

# M.A.R.C.S. SPARKS

Monthly Newsletter of the Madison Area Radio Control Society  
Madison, Wisconsin AMA Charter #665

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## *Come Fly With Us*

MARCS meetings are held on the first Thursday of every month at 7:00 P.M. in Room 201B of the Madison Labor Temple, 1602 S. Park St. in Madison. Visitors are always welcome. We think we have a great hobby and we invite you to come and see and consider joining us.

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**MARCS Web Site:** [www.marcswi.org](http://www.marcswi.org)

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The MARCS web site contains links to War Birds and Electric Flyers Special Interest Group web sites.

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Contribution of articles for publication is encouraged.  
**Deadline for publication is the 20<sup>th</sup> of the month.**

## July 1, 2004 MARCS Meeting Minutes

*By Andrew Morrow*

**Visitors:** None

**New Members:** None

### **Old Business:**

- Minutes were passed from the previous meeting.
- The Emergency Phone has been properly installed and is working. Thanks to all the helped put it in.
- Warbirds Over Dane went very well and earned the club some money.
- The Flying field will be mowed better from now on.

### **New Business:**

- Jerry is running the Boy Scout Fly-In this year on the 9th. Anyone willing to help out would be much appreciated.
- Alcohol bottles are being found at the field. This is against our agreement with the city.
- If you are at the field please be courteous and follow the rules. When you go to retrieve a plane out on the field, make sure everyone on the Flight Line is aware of it. Also please leave your transmitters at the Flight Line.
- The Nominating Committee needs 3 people.
- The annual Picnic and Float Fly is on the 18th in Marshal. Flying starts at 9, and remember to waterproof your electronics.

## **Philosophy 101**

I knew a man who gave up smoking, drinking, sex and rich food. He was healthy right up to the day he killed himself.

Johnny Carson

## **A Successful War Birds Over Dane**

*By Chris Spierings*

War Birds Over Dane 2004 is history and many things added up to make this a very nice event. Friday morning before the event, the city folks cut the field using their new equipment. I believe this is the first time its been used on our field and it left the grass about an inch and a half long. To me the war bird event was the first tangible evidence that using the new cutting equipment and our efforts at rolling and improving the

## MARCS 2004 Calendar of Events

<u>Event</u>	<u>Date</u>	<u>Location</u>
1.5 Meter Hand Launch	August 14	Long Island Sod Farm
Ken Kindschi Scale Rally	August 15	Kettle Field
<b>Electric Fun Fly</b>	August 21 (re-rescheduled)	Kettle Field

flying surface are really starting to pay off.

The weather was as good as any I can remember at a MARCS event. The wind even had enough of a northern component to avoid the smell of the seaweeds piled to the west and the junk piled behind the field.

Mike Kimmerly and Joyce Jeardeau did a great job keeping folks fed. Dave and Joyce Jeardeau ran themselves ragged getting the food and supplies together and then replacing them as more was needed. Joyce, Dave and Mike deserve a big thank you for keeping the spectators happy.

Enough folks showed up Friday night to deal with early set up that Saturday morning's work was a snap. The folks who showed early Saturday had things pretty well under control right out of the gate and quite a few times I looked at something on my to do list and found that it was already being worked on. My thanks to everyone who came out and helped.

We ended up with 23 registered pilots with lots of club participation and we also had pilots from the Twin Cities, Iowa and Illinois. The Beaver Dam club continues to be strong supporters of the event with, I think, 5 or 6 planes being present from that club. We also had folks attend from the Milwaukee area. One guy and a friend flew a Skylane down from upper Michigan and then picked up his Dad and a friend at Appleton. In terms of spectators we drew from all the states I've already referenced and also from Taiwan. A guy visiting the UW for a conference the week after flew in a couple days early so he could see the event. Apparently he read about it on a web forum called rcscale-builder.com.

I think we had just about every possible size model represented. The worst mishap appeared to be Greg Baer's L-19 and the loss of a 1/5 scale 500 lb bomb from the Meister P-47 that came up from Iowa. If you come across the OD green pop bottle let me know; the pilot would like to have his bomb back. I think the biggest catastrophe was that of the guy from Minnesota who drove all the way down here and then realized he had the wrong radio. His 1/3 scale P-40 was grounded as a result.

I'd really like to thank all the people who helped put the event together and those that helped it run so smoothly.

The positive comments I got from spectators and pilots really is the measure of how an event went. Several people sought me out as the event wound down to told me how much they enjoyed it. At least 5 pilots from out of town came up and complimented the club on the way the event was run and the field's condition. Every one of those pilots expressed a desire to return in the future. Some said they may come back for the Scale Rally.

I had one interesting suggestion made for the event. A fellow suggested that the event could be made even better by inviting re-enactors to attend and put on a display. Apparently Leroy Stuczynski's nephew, from god's country, (Stevens Point) knows some folks who have set up living exhibits of WW2 airborne camps complete with Jeeps and other equipment. A really neat idea I wish I had thought of and acted upon especially since it is the 60<sup>th</sup> anniversary of D-Day.

By the time you get this the MARCS website will have event pictures. Go to [www.marcswi.org](http://www.marcswi.org) to see them.

### And Yet Another Great Event

On July 10 we entertained the Boy Scouts and it was a great success. I don't have a list of people who helped out and so I'm not going to mention any names here, lest I miss some of you, but you know who you are and you were what made it happen.

Even the parents got into building Sig-AMA Darts and one dad was still at it after lunch. One of the mothers built the one that turned out to be the best flyer and she had a ball with it. Another mother told me it was the first such event she had been to at which not one of the kids asked, "When can we go home?" after the first hour. One of the scouts, Ed Miller, who is a MARCS member and had been in flight training for two years but hadn't been able to get much stick time, soloed. There were lots of thanks for having invited

## MARCS June 19, 2004 Thermal Soar Results

Name	RES or UNL	Frequency	Total	Normalized	
				By Class	By All
Andreas, Brian	UNL	39	2707	1000	1000
Harold, Bob	UNL	35	2275	840	840
Scidmore, Al	UNL	40	2104	777	777
Mohs, Carl	UNL	31	2100	776	776
Murray, Lee	UNL	31	2051	758	758
Meyer, Steve	UNL	27	1996	737	737
Yahr, Ben	RES	15	2156	1000	796
Westphal, Wayne	RES	48	1885	874	696
Boelk, Duey	RES	29	1092	506	403
Yahr, Steve	RES	52	1010	468	373
Harold, Bob	RES	35	106	49	39

them.

You guys - and gal - who came out to help with this event really did a great job. It's certainly easy to run something like this with that kind of help.

See a few pictures by David Brickett on page 9.

### 1.5 Meter High Start/Hand Launch Soaring Contest, August 14

*By Al Scidmore*

This event is our annual competition format for smaller sailplanes. Newcomers are encouraged to join the festivities. This is not intended to be a gung-ho hard-nosed competition, but a low key time for trying some new things. Come, experience the fun and excitement, meet some great people, see some beautiful airplanes, see our contest field, fly booming thermals, and learn from some of the finest flyers in the country. The particulars?

Y MARCS will hold an event on August 14th that is limited to sailplanes with wingspans of 1.5 Meters or less. This is the class usually described as "*hand launch*" where the pilot launches the plane by using his/her hand to throw the model.

Y The tasks for this event are designed for this size A/C and method of launch. Most of the tasks require a hand-launch (either discus or javelin technique). Some of the tasks may be accomplished using a high-start designed for this competition. Flyers who would prefer to hand launch (rather than high start) these tasks will be permitted to do so.

Y The pilot may use a substitute human launcher.

Y For the high start tasks only high starts provided by the contest organizers can be used. All high starts used in this event are constructed from 25 feet of ACE 1/4 inch diameter Mini tubing (or equivalent) and 125 feet of towline. The amount of stretch allowed will be limited since we don't want to break the rubber or tear your wings off.

Y Membership in the AMA is required of all contestants. All AMA regulations and policies will be in effect unless otherwise noted here. A non-member may compete by submitting a completed AMA membership form (which will be available) and fees to the Contest Director the day of the contest.

Y PLACE: LONG ISLAND SOD FARM which is near Marshall, WI. See the attached directions and map. The location is quite convenient to I-94.

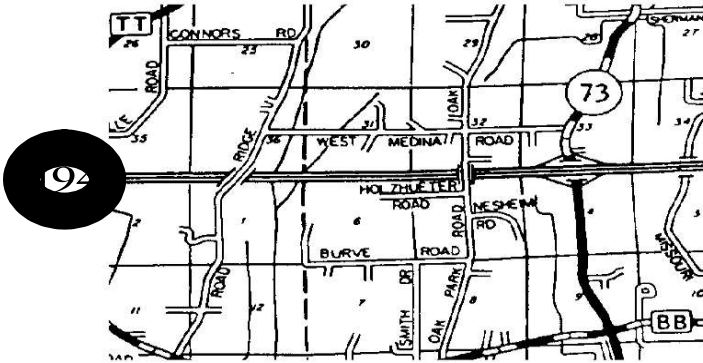
Y PILOTS BRIEFING at 9:30 A.M. with the first flight at 10:00 A.M.

Y ENTRY FEE: A charitable contribution toward expenses will be accepted, but no entry fee will be charged..

Y THERE WILL BE AWARDS THROUGH THIRD PLACE.

TASKS: Tasks will be jiggered to fit the conditions of the day, but will be scored Man-On-Man with a fixed time slot. For example, round one might score the best four flights in a ten minute window with an unlimited number of launches. Flights over 2 minutes in length would be scored as 2 minutes. Scores for all flyers in each time slot will be normalized. Landing points will be available (even from a hand catch) THE

ACTUAL TASKS WILL BE ANNOUNCED LATER. THERE MAY BE BOTH HAND TOSS AND HIGH-START TASKS.



To access the particular 40 acres of the Long Island Farms used for the 2004 1.5 meter event From **I-94** East of Madison, take **EXIT #250**, then Take State Rd. **73** North 0.5 mile, then take **W. Medina Road** West about 2 mi., take **Knutsen Road** North about 1/4 mile. Look for SOAR signs leading into the sod farm. Contact Contest Director, **Al Scidmore**, **5013 Dorsett Drive, Madison, WI 53711** (608-271-5500) for more information.

### Roster Upates

The following are new members who may be added to your copy of the club roster: **Bruce & Jonathon Bandt**, 2819 Manchester Dr., Janesville, 756-0231, [bandtfamily@netzero.net](mailto:bandtfamily@netzero.net), **Jeff Banschbach**, 2409 Crest Line Dr., Madison, [Jeff@banschbach.net](mailto:Jeff@banschbach.net), **Kyle Black**, 870 Arrowhead Cir., Sun Prairie, 837-8409, [krzykyle00@aol.com](mailto:krzykyle00@aol.com), **Ryne Budrow**, 436 Columbia Ave, DeForest, [rbudrow@hotmail.com](mailto:rbudrow@hotmail.com), **David Erwin**, 418 Clover Ln, DeForest, [dkerwin@charter.net](mailto:dkerwin@charter.net), **Norris Headley**, 6922 N. Green Way Rd., Sun Prairie, [nheadley@amfam.com](mailto:nheadley@amfam.com), **Kieth Higgins**, 820 Jerico Ln., Sun Prairie, [k.a.Higgins@horizon.net](mailto:k.a.Higgins@horizon.net), **George & Jaque Jerdee**, 124 Church St., Stoughton, [wponyl@charter.net](mailto:wponyl@charter.net), **Chris Karinopoloulos**, 810 Briarcrest St., Madison, 442-5534, [ckarinopoloulos@hotmail.com](mailto:ckarinopoloulos@hotmail.com), **Steve Kaste**, 5025 Maher Ave., Madison, [skaste@itis.com](mailto:skaste@itis.com), **Kieth Kinney**, 4403 Crescent Rd. #45, Fitchburg, [kkinney@carlsonco.com](mailto:kkinney@carlsonco.com), **Eric Loucks** 6 High Point Oaks Ln., Madison, [eloucks@aeieng.com](mailto:eloucks@aeieng.com), **Paul Olson**, 2 Linden Cir., Jefferson, [pmolson@yahoo.com](mailto:pmolson@yahoo.com), **Jeremy Scott**, 252 Bonnie Rd., Cottage Grove, [jeremy@doit.wisc.edu](mailto:jeremy@doit.wisc.edu), **Randy Smith**, 4224 Winnequah Rd, Monona, [rsmith@isthmuseng](mailto:rsmith@isthmuseng), **Jeremy Teasdale**, 1145 Glacier Hill Dr., Madison, [jteasdale@sbcglobe.net](mailto:jteasdale@sbcglobe.net), **Charles**

**Toms** 925 Eagle Crest Dr. Madison, 288-9649, [ctoms@charter.net](mailto:ctoms@charter.net), **Tom Woodward**, 330 Harbor Town, Madison, 833-6306.

### Liquor at the Field

Just before the July 4 weekend, I noticed three liquor bottles in one of the trash cans. I hope, and believe, that they were not left there by any of our members. I suspect outsiders are coming in over the running trail to party late at night and that's why our field sometimes gets cut full of ruts too.

If you have any information on this, please pass it on to Vince or to any board member.

If any of you are responsible for it, realize that it is a violation not only of a city ordinance to have liquor in a city park, but also a violation of the terms of our lease. It could have dire consequences where that lease is concerned. Hey Mister, wanna buy a new field?

### Common Sense Safety Rules

Recent happenings at the field bring up the need to emphasize what should be obvious.

- Y When you land deadstick or your engine quits before you can taxi in to the flight line, call out "ON THE FIELD," loud and clear. This applies to electrics, too.
- Y Do not go on the field until pilots with planes in the air acknowledge.
- Y Leave your transmitter either in the pilot box area or in the pit area. *Don't take it out with you.*
- Y Clear the field as soon as possible.
- Y If you are a pilot who has a plane in the air, stay well away from the pilot who is retrieving his plane and stay high.
- Y If you have an emergency causing a need to land immediately, call LOUDLY, "Dead Stick," or whatever, to the other pilot to make him aware of the problem. Advise him where to look for your plane. Then land as far from him as you can in the circumstance.
- Y If you are about to take off, wait for the pilot with the dead bird to clear the field, even if he is on another part of it.
- Y Taxiing from the pit area through the pilot boxes to the flight line is not allowed. If you have a large plane, you must push it through the pit and pilot box area with the engine at idle, or start the engine at the flight line gate.

ÿ Hand launches, such as electrics, should be done in the flight line gate area or the flight line edge of the pilot boxes, not out on the field.

There is no magic in this. It's just common sense and courtesy. Good pilots, no matter how new, observe these rules; bad pilots, no matter how expert, don't.

### **A New Member Comments**

I am new member as of April and I have been to the flying field maybe 10 times or more in that time period. I need to say that I have been disappointed by the club and will more than likely not return next year. I will tell you what brings me to this feeling. I joined the club for a few reasons.

ÿ To gain access to the flying field.

ÿ Learn from experienced flyers

ÿ Be a part of a club and be around people who enjoy this hobby as much as I do.

In my past trips to the field I have attempted to talk to some of the guys and get help or just learn from them and chat and get to know them. They have been incredibly rude and in some cases even mean, going out of their way to avoid talking to me and seeming bothered by my being there. This is crap. What is wrong with this club? Why would you be so rude to a person who is new at this and needs help?

I don't know how to explain my disappointment but it is almost laughable. The fact that these guys think they do not need to help is fine but to be so rude about it is ridiculous.

I have never joined a club where you can be almost completely ignored as a member save a flyer in the mail that, by the way, never bothered to mention me as a new member. I am getting sick of going to the field and basically flying by myself. I can do that at a park. Speaking of the field, It is not friendly to electrics due to the grass is not cut often enough or short enough for most electric planes.

I am sorry for the confusing e-mail but you get the picture.

**Editorial Comment:** *The foregoing is an e mail that was sent to the club's web site. If you wish to make yourself known to the club, that's fine, but I am not going to identify you here. Having been signed, however, your message must be accorded credibility. Please note that I am replying to you with my own personal opinion, not the the club's spokesman, but I'm*

sure many members will agree with me. If your perception is accurate, it's not something we need.

Your complaint about friendliness at the field and willingness to help new members, frankly stated, doesn't sound at all like the club I know. On the other hand, I almost exclusively fly on weekday mornings. There couldn't be a more friendly and helpful bunch than the guys who fly then. Moreover, how could any group be more friendly and helpful than those who turned out to help at the Boy Scout Fun Fly? They were a mix of weekday flyers and others.

You don't say on what days or times of day you have been at the field. Do I assume correctly that it was on weekends, or weekday evenings? **Aside to other members:** It might be good to look around you and assess what is happening. Are you and your fellow flyers treating others the way you would like to be treated? Weekend and evening flyers are mostly those who have limited time to fly because they must work. Perhaps some are jealous of their stick time when it comes to helping others. I certainly don't know that to be the case, but it may be true. Whatever, rudeness is always inexcusable, but this is the first complaint I've heard.

Where your comment about the field condition, closeness of grass cut, is concerned, I believe your expectation is not reasonable. Because of all the rain we have had, it has been impossible for the Parks Department to maintain the field as they usually have. The grass grows like Topsy and sometimes there has been so much moisture in the soil that mowers couldn't go on the field at all. When weather conditions permit, I believe the Parks Department does a great job of mowing and a modicum of forbearance toward them is certainly indicated when weather intervenes.

You mention flying in parks. I doubt that many park flyers were ever intended to take off from a grass field, even under the most ideal conditions. Rather, they seem to me to be intended for hand launch or a hard surfaced runway. I believe we should consider creating a surface suitable for electrics on some portion of the field. Electrics have become a significant part of RC and we need to consider how we can reasonably accomodate them, for they are us.

Where being introduced to the club is concerned, that is done at meetings where the new member is asked to introduce himself and tell about what he flies and his interests. Then he receives a welcoming round of applause. If you haven't been through this, consider

coming to a meeting. New members are identified in these bulletins as space allows, as above, to allow members to update their club rosters. *Aside to club Secretary:* I believe you should include new member and visitor introductions and Show and Tell presentations in your minutes.

I don't know if your complaint about rudeness is objectively accurate or not, but in the absence of evidence to the contrary I must consider it to be and any offending members should mend their ways. At the same time, however, you should consider that we are a big club. In such a group, there are likely to be a few duds and you may have found one or two. If so, I wish you wouldn't judge us all by them. I encourage you to try again and especially to get involved in dome flying this winter. You will find that group very friendly, indeed. I would also encourage you to get involved in some of the club's events. You weren't at the Boy Scout event nor the picnic and float fly. Why not volunteer to help at the Kindschi Scale Rally on August 15? You will meet some great people there. Just call Don Weigt at 238-9402. The Electric Fun Fly on August 21 should be right up your alley. Call Dave Rush at 838-9704 and offer to help. You'll meet some good people there too.

If some of us are duds I hope they will consider this a wake up call where common civility is concerned.

## **The Bent Bird**

### **Computer Radios: Boon or Bane?**

Ah, flying season finally seems to be here! It's warm, the days are still long, the rains have become less frequent, and the puddles and muddy parts of the field are drying and firming. Let's charge those radios and go fly!

All the better (higher priced!) radios these days, and many of the midrange ones are "computerized." This offers many advantages, but also some nasty pitfalls. Most of us are buying and using these radios, which is fine. But, we need to take care not to get bit by the things that can happen, and a hardy few may decide to stay with simpler radios as long as they remain available. The less often we use all those features, the more likely it is they'll trip us up sometime.

In the "good old days", transmitter stick travel caused a fixed amount and direction of servo travel. Trims were affected only by the setting of the transmitter trim tabs. To change control throws, we moved the pushrods to holes farther in or out on the servo arms or

control horns. To change the neutrals, we unhooked clevises and cranked them in or out on the threaded pushrod ends. Differential or exponential travel was only possible if you made clever linkages, or accidentally did something that had an unintended effect! Reversing travel meant rewiring a servo or adding an inline electronic module, so most pushrods were moved to one servo arm or another to get the right travel direction, even though it made some of the pushrod routing less than ideal.

When I got back into the hobby (again!) about 1998, I had never flown with a computer radio. I went to the Scale Rally that year, and tried to see what everyone was using. I saw mostly computer radios. I also saw at least one fine model crash because the pilot selected the wrong model or the wrong rates. Hmmm. I wondered if computer radios were really a big improvement or a gimmick.

It's easy to see why computer radios are popular. We can reverse servo travel, change travel ("volume") and neutral model by model, have exponential and differential control of the primary flight surfaces, high rates for wild maneuvers and low rates for smooth flying, and so on. On the other hand, most transmitters have limited displays and menus that are not obvious, so you should take the radio manual along when you go to the field. I suggest you keep it in a ziplock(tm?) bag so it stays clean.

All that flexibility means we're in big trouble if we try to fly one model with another selected, or maybe even if we've selected the wrong control rate before takeoff. It means we may not be using the servos to best advantage, too, which may seriously reduce the quality of control we experience. We may also do something new while a model is flying and cause a wholly unexpected problem.

So, we should always check the neutrals, control travels and directions, and throttle range when we switch models. If controls are reversed or if neutrals or travels are odd, we probably have the transmitter set for the wrong model. Sort it out before you take off!

Dual rates are nice, but what if you don't use them? I make all the settings for the two rates the same, so that if I flip a switch in flight it won't change the way the model flies. Otherwise, having that switch set wrong before taking off or flipping it during flight may cause a very large change in model behaviour, maybe even making it crash. I think sometimes the factory setting is for zero travel: switch to that, and that control freezes!

We don't want that! It's often pretty easy to match the settings. On my transmitters, I just toggle the rate switch for that control as I change each travel and exponential setting, and match the two sets of adjustments. Direction probably will only need to be set once.

Exponential travel is a very nice feature I use on most of my models. It makes control response softer around neutral while keeping full travel at the extremes. It's nice for flying smoothly with enough control for quick tight maneuvers. If your transmitter has dual rates, make sure you have the same amount of exponential selected for both, or really want them to be different.

Travel amount, or "volume", is handy, but use it sparingly. The servos you use have a limited amount of torque. That means the maximum force they can deliver at a given point on their output arms is fixed. To get full power for moving the controls, you need to use their full travel. Don't reduce the high travel much below 100%, or you'll end up with less power (force times distance) for moving the controls. Instead, use a hole farther in on the servo arm, or one farther out on the control horn. That way you'll have the full power (available work) from the servo for control deflection.

Another effect of using less than 100% of available servo travel is poorer centering. The servo output arms will center with the same accuracy whether the transmitter uses 10 or 130% travel "volume". If the arm is moving only a little way for full travel, the centering band will be a larger percentage of full travel. As travel range is increased, that fixed centering band becomes a smaller percentage, effectively improving. Moving the output arms farther (more servo travel) also reduces the effects of any play in the linkage between the servos and what they control.

Moving the pushrods or pull-pull cables farther out on the servo arms results in more motion and lower forces, reducing the effects of play and stretching or compression of pushrods or cables. This improves control accuracy and sometimes makes smaller lighter hardware adequate for a given model.

One last effect of using small servo travel for full control is more disturbance from glitches. When a small amount of servo travel gives full control, glitches or other loss of control can still cause full servo motion, so the upsets may be much more violent than full control inputs! That's another reason for adjusting control linkages so nearly full servo travel is used for full control.

The only disadvantage of using full servo travel

is that the speed of the servo arms is pretty constant, so it will take the servos a little longer to make any given change in control position. But, many servos are so fast it isn't a problem for most flying.

Finally, all that computer flexibility can cause unexpected problems in the air. My PT-19 has two servos for the ailerons, and uses two different channels for differential travel: each aileron moves upward nearly twice as far as it moves down. One servo is plugged into the aileron channel, the other into the flap channel.

There I was, flying my PT-19. I decided to try adding the control operations I would need to fly a Spitfire, if I ever build it. That meant raising the landing gear after takeoff, and lowering the gear and flaps before landing. I flipped the gear switch for takeoff and landing with no problems, but when I turned the flap knob, the plane veered off to the side. Oops! Even though the flap channel was now controlled by the aileron stick input, it still had the flap input added in.. I turned the flap control back near where it had been (no detent..), added power and safely got back to altitude. Then I adjusted the flap control until the aileron trim seemed to be the same as before the problem. I landed without any difficulty, so it turned out OK. But, I could have destroyed the model, engine, and radio.

The lesson I found in that adventure was that I should have checked the manual before using the flap knob while the model was flying. There's probably a way to change the flap control to a spare channel, since differential ailerons requires using the normal flap channel. I also should have tried both the landing gear and flap controls on the ground before using them in the air. So, I made at least two mistakes, and still got the model down safely! I think I also (re)learned an important lesson about checking out any new operations carefully before trying them in the air.

## **Flying the Mail**

*By Jerry Buss*

1920 was an election year and there was fear in the Post Office Department that Harding's new Republican administration would severely cut or perhaps even eliminate air mail service, since it had been treated as a political football during the campaign. It was popular enough along the routes it served, but that was a minority segment of the country and much of the rest was rather disinterested after the initial thrill had worn off. Many regarded it simply as a pet of the outgoing Wilson government.

To publicize the utility of air mail, Postmaster General Bredeson and Otto Preeger planned a dramatic demonstration before the Harding inauguration in March of 1921. Airborne radio direction finding equipment, beacon lights and runway lighting did not exist and thus mail routes were flown only in daylight and this narrowed the advantage of air transport versus rail considerably. If operations could be continued overnight a great leap forward would be achieved and good publicity might result in a favorable outcome for air mail in the new government. So it was that on February 22 two planes took off from Hazelhurst, NY headed west and two more left Marina Flying Field in San Francisco, headed east.

E.C. Leonhardt took off first on the westbound route at 6:00 a.m., Eastern time. After refueling at Bellefonte, he encountered gale force winds and was forced down. Ernest Allison succeeded in getting through to Cleveland, where he handed off to Wesley Smith who carried the mail on to Maywood Checkerboard Field in Chicago, but blizzard conditions existed there and take off for the next leg was impossible. It all hung on the eastbound flights to put on the desired demonstration.

W.F. Lewis, who had been flying the mail for only 4 months, got off from the California end at 4:00 a.m., Pacific time. Right behind him, Farr Nutter, a far more experienced pilot, also departed. Both cleared the 10,000 foot Sierras and landed at Reno without incident. Lewis refueled quickly and moved on to Elko, still with no problems. Nutter relayed his mail to J.L. Eaton, who followed Lewis, and arrived at Elko to discover that Lewis had just been killed when his plane stalled on take off and spun in.

At 9:31 Eaton left Elko for Salt Lake City, the entire weight of the demonstration weighing on him alone. All went well, however, and he handed his cargo off to James Murray (who soon was to become famous for being forced down and being tracked by a bear on his walk out), who carried it on to Cheyenne, arriving at dusk. Here he handed off to F.R. Yager, headed for North Platte. It was dark now, but he knew the route well and there was a full moon so he had no problem with navigation. At Cheyenne, Jack Knight, who the reader will recall as a participant in a mock wedding celebration at Bellefonte, waited to carry on to Omaha. An achievement was about to occur that was to become a legend of the air mail service.

Knight's plane was warmed up and ready to go

when Yager touched down, but at the last moment it was discovered that his tail skid was broken. It was an hour before Knight could get off and it may have been a blessing in disguise, for he got a chance to catch a brief nap. He had already flown a relay to Rock Springs and back earlier in the day and he was about to get a much longer flight than anyone had anticipated. At 10:44 he lifted off, following the Platte River toward Omaha. People along his route who had radios and knew of the race that was going on had lit bon fires to help guide him.

Arriving at Omaha at 1:10 on the morning of February 23, he discovered that his relay, pilot, Wesley Smith, was snow bound in Chicago. When the local Superintendent of Air Mail, William Votaw, informed him that the demonstration was failed because there was no one who could take the next relay, Knight said, "We can't let the transcontinental effort end here. I'll fly'er through." He and all of the other pilots recognized full well that unless they could put on a successful demonstration, Congress very well might reduce and possibly even eliminate the air mail budget allocation. Their jobs might be hanging in the balance. Votaw was reluctant to agree to let Knight go, knowing that he had too many flying and too few sleeping hours in the past 24, but permitted himself to be swayed into allowing it. He almost changed his mind when he learned that Knight would be night flying over a 425 mile route he had never seen before. Moreover, there was a snow storm over the eastern two thirds or more of Iowa and he would be flying into it.

After warming up, having a lunch and studying Iowa and Illinois road maps, Knight was off at 2:00 a.m., intending to set down in Des Moines, but when he arrived he found a treacherous cross wind and that the field seemed to snowed in. He had no choice but to continue on to Iowa City, a further 120 miles. A half hour later, he met the snow storm, but battled on. After a couple of passes over the field at Iowa City, he got the attention of the night watchman who lit some signal flares to mark the runway. Although he managed to land safely, the service staff had all gone home and he and the watchman had to refuel the plane as best they could.

At 6:30 Knight was back in the air and soon outran the storm, but the Mississippi Valley and the land beyond were socked in by ground fog. There was nothing to do but rely on his compass and hope. Finally he was rewarded by the sight of smoke stacks sticking

up through the fog and at 8:40 a.m., with the fog dissipating, he landed at Maywood Checkerboard Field on a newly cleared runway. The people of Chicago and much of the rest of the country had been listening on radios and were aware of what was happening and a huge crowd waited to welcome him, some still dressed in formal evening attire. Reporters and photographers were on hand and within a day the name of Jack Knight was known all over the country. He had made the first night time carry of the mail by air and had covered 680 miles in terrible weather. He was "the hero of the air mail service."

J.D. Webster left Maywood just before 9:00 a.m., handing off to Ernest Allison at Cleveland. Allison battled high winds and snow, but landed at Hazelhurst Field on Long Island at 4:50 p.m. Seven pilots had flown 2,666 route miles in less than 26 hours flying time and a total elapsed time of about 33 hours and 29 minutes, about 3 days and 2 hours less than the best possible rail time.

Whether the night flight demonstration had anything to do with the Harding administration's treatment of air mail or if it was only political posturing on the part of Praeger and Burleson is sheer speculation. As it was, the new Postmaster General, Will Hays, who would go on to become Hollywood's morality censor, along with Otto Praeger's replacement, Col. E.H. Shaughnessy, continued to build the air mail service. Their goal was the same as that of the Wilson administration, to build a profitable operation that could be handed off to private business and clear the way for commercial aviation in general. That they succeeded is proven by the scheduled airline industry which sprang directly from the US Post Office's air mail service.



Jack Knight, "The Hero of the Air Mail Service"

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### **Pix from the Boy Scout Fun Fly**



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Les Thorp spots for Ed with a Scout on the buddy box.



Bill Rewey helps Scout and Mom build Sig-AMA Darts.  
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