

# National Control Line Racing Association

Volume 4, Issue #4

November 1997

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## Win a \$400 Nelson Merchandise Certificate

### 1998 Nats Planning Meeting

First we are pleased to announce that Roy Gould will serve as our event director for the 1998 Nats. This year we plan to implement some changes in the Nats to help Roy, and to make the event better for all the competitors. One of the changes will be to have a public address system in place so the competitors will be able to hear calls from the ED. Another addition will be to have a large easy to read clock to keep the events moving in a timely fashion. We will probably run on a 5 min. interval between races. This seems to be adequate time. This however, requires the competitors to have their equipment in the pits, and checked and ready to go when their heat is announced. Adhering to a set time is the most equitable way, thus insuring that no one competitor is given more or less time between heats. We have also asked for the Judging tower to be brought to the racing circle, this will give Roy a good view of the entire circle, thus permitting a better control on high flying. *as a note of comment please be advised, I don't recall a single heat or team that was not guilty of high flying. So if you get called remember be careful what you ask for you might just get it.*

Another major change this year

## Thats Correct. Help Support the 1998 F2C Team. Page 4 for details

will be the addition of the fifth day. Racing enjoyed a 16% increase in 1997, this has prompted us to move to 5 days of racing. *Remember this was brought up at the Nats banquet* The 1998 Schedule is published later in this edition. Again this year JR/SR entries will fly free. Please however, send those JR/SR entries in before the pre-registration deadline. Trophy counts are based on pre-registration. Even if you are not sure about attendance, send in those entries. You are only out the cost of postage to insure a accurate trophy count for the JR/SR participants.

This year as in the past couple we will be holding two NCLRA supplemental events. These will be NCLRA Fox Racing and Mouse II. We are again pleased to announce the continued support of NCLRA Fox Racing by Fox Manufacturing. Fox will again be providing fuel and 3 engines for the JR/SR bracket.

A change this year in our fuel supplier, we are currently in talks with a couple of interested parties to supply fuel. One intent is to find a supplier that has this blend in a ready to buy

format, so watch the newsletter for an announcement forthcoming as to the 1998 Nats fuel supplier. See you at the Nats.

### **Mouse Tips**

by Paul Gibeault

"There have been reports of fuel leakage emanating from tiny unseen cracks in and around the four 2-56 screw holes in the Cox backplate. One of the symptoms may be simply a shortage of laps.. I have seen:

1. Mini O-rings made from silicone tubing or actual o-rings made to fit around the heads of the 2-56 screws.
2. The hole cavity filled w/ silicone glue after assembly.

Although the above may have merit, I personally just clean the backplate & apply a strip of fas cal combat covering. So even if the holes may leak, it won't go past the fas cal seal. This works most effectively during on the field engine dis-assembly which is often req'd. Of course the area for the venturi intake is cut away with a sharp exacto knife.

#2

One thing you must be very cognizant of when disassembling your engine is the upper area of the tank that protrudes into the crank case. A quick check of most engines will reveal gouging in this area. The gouging of course comes from the lower piston skirt hitting the tank at the bottom of its stroke. This of course is a bad situation that I've handled in one or more of the following ways:

- A) With a round jewelers file, file the gouge away & a bit more to provide the clearance necessary.
- B) Use a newer tank assembly incorporating the nylon reed retainer.

Gouging of the nylon is by far more tolerable than gouging of the aluminum. Dress out the nylon also if necessary.

C) Replace the crank case and or piston with parts that have slightly more clearance.

D) In all cases, you must make sure that the piston/rod ball-socket joint is tight within .002" or so, as a loose fit here alone can in itself cause substantial gouging. Also, any time this gouging is found, a note should be attached to the engine indicating that after its next race, a disassembly & re-inspection is required to ensure the problem is rectified.

### **Items Wanted**

The NCLRA is looking for items to make our organization one of the premier groups in aeromodeling. Bob Whitney has donated a generator and a pull scale to the NCLRA. Plans are currently being made to get the generator to Muncie. Bob Oge has donated a set of 0-1" micrometers for measuring lines. Thanks Bob & Bob

Have an old item? Here is what we are looking for:

#### **Public address equipment**

50-100watt amplifier  
Speakers  
Microphone

#### **Racing equipment**

Lap counters  
stop watches  
100' tape  
T/R Tank measuring equipment

If you have any of these items and would like to donate them to the NCLRA please contact us so we can truly make this the best special interest group in aeromodeling.

**Contest Reports****Bill Lee**

Spring Warm-up - April 20, 1997 Dallas

## Mouse I (Open)

- 
1. John McCollum 5:04.72
  2. Bill Lee 5:12.85
  3. Kenny Perkins 6:33.00

## Mouse I (Junior/Senior)

- 
1. Rush Loy 30 laps

Dallas Aero Summer Heat - June 14-15, 1997

## Mouse I - Jr-Sr

- 
1. Travis Chapin 55 laps

## Mouse I - Open

- 
1. John McCollum 5:18.90
  2. Mike Cauthron 7:58.90
  3. Bill Lee (DNF)

**Dayton OH, "Just Racin"**

A very hot and humid day greeted the contestants at this 1st annual event. With a full day of activity planned the heat took its toll on both man and machine. Events to be flown included Mouse I, NCLRA Fox Racing, Scale Racing, Slow Rat, and Limited Goodyear.

Mouse drew 11 entries with Bill Reynolds finishing 1st with a time of 6:15.8, Pat Matson took 2nd at 6:38.1, John Sunderland 3rd at 6:41.7.

NCLRA Fox Racing saw 15 entrants do battle, and for a while it looked as if the 1st and 2nd place finishers at the Nats would meet again. However the heat races proved that theory incorrect. With Dave McDonald running a 6:03 in his heat race, and Mike Matson turning a 6:12 to set the class of the field. The final saw Dave McDonald, Mike Matson, and Les Byrd do battle. Mike Matson turned a

excellent 6:02.4 to take 1st place. With Dave McDonald running a 6:09.4 for 2nd, and Les Byrd 3rd at 6:31.97.

Scale Racing had 6 entries, with the team of Dziak/McDonald finishing 1st at 6:15, 2nd to Pat Matson 6:44, and third to Dave Betz 13.32.

Slow Rat had two fliers take to the sky and both of those were Jr. entries from Muncie. (a little practice for 98?) Scott Matson finishing 1st, and Doug Short taking 2nd.

**Muncie, IN "The Great Fox Race"**

Oct. 19

This event used the NCLRA rules with the exception of number of laps. Heat races of 300 laps determined the three finalists for a 500 lap shoot out. Entries from Illinois, Ohio, Indiana and Arkansas, came to do battle.

	<b>Name</b>	<b>300lap</b>	<b>500lap</b>
1	Pat Matson	16:46.63	28:51.20
2	Dave McDonald	18:13.05	30:44.64
3	Mike Matson	17:50.13	DNF

Remember folks we cannot publish results if you do not send them to us. D.McDonald, P.O. Box 384, Daleville, IN 47334 (email DMcD143@aol.com)

**NCLRA Points Standings**

<u>Event</u>	<u>Pts.</u>
<b>Mouse I</b>	
Bill Lee	26pts
Bruce Duncan	17pts
Scott Matson	16pts
<b>NCLRA Fox Racing</b>	
Mike Matson	31pts
Pat Matson	27pts
Scott Matson	17pts
Les Byrd	14pts
<b>Scale Race</b>	
Dziak/McDonald	32pts
Willoughby/Oge	13pts
Ricketts/Ricketts	6pts

**Slow Rat**

Mike Greb	16pts
Rich McIntyre	14pts
Dave Fischer	5pts

**F2C**

Willoughby/Oge	13pts
Ballard/Lambert	13pts
Ascher/Ascher	7pts

**Fast Rat**

Bob Fogg	8pts
Roger McIntyre	5pts
Bill Cave	4pts
Mike McCarthy	4pts

**1998 Nats Schedule**

July 13	#312 Slow Rat NCLRA Fox Racing (2:00pm)
July 14	#317 Scale Race
July 15	#318 F2C NCLRA Banquet
July 16	#313 Mouse I Mouse II 2:00pm (Supplemental)
July 17	#311 Fast Rat



Dave McDonald (L) presents Dr. Laird Jackson (R) his plaque recognizing his induction into the NCLRA Hall of Fame

**Help support the F2C Team**

The future of FAI funding is once again becoming increasingly talked about. The current levels are possibly going to be reduced. Therefore, the NCLRA is taking steps to help.

We are pleased to announce that we are selling the opportunity to receive a \$400.00 merchandise certificate from Henry Nelson of Nelson Competition Engines.

With your \$5.00 contribution, you will receive a ticket toward the opportunity to claim the merchandise certificate. The more tickets you buy the better your chance of winning. Just think for a small investment, you could have that new Nelson Engine, or any of Henry's other fine items.

Enter today, and often  
Tickets are \$5.00 each

Make checks payable to:

NCLRA F2C Fund  
c/o Dave McDonald  
P.O. Box 384  
Daleville, IN 47334

Please enclose a SASE so we can expedite your ticket back to you.

All profit from this goes directly to support the 1998 C/L F2C Team. Thank you for your support.

## NCLRA Bulletin Board

**Wanted!**

Wanted Supertiger X29 Crankshaft.  
Contact: Ron Salo, #10-8280 Bennett  
Rd. Richmond, British Columbia, Canada  
V6Y 1N5

**For Sale!**

F2C Equipment:  
For Sale 2 Vorobiev FE TR

**NCLRA WWW Page**

<http://members.aol.com/DMcD143/index.htm>

engines, 1 with new style backplate, 1 with old style. \$250.00 each Contact : **Kenny Perkins, 4011 Lacewood Dr., Memphis, TN 38115 TX# 901-365-6749**

For Sale 1 Vorobiev crankshaft (used) for FE engine \$25.00 USD, FE case with F&R bearings and collet \$25.00 USD, Head \$15.00 USD.. contact:**Dave McDonald, P.O. Box 384, Daleville, IN 47334 TX#765-378-7228**

For Sale Zalp T/R engine New/Manufacturer rebuilt, includes 2 tanks. \$400.00 USD..contact:**Bob Whitney, 7840 NW16 Pembroke Pines FL, 33024 TX# 954-983-3624**

#### Slow Rat Equipment:

For Sale, set of foam cores for a Medfly slow rat, excellent quality. \$25.00 USD contact: **Dave McDonald P.O. Box 384, Daleville, IN 47334 TX# 765-378-7228**

#### Fast Rat Equipment

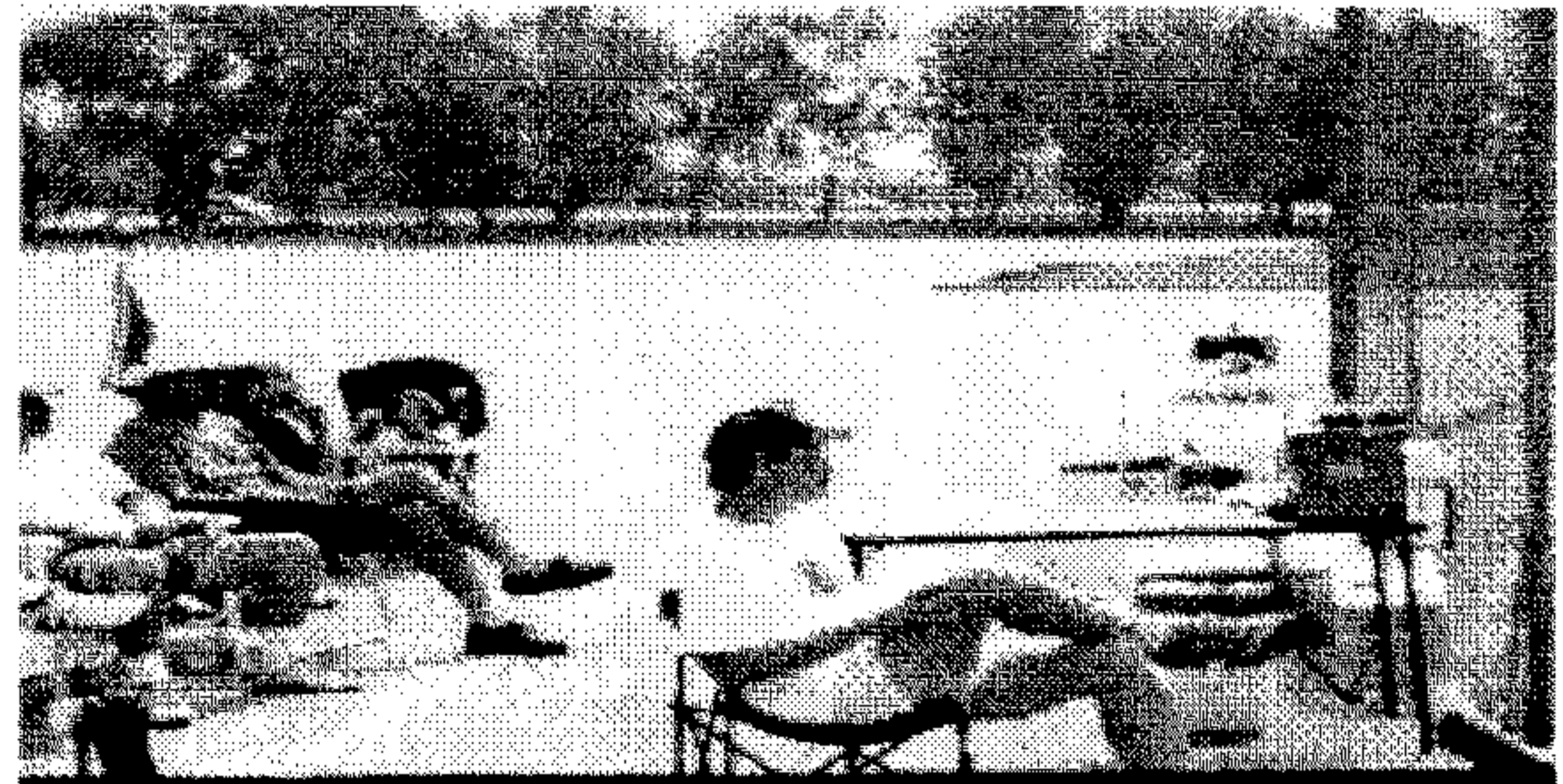
3 composite rats. Info and prices follow if anyone is interested. Weights are without pan, tank, and q-fill. All use Harters full pan, trimmed to approx 12 inches. All fit K&B 6.5. Work best with AAC conversion and lightened crank. Bare trimmed pans weigh approx. 96 gm. R-33 has pan, They all fly virtually the same. All have run in low 11's under the old 10% rules. These run 11.5-11.9 with our K&B 6.5s under current .25 dia. carb rules. All are capable of running under current Rat records with good race and pits. Variations in weights were from differing assembly experiments. All have approx. 25 gm non-removable wing tip weight. I will provide drawings for pan, mechanical quick fill and filler and engine head (K&B 6.5) or what ever is needed. Will assist (advise) whoever buys one as much as is needed ( setup, pressed tank ends, loan of tank forming mandrel, q-fill springs, repairs, etc.). These Rats are not pretty, but they are functional. Will also sell complete tooling set and laminate

schedules for the rats (15-20 molds, fixtures, tools, etc.) since I do not plan to make more. R-33 (includes plane with pan,tank,q-fill {but not filler}, shutoff) \$350 2nd (of 8) rat produced from the current composite tooling. Ran 1st at Lincoln Nats. Full body painted K&B red (all others are only trim painted to save weight)has 1/8 wire gear instead of Ti strut (costs about .1 sec)Only rat who's pan is not interchangeable with R34-R39. Weight 430 gm. Pan with tank,q-fill,shutoff - 140 gm First Flown in '86, last used as backup '89 Nats? Harters pans, original package, still lacquered, \$40 Contact:**Bob Fogg, 11272 Carroza Ct. San Diego, CA 92124 TX# 619-560-0892**

#### Misc.

Fox .15 Sch. Russian made, Glen Dye fitted,replacement ABC piston/liner assy's. Less vibration & more power.  
1. ABC p/l assy w/ Rossi wrist pin US\$40.00  
2. ABC p/l assy w/ Rossi wrist pin fitted to Fox rod. US\$50.00  
3. Fully modified Fox .15 "Clown Racing Special" (you must supply new engine)US\$100.00 contact: **Paul Gibeault, 54-5380 Smith Dr, Richmond BC, V6V 2KB Canada**

If you have a item or looking for one, send us your info. Not only will you get it published in the newsletter,



Stoo Willoughby contemplating his next move at the F2C Trials.



Tim Gillot prepares to launch his F2C model during a practice flight at the Team Trials.

Team	Best time	Total
Ballard/Lambert	3:19.97	10:10.1
Ascher/Ascher	3:22.2	10:12.6
McCollum/Lee	3:21.8	10:17.1

**NCLRA Renewal**

Yes it is that time of year again. We are pleased to announce that we experienced another successful year in the membership rolls. This year infact may have been our best. With membership up 25% since this time last year. Without you the member the advances we have made, and plan to continue to make would not have been possible. So Thank You, and again this year I would like to challenge each of you to bring in one new member to our group. Keep up the good work.

The following members are paid for 1998, if your name does not appear here please send your dues to:

**Jerry Meyer**

**8 S. Grace St.**

**N. Aurora, IL 60542**

**Dues are \$10.00 US, \$12.00 Outside US**

- |                    |                 |                |
|--------------------|-----------------|----------------|
| George Aldrich     | Betty Fox       | Lou Crane      |
| John Lowry         | Joe Just        | Harold Downing |
| Steve Eichenberger | Juan Scaltritti | Bob Oge        |
| Roy Gould          | Dave Fischer    | Tom Tabor      |
| Richard Palmer     | Ron Hoogenkamp  | Jeff Cleaver   |
| James Strickland   | Joe Shoemaker   | Carlos Perren  |
| Robert Yurcik      | Robin Freeman   | Pat Rowan      |
| Richard Kulas      | Bill Harding    | James Gill     |
| Joe Spanovich      |                 |                |

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

AMA# \_\_\_\_\_

TX# \_\_\_\_\_

E-Mail \_\_\_\_\_

**F2C Team Trials**

The 1998 F2C team was recently selected at Whitter Narrows. The team this year consists of the same group as the team that represented the US in Sweden. This time however the qualifying order of the teams are different.

#1 Qualifier and in my opinion the class of all the F2C teams is John Ballard&Dick Lambert. Many hours of practice showed. Along with top of the line equipment.

# 2 Qualifier this year was Lenard & Aaron Ascher, they seem to have found some speed since the last trials, and better stops made a difference for this team.

#3 Spot this year goes to the team of John McCollum & Bill Lee. Campaigning some of the same equipment that took them to Sweden, additionally this year they had two decent running home built airplanes with Mazniak engines. Some prop work should make these two airplanes better in the future. The airplanes looked good, maybe we could get Bill to send us info on making the wing?

Making a good showing after 3 or 4 years out of competition was Tim Gillott with Tom Fluker handling pilot duties. Tim runs his own engines and airplanes, and with a little luck of a few calls could have been on the team. The second alternate position goes to team Willoughby/Oge, despite having compression problems managed to claim the 5th spot.

**Good Luck to all at the 98 WC's**

**In air RPM**

After watching a couple of the good speed flyers checking in air performance of their model I decided I too need a way to see what my Goodyear engine was doing after launch. One night while talking with Bob Whitney, I told him what I wanted to do, and he sent a article on the basics.

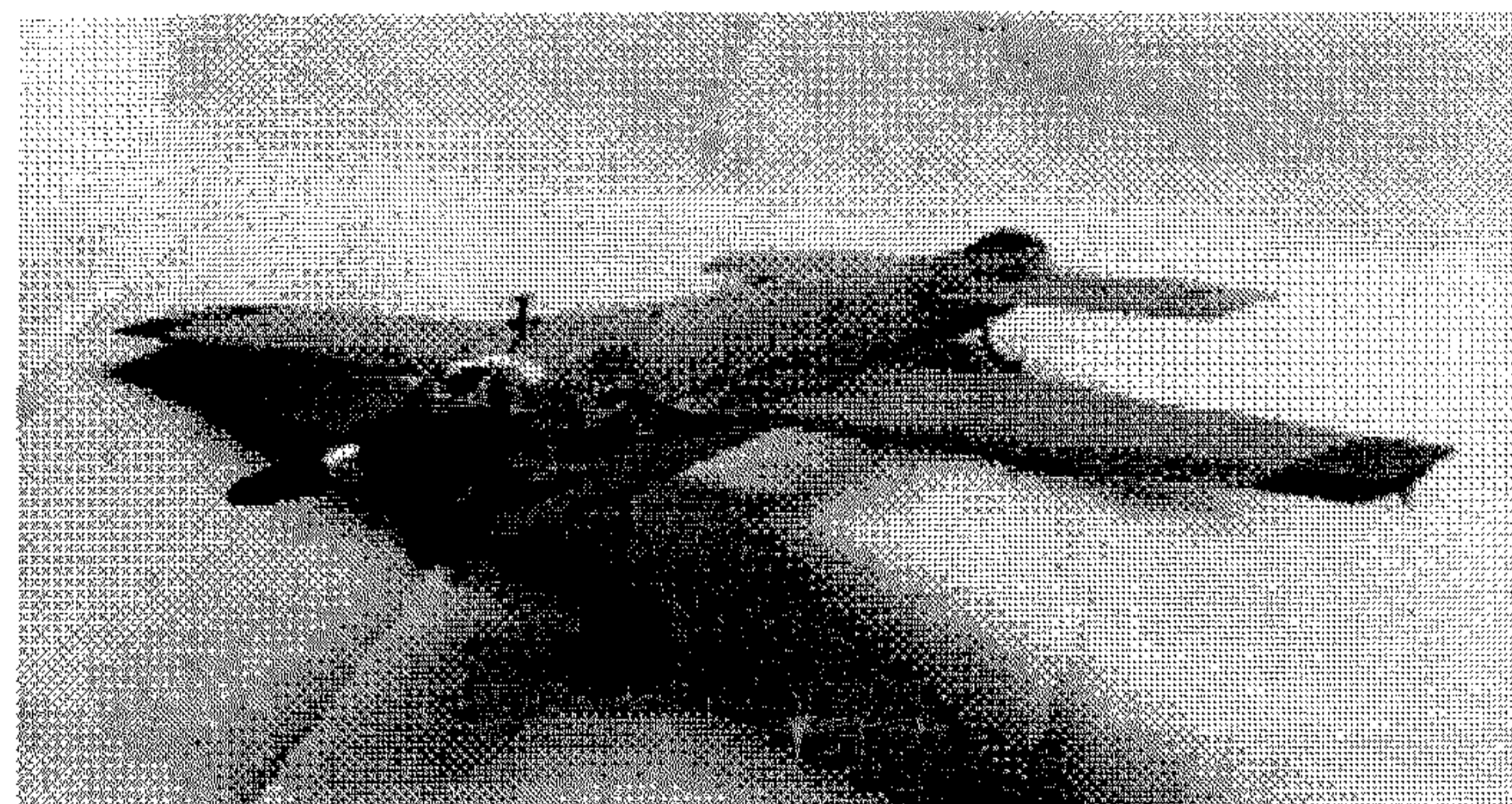
The next step was to build such a device. First you will need a good pocket tape recorder, and a tachometer. After going to Radio Shack and purchasing a book "Engineer's Mini-Notebook" on 555 timer IC Circuits, I was all set to begin. What you want to build is a voltage-controlled oscillator, with a LED added. You can build this modelers black box for approx. \$20.00. When finished you will have the necessary equipment for developing a baseline for in air performance.

The equipment works in the following way. Take your tape recorder to the center of the circle and start recording. After the flight is over, turn off the tape recorder, and get out your "black-box" harmonize the sound from the box and tape. Take your tach and put it in front of the LED you installed in the oscillator, and you will actually be reading the pulse of the light. Don't worry you cannot see the LED flash, but it is. The tach will tell you how fast the light is flashing, this is very close to what the engine is doing in the air. By recording this, and keeping a log of engines, props, airplanes, weather, you will determine a base for engine performance.

I have tested this system by running a engine on the ground, taking a tach reading, while the tape was

recording. This way I knew what the engine was infact doing. After shutting off the engine, rewinding the tape, I harmonized the two sounds (from the tape & from the oscillator). After the two sounds were in harmony, I placed my tach in front of the LED and and took a reading. Too my surprise, I was within 100 RPM of the tach reading from the ground. This gave me an accuracy of .996%. Close enough.

So try this, you might be surprised just what your engine is or is not doing in the air.



Paul Gibeault sent us this photo of a Mouse I he tested for Lenard Ascher. Maybe we could get Paul to give us some more info on this interesting design?

Wanted!! Articles for the Newsletter. The old mail bag is EMPTY!! We need your assistance to keep a timely flow of information. Have an event? Send us the info at least 3 months in advance to insure publication. So don't forget, send those articles in today.

**Purchase your ticket  
to win \$400 Nelson  
Merchandise Certificate**

**Don't Forget  
Renew your NCLRA  
Membership Today!**