned flight.

#### **BLOWIN' IN THE WIND**

Although his glider designs never flew, English scientist Frances Wenham is credited with inventing and using the first wind tunnel to study airfoil design. Wenham's work helped define the "right" amount of wing camber for later, successful airplanes.

The first variable-pitch propeller, controlled by oil flow (like most modern variable-pitch props) and using data like that obtained in Wenham's wind tunnel to determine optimum settings for takeoff, climb and cruise, was designed by Frenchman J. Croce-Spinelli in the 1870s.

Next time, it gets even more interesting as Lilienthal and Chanute move crucial steps forward toward controlled powered flight.

# MINUTES OF SSD BOARD MEETING September 20, 2003

Present: Bill Maxwell, Bob Root, Deiter Schmidt, Bob Gaerttner, Norb Maurer, Jim Hurst, Aaron

Sorrell.

Absent: Pat DeNaples, John Lubon

The meeting was called to order at 9:55 AM, and was presided over by Vice President Bob Root in the absence of President John Lubon.

The minutes of the previous meeting were reviewed and approved. It was noted that the manhole cover on the concrete ramp was closed and concreted in place by Henry Mererrose. The trailer for primarily hauling the golf carts and other club chores has been purchased and is in use.

The Treasurer's Report was reviewed and approved. Pat DeNaples had e-mailed the board members asking for approval of a stock redemption. The stock redemption was approved.

A possible replacement for the white club 1-26 has not appeared.

The meeting was adjourned at 10:30 AM.

## **CCSC Cross-Country Eagle Trophy**

To help pass the time during the week this past month several members of CCSC and Central Indiana Soaring Association (CISA) have been involved in a rather lively exchange of email correspondence concerning the CCSC eagle trophy, which we thought you might enjoy. – Greg.

#### ···· Original Message ····

From: ZASoars@aol.com Greg, Larry, Dieter, Jim, A great first flight into Caesar Creek by Nyal Williams yesterday I'm sure you will agree. Shame on you guys hiding the Trophy! What can be done? Regards, Ron Clarke (ZA).

From: Greg Crook Was this flight made during the week rather than on a weekend? If so, it is the first time anyone has done this in the 15+ years the trophy has been in existence. I don't mean to discredit Nyal Williams flight in any way, but I do suggest that we honor the tradition and accomplishments of the previous flights and attempt all future flights like this on either a Saturday or Sunday - especially if you expect a tow for the return leg.

From: ZASoars@aol.com Hi there Greg. No the flight by Nyal was not the first time a mid-week flight has been made to CCSC. I myself made one (on a Wed. because I knew you guys frequently fly Wednesdays) a few years back. Nyal knew he stood the chance of no tow for a return so in fact arranged for a member of our club to drive his trailer down. I would suggest we allow flights any day of the week, with the pilot obviously responsible for their own retrieve if no tow plane is available. The only real issue is how to get the trophy if it is not in it's usual place? How do we get it now?? UPS? Regards, Ron.

From: Greg Crook Ron, I will agree with you to allow mid-week flights for the trophy, but I'd like to see those flights noted with an asterisk (\*) along with the pilots name to distinguish them from the weekend flights. It's much easier to just wait for a good soaring day than to take what comes on the weekend. I'd also like to hear what some of the others think about this?

From: G. Frank Paynter paynter.5@osu.edu I think the asterisk ought to be for 'one-way' vs 'round-trip' trophy flights. As we all know, it is generally \*much\* easier to go one-way from Indy to CCSC than it is to go the other way. A Round-trip requirement evens out the difficulty. Just my \$0.02, from someone who has never dared to make even the one-way flight himself;-) Frank

From: ZASoars@aol.com Greg, I personally would not have any objection to your suggestion of an \* next to mid week flights. I think the whole idea is to encourage distance flying between the clubs, so any time someone can make the flight they should be recognized with their name on the trophy. What about holiday weekends. Mondays and Fridays like labor day etc? ZA.

From: Greg Crook Ron, I think Dieter has the trophy and I believe he is getting new name plaques made as he mentioned earlier this week. I will call him at home tonight to make sure he has heard about Nyal's flight and we'll get the trophy to you one way or the other. Maybe someone from CCSC will deliver it by AIRMAIL this weekend.

From: dschmidt@ececs.uc.edu Ron, The top half of the trophy was on its usual place at the fireplace in our club house. I do not see how Nyal could have missed it. I had the bottom half in order to update the plaques and I have returned it yesterday. We can UPS the trophy to you. The question is not only what to do if the trophy is not in its proper place, but what to do when no one is there to open the door to the club house. We were lucky that your tow pilot returned to Terry just before our departure, but 15 minutes later we would have missed him. Dieter

From: nyalwilliams@comcast.net Aha! I did see something that looked like the top part of the trophy, even picked it up and examined it. I couldn't positively identify it, however was a bit concerned that I could never encounter your caretaker during the 2 1/2 hour period I waited for my

crew and loaded up. Anyway, I left you another "trophy," a good-natured insult to yours and all clubs. Bring it back, pass it around · in a separate flight from any other delivery or claim.

From: Richard.Holzwarth@wpafb.af.mil Some of the responses to Mr. Williams and Mr. Clarke's concerns about the difficulty Mr. Williams had finding the trophy have become rather pointed. Dick H

From: ZASoars@aol.com Greg, By the way - Nyal told me he left a "Hudson terraplane" hubcap as a memento at CCSC - might check on the mantel ! ZA

From: Greg Crook Ron, I am going to send you the trophy but I also heard some rather strong objections from several of the pilots here about allowing for weekday trophy flights. Therefore, since it is actually a CCSC cross-country challenge, all future flights must be made on a weekend or holiday when normal club operations are being conducted. Please pass the word to your team and tell Nyal he can come here again anytime to pick up his hubcap.

From: nyalwilliams@comcast.net The hubcap is a CISA challenge; therefore you may keep it and display it to your heart's content. You should, however, honor its stipulations. Nyal Williams

From: dschmidt@ececs.uc.edu Nyal, It is funny that you mention we should honor the stipulation of the hubcap trophy. It says that one can not collect a trophy of honor until the hubcap trophy has been delivered to some other club. From what you did it appears that we can return the hubcap trophy to CISA and claim the Eagle trophy at once with the same flight. The effect of your trophy will be that one club will have the hubcap and the other the eagle trophy. Please let us know, how to interpret the stipulation. If it means that we need to make two separate flights to get the eagle trophy back then you should not claim the eagle trophy for your own flight in accordance with its stipulations. Dieter

From: nyalwilliams@comcast.net Dieter, Too bad this got off to a rocky start. I am happy with the notion that I have "tweaked the nose" of CCSC with the anti-trophy and I'll lay no claim to your trophy for this trip. It was not my original intent to both deliver the "insult" and to pick up the trophy. Our purpose is to prompt more XC flights, and what better way than to have in hand an embarrassment that one has to get rid of? I had intended to persuade another club member to accompany me so that he could pick up the trophy and I could deposit the challenge. Everyone else who flew that day elected to go in a different direction, so I planned just to deliver the Terraplane hubcap. Various club members urged me to get the trophy and I considered that it might be claimed on the basis that I did not get a tow to come back (as mentioned on the plaque attached to the hubcap). I went along with this idea reluctantly, but was relieved somewhat that the trophy wasn't actually there. Let there be a race to see whether one of our guys can get over for the trophy before you bring the "insult" back to us. If we get there first, then you will have to make two separate flights to redeem your honor once again. Devilish, isn't it! <grin> It makes sense that your trophy should be picked up only on weekends because someone has to be there to make it available; (working class people are a pain). <br/><big, wide grin> On the other hand, the hub cap can be delivered any day of the week - by glider only, of course. In such a case, however, a return tow might not be available. Fair enough? Nyal

> Octoberfest Party!!!! Saturday, October 18

Please bring a German style covered dish. CCSC will provide meats, beverages, and maybe a little more!!

#### **Instructors Corner**

Landing Pattern "Procedure" By Jim Hurst

The Practical Test Standard is the bible by which a Pilot Examiner measures the skill and ability of a pilot applicant in order to determine his or her qualifications for a license. The Practical Test Standard requires the applicant to be proficient in "ground reference maneuvers". In airplane flight tests, this may involve S turns on a road or pylon turns or other such things. The limitations of a glider mean that these kinds of maneuvers can't be easily done. However, the landing pattern is a ground reference maneuver and the most important one a glider pilot needs to learn.

We teach a four-legged pattern, where leg 1 is a crosswind leg perpendicular to the runway and over the upwind end of the runway; leg 2 is the downwind leg, parallel to the runway; leg 3 is the base leg, beyond the approach end and perpendicular to the runway; and leg 4 is the final approach. We teach this pattern because it makes it easy for novice pilots to learn how to land the glider where they want to, and also, because if everybody flies this pattern, then each pilot knows where to look for traffic, and knows what the other pilot is going to do. I really shouldn't need to mention this.

This pattern is a PROCEDURE which we want students to learn and that we expect them to execute. We see all kinds of very casual patterns, or no pattern, that creates a great deal of suspense and stress in the mind of the instructor sitting in the back seat. We think, "What is this person doing? Are they going to land on our gliderport or not?" One of the measures of whether a student is ready to solo is whether they demonstrate the prescribed landing pattern on their own, without prompting, advice or suggestions from the instructor. We would like for the student to prove that they can execute this procedure on their OWN.

It is possible to enter the landing pattern form any of the four legs, or even to land across the width of the runway but such practices should be limited to emergency situations, where the pilot has made a mistake and can't fly the normal pattern. If a pilot does not fly the normal pattern, we can only think:

1) They don't think it's important, 2) They don't care about the pattern, 3) They aren't thinking about the pattern, 4) They don't know how to do it.

I think this is important enough that I have made a resolution. If you have not soloed yet, I am not going to approve you for solo if you don't fly the prescribed pattern. If you have soloed and you are getting a routine solo check ride from me, you are not going to solo on that day until you fly the prescribed pattern. If you are getting a flight review, you are not going to get signed off until you can fly the prescribed pattern.



**CCSC NEEDS YOU!** 

Are you concerned about the future of YOUR club? Worried about the financial welfare of our organization? Then get involved!

The elections for the Board of Directors will be held in November. We need numerous nominations to run for a position on the board. Become involved; don't rely on everyone else to make the proper decisions for the future of the club. Contact any board member by October 25 in order to put your name on the ballot.

It is with a heavy heart that CCSC mourns the passing of Morgan Remington, age 17. Morgan passed away on Wednesday, September 17, 2003. She was member of the first Sunday Crew.

Saturday, 18 October, will be the date for our annual Octoberfest Hayride Party.

Please come out to the gliderport for this party early. Real early, say 10:00 AM or thereabouts. And as long as you are coming early, please wear work clothes (think GLOVES) and bring tools too!

Saturday 18 October is also the day we have selected for our not really quite annual Fall Clean-up Day. You might have noticed that we haven't had one recently, and the gliderport sure could use it.

Seriously, we need a clean up day, there is lots of work to be done, including some major projects, and we need your help.

To help us concentrate on our chores, the field will be closed to flying.

And we really ARE having the Octoberfest Party later that night. Good food, appropriate refreshments, hayride, FUN!

Contact Bill Parr or Mike Karraker for more information about clean-up day projects.

# Welcome new members!

Todd and Michelle Schopp Florence, KY

Robert Rankin Kettering, OH



Congratulations to Ricardo Fontanet who soloed in the 2-33 on Sunday 9/28/2003!!!

# **PLAN A PARTY AT CCSC**

It's party season at CCSC and everyone can participate. There's no such thing as a bad party, although some are certainly better then others. So if you have an idea for party that might be a little different, or if you would just like to take charge and show off your party animal qualities contact Dick or Sandy Holzwarth at: (937) 885 4156.

Submissions for *The Frequent Flyer* should be sent to:

aaronsorrell@ameritech.net

- or -Aaron Sorrell 128 McDaniel St. Dayton, Ohio 45405 (937) 220-9026

### **Classifieds**

#### For Sale:

1977 MacGregor 22' Venture sailboat with 5hp Evinrude. Sleeps 4. \$3250 Complete and ready to sail. Remember that glider pilots make natural sailors. Gene Wade 937-667-5619

#### For Sale:

One-fifth share of Big Wings, ASH-25E, including Cobra trailer, competition instruments, new winglets and 55-1 L/D. Contact Greg Crook at 513-494-1350 or email gregcrook@att.net.

#### For Sale:

Dutchman Travel Trailer, **Price Reduced to \$6500**, 1991, 30', \$8000 OBO. Currently on site at the CCSC campgrounds. Contact Greg at 513-494-1350 or greg.crook@att.net.

#### For Sale:

Security 150 parachute, chair-type. Also Raine Winter barograph, 10 km. Contact Kent Sorrell 937-855-7135

#### For Sale:

1996 Innsbruck 30' travel trailer by Gulfstream Asking \$7,500. Located on site at CCSC campgrounds. Contact Joe or Kathy at 614 864-9852 or e-mail jmuth@infinet.com.

#### For Sale:

One-fifth share for one-eighth the price in a Russia AC-4. Contact Pat De Naples 937-291-1466 or pat126@go-concepts.com

#### For Sale:

Casita 16' Fiberglass Travel Trailer "Liberty Deluxe", Built 1994, Every accessory. AC/Heat. Gas/Electric Frig. Very dry. Bathroom and kitchen never used. Ready to trailer. \$4500. No charge for Mako Shark. Will consider partners if they are on a regular crew. Contact Chuck Lohre 513-731-3429, <a href="mailto:chuck@lohre.com">chuck@lohre.com</a>

#### For Sale:

Paraphernalia Long Softie Parachute, blue in color with quick ejector snaps, excellent condition, always protected from sun and humidity, and has no stains etc. Used very infrequently by myself \$550. Norb Maurer (513) 552-6708 or (513) 774-0380.

#### For Sale:

One share of Redwings SGS 1-26. Contact Stewart Trefzger at 513-561-5579 or e-mail at strefzger@worldnet.att.net

#### For Sale:

1/2 share in 6V, N178K, 1972 ASW-15. \$7500, contact Gil Stengel 513-233-2103 or gstengel@fuse.net

#### For Rent:

Sailplane trailer garage at CCSC. Contact Paul Siegel 513-561-6872 or psiegel@fuse.net

# **Crew Schedule**

Date	Crew Chief	Tow Pilots	Instructors	Ground Crew
1st Sat & 3/29	G. Daugherty	J. Armor T. Hudson	R. Hennig W. Miley	J. Beaupre, J. Chiles, A. Colvin, P. Nord, Dave Edwards, J. Lowe, A. Sorrell
1st Sun & 3/30	M. Karraker R. Carraway	M. Maurer N. Maurer D. Schmidt	A. Swanson	W. Van Breukelen, M. Jett, W. Schmid M. Munz, B.& B Towne, J. Miles, D. Rawson J. Sorrell, S. Tagariello, TLynch
2nd Sat & 5/31	R. Root D. Staarmann	R Anderson	J. Price J. Hurst M. Williams	J. Antrim, J. Biernacki, B. Connolly, D. Colvin, W. Detert, S. Trefzger, J. Benner, J. Inman
2nd Sun & 6/29	D. Menchen T. McDonald	L. Kirkbride F. Hawk T. Holloran	G. Wade T. Rudolf	R. Anderson, Ed Dorosz, M. & L. McKosky, K. Menchen, J. Muth, P. Pedersen, R.Sexton, M. Debeque, J. Smissaert, T. & G. McDonald, H Goebel, E. Tete
3rd Sat & 8/30	R. Hegele R. Griffiths	D. Green A. Widner	B. Gaerttner C. De Berry	B. Boesel, R. Weaver, D. Klenbanow E. Lopez, T. Bresser, P. Vintrup, D. Rivers
3rd Sun & 8/31	J. Morari B. Paar	B. Oagley	R. Eckels * B. Gabbard	S. Estell, K. Sorrell, J. Koons, M. Keller K. Robertson, S. Shields, T. Bonser R. Reinhart, J. Macnicol
4th Sat & 11/29	J. Miceli J. Murray	T. Bales G. Byars S. Day	J. Jackson ** T. Bales	T. Spillane, C. Lohre, H. Meyerrose, E. Saladin, B. Stoops, A. Dignan, D. Corni
4th Sun &11/30	R. Holzwarth M. Statt	F. Paynter R. Scheper	J. Lubon	C. Burns, R. Cedar, G. Crook, B. Kish, J. Jordan, P. Lubon, G. Stengel, G. Berneir

<sup>\*</sup> Designated Examiner

If you are not assigned to a crew and would like to be, contact Dave Menchen at 513-779-0821.

Former Floating Crew members should contact Dave Menchen for crew credit information.

<sup>\*\*</sup> Chief Instructor