CENTRAL INDIANA AEROMODELLERS

INFORMER

FREE FLIGHT NEWS OF THE MIDWEST

** The Weather **
Ne'er trust
a July sky!

- Editor -
Moe Whittemore
2348S, 700W
New Palestine
IN 46163
(317) 861-4266

Issue # 3/98 | May/June | Price $7.50/yr.

Testing, Testing.....

About the first of the year, Agent **Mark Wood** machined himself up a really neat model engine test stand. Caused quite a buzz when he showed it off during a CIA meeting's sho 'n tell segment. He also brought along some preliminary test results gotten on a Nelson .15. I'll let Mark tell about it.....

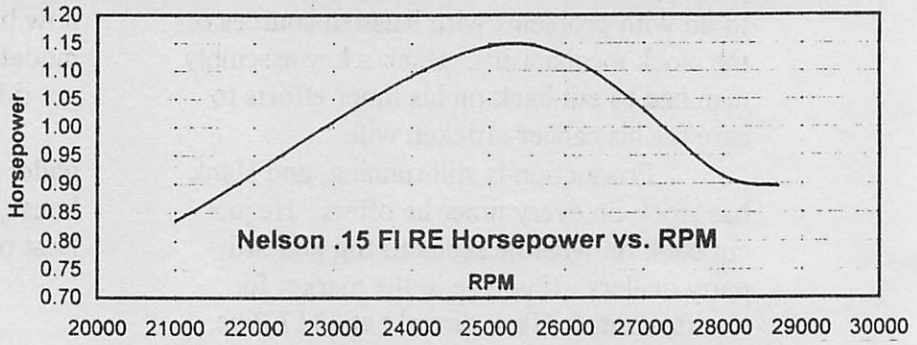
"I did some interesting testing over the holidays. I've been interested in working on a new propellor for my F1C projects, using the prop design portion of Martin Heberle's web page. The missing information I needed was the horsepower of the engine. I've many different versions of the horsepower output of the Nelson .15, so this information was unreliable at best."

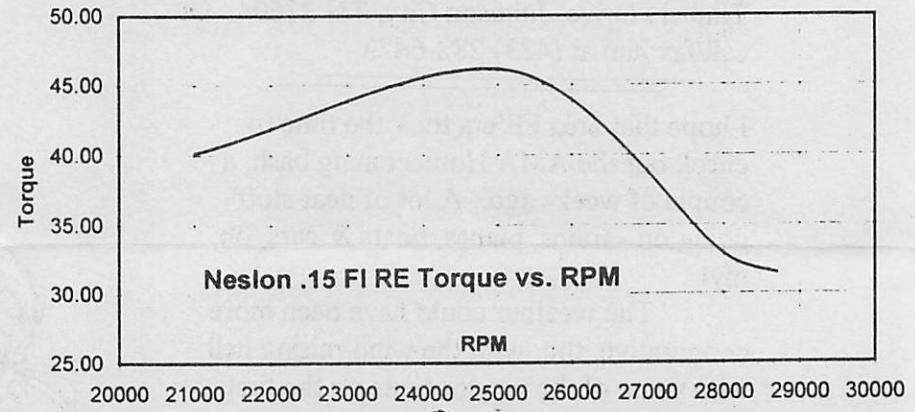
"True to form, I went off on a tangent and built a test stand!"

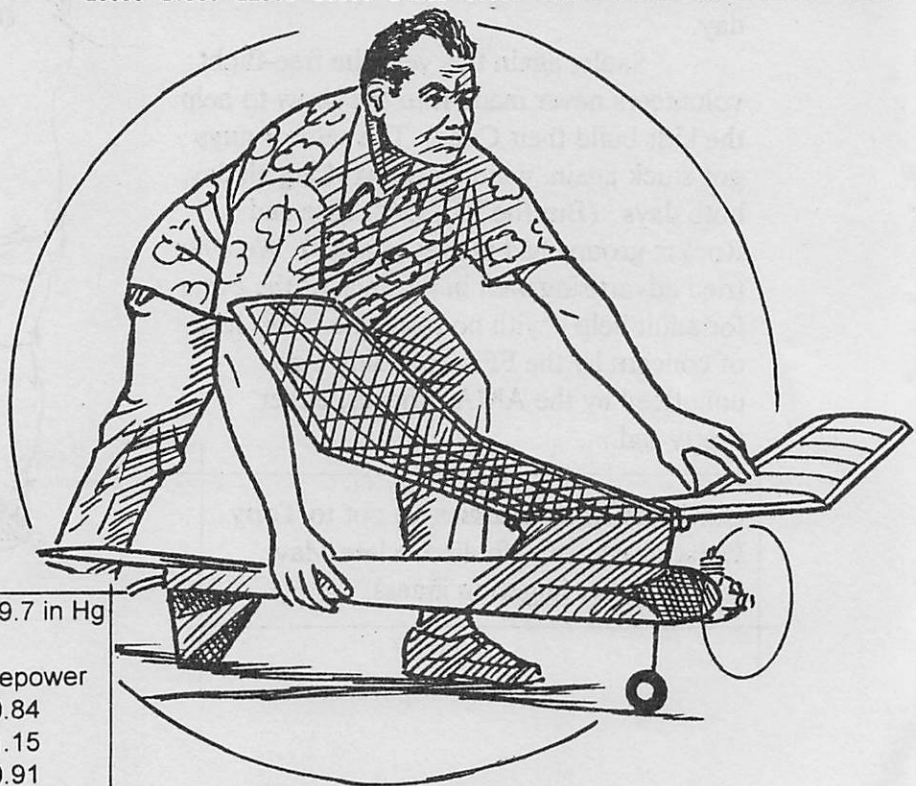
"Well, I got some pretty interesting data about the horsepower, but I need to go back and get one or two more data points to get a better curve. It looks like the .15 puts out about 1.15 horsepower - which is better than I would have guessed."

"It also looks to me like *we're using propellors which are on the back side of the power curve by a large margin*, which is what I was expecting from observation. This was the initial reason I went down this path."

Interesting stuff! We'll be looking forward to Mark's test results on future subjects! - MJW







Nelson .15 FI RE 1/1/98		FAI Fuel	Temp 40 F	Bar 29.7 in Hg
	RPM	Deg	Torque	Horsepower
REV 7x6	21000	15.0	40.16	0.84
Rev cut 6x6	25200	17.0	45.97	1.15
APC 7x3	28000	12.5	32.89	0.91
Poti folder	28700	12.0	31.44	0.89

For Sale !! 1986 Honda CT 100 chase bike, auto clutch, 4-speed. Excellent condition. $900. Call Bob Johannes, (314) 441-3945.

Hank Nystrom would like us all to know that the temporary slowdown in the production of his Texas Timers has nothing to do with problems with Russian sources or the clock mechanisms. Hank's key assembly man had to cut back on his timer efforts to care for his cancer-stricken wife.

Production is still running, and Hank has stock on every timer he offers. He just cut back on what he sends to Sig and 3rd party dealers. If you're in the market for timers, contact Hank directly at 3317 Pine Timbers Drive, Johnson City, TN 37604. Or call/fax him at (423) 282-6423.

I hope that area FF'ers took the time to check out the AMA Homecoming bash, a couple of weeks ago. A lot of neat stuff going on - trains, planes, boats & cars, oh, my!

The weather could have been more cooperative, tho, with the wind raising hell with some of the vendor tents on the first day.

Sadly, again this year the free-flight volunteers never made it to the show to help the kids build their Cubs! The same 3 guys got stuck again, winding up working all day, both days. (But the RC, U/C, Kite and Rocket groups had plenty of help!) We even tried advertising well in advance of the event for adult help - with no response. This lack of concern by the FF bunch didn't go unnoticed by the AMA officials, either. Pretty sad.....

Our heartfelt sympathies go out to **Tony Italiano** whose wife died in late May, following her lingering illness.

Looks like Agent **Jerry Nolin** is sliding out of the free-flight game. He relates that he has no more competitive indoor models, and is not inclined to build again. His *Serendipity* was a landmark airplane; seems just like yesterday.... He's been finishing up projects that he started years ago. As a result, he now has, for the first time in his life, more models than he really wants - and needs to get rid of a few of them!!

Jerry's found a really good R/C glider club (with a field!) 3 miles from his house, and has decided to do that this year. Best of luck to a hell of a builder & flyer!!!



ALBUM

KEEP 'EM FLYING

ANOTHER SELECTION OF INTERESTING AND UNUSUAL AIRCRAFT PHOTOGRAPHS FROM THE EDITOR'S FILES

BY MICHAEL O'LEARY



Jimmie Allen was an extremely popular radio star of the 1930s but in 1936 he branched out to enter the world of film — starring in *The Sky Parade* from Paramount Productions. The boyish Allen is seen suitably attired in flying togs (complete with a logo for Richfield Oil) standing in front of a Vultee V-1A transport at Grand Central Air Terminal in Glendale, California. Designed by Gerald Vultee, the V-1A was an aircraft well ahead of its time. Of all metal construction with retractable landing gear, enclosed cockpit and cabin, and offering sterling performance, the Vultee's career as an airliner was cut short by a government ban on single-engine airliners. One Vultee survives today in airworthy condition in an east coast museum.

3.

MicroFlyers!! By Morris & Whittemore

Agent Gil Morris sent me a pack of information about some development work now going on in many institutions. Gil relates "Millions of dollars are being spent on developing micro size power models for both military and peaceful purposes. Models that fly half an hour at 20 to 40mph, weigh one or two ounces and fit inside a shoe box! Current development includes not only the airframe and power source, but the electronics for control and photographic feedback for reconnaissance purposes."

"We, the modeling community, are probably closer to the cutting edge of this new technology than any other single group! It seems unlikely, however, that emerging designs will follow conventional wisdom - but who's to say at this early stage. Scientists believe insects and small birds hold some clues to the future of these microflyers. It's like a throwback in time to the year 1900 and reinvention of the airplane in miniature." (Remember some of those hairbrained schemes some inventors attempted to fly, back then?)

The developers are finding out that at these small scales, normal aerodynamics no longer apply. (Welcome to the club!! Now maybe we'll get some **real** answers to low NR aerodynamics!!) Typical of the microflyers is the 6" diameter, saucer-wing "Black Widow" made by Aerovironment. This battery powered electric craft weighs a little more than an ounce, and has flown for 16 minutes at up to 43 mph. (With that kind of wing loading, it probably needs to fly that fast to stay airborne!)

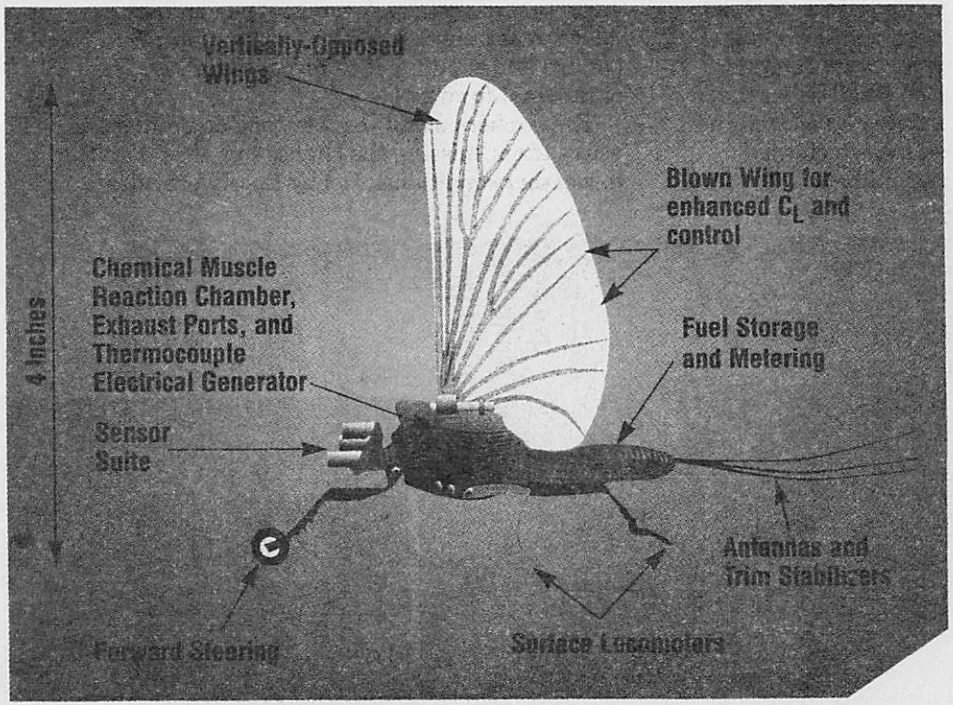
The forces associated with air moving around the tiny devices are more pronounced that with conventional aircraft in flight, causing increased drag, reduced lift under the smaller wings at low speeds and decreased propellor efficiency, engineers say. And such aircraft are susceptible to wind gusts, updrafts and the pounding of rain. Even so, DARPA has invested $35 million bucks to have industry and academia develop prototypes! (I just hope they call on innovative current & former modelers such as Mark Drela, etc., to help out...)

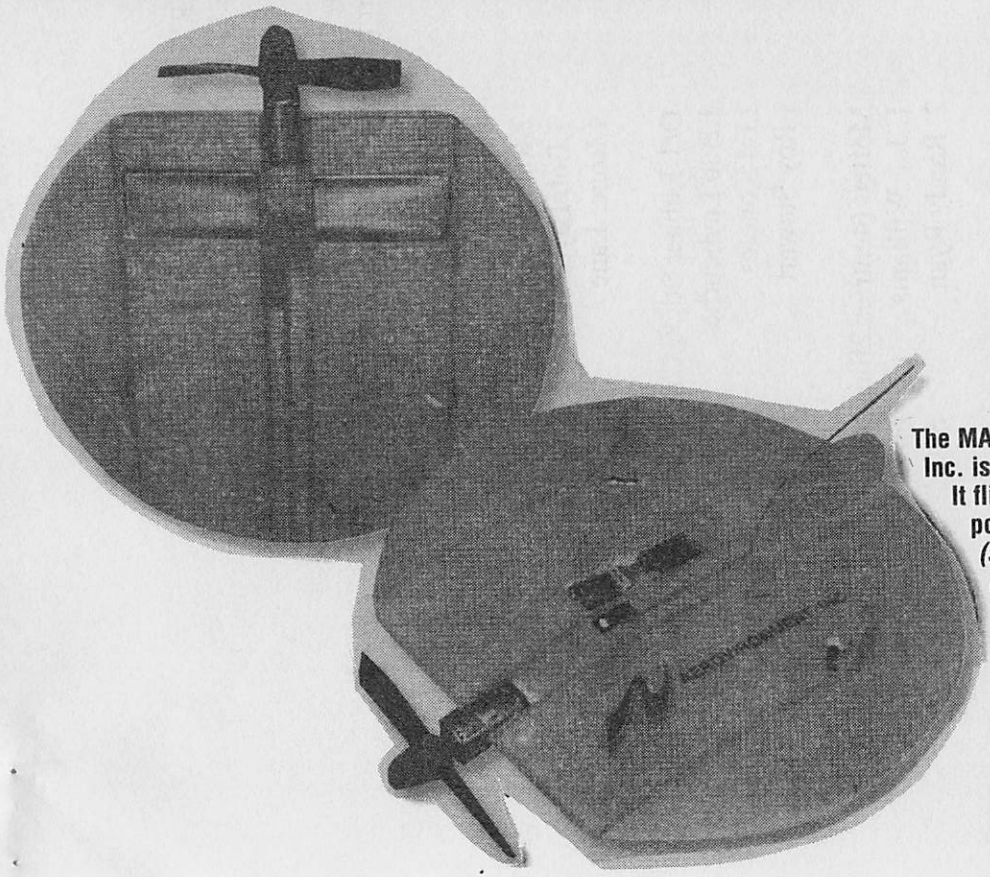
Other challenges include developing tiny sensors, engines and power sources for such planes, as well as communications, control and navigation systems for the tiny robot craft, which would have to operate with little or no human input.

Some of the power systems include: A "small piston engine" driving a 2 inch prop. But the alcohol-fueled engine, half the size of a commercial model engine (a TD .010 ?) has yet to be developed; A spheroid craft to be powered by several microturbine fan-jet engines (1/2 inch in diameter and 1/4 inch long!), firing downward from its rounded, circular bottom should be able to hover, theoretically; An "emptomopter", powered by a chemical muscle which drives the wings of a flapper, or the legs of a walker. The chemical muscle can also generate electricity, as a byproduct!

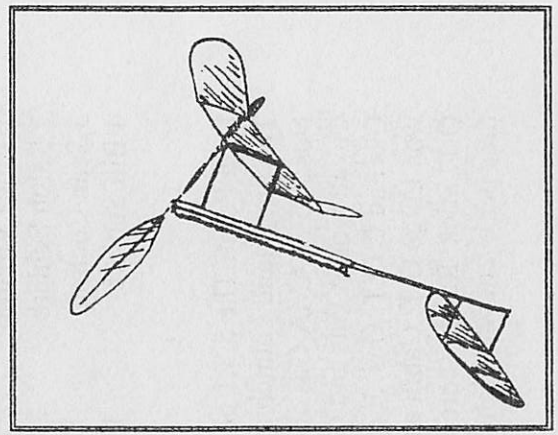
Another power source is a piezo-electric actuator, also used to flap wings. (I know this can work, having had some success vibrating glider wings with it a few years back - but the battery weight is a killer!) The group following this approach have designed the actuators into a metal exoskeleton they believe will imitate the action of a flying insect's! These guys are also into "swarm dynamics"! If one bug finds something interesting but is ill-equipped to investigate it, it could call in other insects with sensors better suited to the task!

Keep it light!! Says one of the experimenters, "It takes me about 8 watts to fly if my vehicle weighs 100 grams. If I cut the weight in half, the power needed drops by a factor of 8 to 10"!!! More to come, as space allows..... - Mo





The MAV design from AeroVironment Inc. is called the Black Widow. It flies under radio control, is powered by lithium batteries *(see the silver rectangles on the pink model)*, and can fly 16 minutes at a stretch at speeds up to 43 mph.



The most recent metamorphosis of the entomopter

THERMALEER'S ANNUAL
58TH Outdoor FF Contest
Saturday and Sunday, May 16 & 17th 1998, AMA National Flying Center

FIFTY SEVEN FLIERS FROM ELEVEN STATES COMPETE, BEAT WIND
JOE WILLIAMS, BROOKVILLE, PA, WINS HIGH POINT

½ A Gas (11entries,4fliers)

1. Keith Fulmer	480 sec.
2. Jack Marsh	420 "
3. Hank Sperzel	295 "
4. Bill Schlarb	268 "

B Gas (8entries,2fliers)

1.Hank Sperzel	337 sec.
2.Don Diggs	321 "

A/B Nos Gas (16 entries, 7 fliers)

1. Elmer Jordan	360 sec.
2. Keith Fulmer	320 "
3. Jack Marsh	293 "
4. Bob Edelstein	257 "

.020/1/4A Gas(10 entries,4fliers)

1.Bill Barr	319 sec.
2.Shel Myers	318 "
3. Bob Edelstein	267 "
4. John Schifko	172 "

Catapult glider(12entries,11fliers)

1.Vince Villardo	224 sec.
2.Ralph Schlarb	214 "
3.Sean Cochran	176 "
4.Bill Schlarb	175 "

O/T Rubber Cabin, Small(10 entries,5fliers)

1.Don Diggs	511 sec.
2.Randy Ryan	491 "
3.Bob Laybourne	275 "
4.Roger Lane	255 "

O/T Rubber Stick, Large (8entries,3fliers)

1.Bob Laybourne	511 sec.
2.Ed Konefes	360 "
3.Roy Stewart	315 "

Moffett (4entries,2fliers)

1. Joe Williams	669 sec.
2. Randy Ryan	360 "

A/B OT GAS(8entries,6fliers)

1.Bob Placier	302 sec.
2.Harry Murphy	301 "
3.Bob Edelstein	279 "
4. Ted Dock	267 "

F1A/F1HNordic(3entries,3fliers)

1.Bill Schlarb	180 sec.
2. Jack Marsh	170 "
3. Bob Klipp	145 "

High Point: The 5,3,1 point allocation was used. Bill Schlarb is our Glider Champ. He won Towline, Hand Launch and fourth in Catapult.Keith Fulmer took first in the most popular ½ A Nos., ½ A AMA Gas and runner up in A/B Nos. Gas. Keith is the Nostalgia Champ. Rich Covalt won A Gas and C/D Gas. Rich is AMA Gas Champ. Elmer Jordan won firsts in A/B Nos. Gas and C O.T. Gas. Joe Williams won Moffett, Mulvihill and O.T.Small Stick. Randy Ryan won Large O.T. Cabin and runner up in Moffett, Mulvihill, Small O.T. Cabin and third in Small O.T. Stick. Randy scored a 15 also but Joe won three firsts head to head with RR and his total time per event was higher. Congratulations to Joe, Randy, Elmer, Rich, Keith and Bill.

½ A Nos Gas (21 entries,14fliers)

1.Keith Fulmer	559 sec.
2.Gene Wicks	530 "
3.Bob Placier	452 "
4.Steve Sova	446 "
5.Bill Hale	353 "
6.Jack Marsh	335 "

A Gas (12entries,6fliers)

1.Rich Covalt	351 sec.
2.Charles Mortimer	320 "
3.Alex Marsh(Jr.)	310 "
4.Bob Watson	286 "

F1J (5entries,2fliers)

1.Norm Poti	360 "
2.Jack Marsh	325 "

C/D Gas (9entries,6fliers)

1.Rich Covalt	750 sec.
2. Bob Johannes	739 "
3. Gil Morris	345 '

C O.T. Gas (11entries,7fliers)

1.Elmer Jordan	446 sec.
2.Ted Dock	326 "
3.Bob Edelstein	316 "
4.Dick Patton	313 "

Mulvihill (8entries,3fliers)

1.Joe Williams	540 sec.
2. Randy Ryan	357 "
3. Ed Konefes	240 "

O.T. Rubber Stick,Small(12entries,7fliers)

1.Joe Williams	540 sec.
2.Bill Barr	455 "
3.Randy Ryan	353 "
4.Roger Lane	352 "
5.Roy Stewart	345 "

O.T.Rubber Cabin,Large(9entries,2fliers)

1.Randy Ryan	760 sec.
2.Bob Laybourne	341 "

Hand Lanch Glider(10entries,9fliers)(3Jr)

1.Bill Schlarb	327 sec.
2.Bill Barr	121 "
3.John Schifko	115 "
4.Don Diggs	108 "

P30(13entries,6fliers)

1.Roger Lane	480 sec.
2.Dan Smith	345 "
3.Bob Layborne	338 "
4. Don DeCook	273 "
5.Vicky Wicks	253 "
6.Drew Coverdill(Jr)	227 "

F1G Coupe d'Hiver(6entries,2fliers)

1.Don DeCook	254 sec.
2.Tom Hepler	120 "

THANKS: Bob and Marilyn Johannes, John and Helen Schifko, Bob Klipp, Lou Merlotti, Joy Bennett and to all who timed, chased and participated. Comments and criticism appreciated. Jim Bennett, 324 Helfenstein Ave.,St. Louis, MO 63119. Email jhbennett@aol.com

<u>This Just In!!</u> A few months ago, FF'er John Adams died. It seems that there will be an auction of his posessions - probably by sealed bid - timed to occur <u>during the week of the AMA FF Nats.</u> in Indianapolis. Christy's is the auction house.

The modeling supplies include kits, finished models, neatly-packed boxes of good balsa, engines, etc. If anyone is in the market for some class goodies and the bidding procedure, contact Tom Metzler (317) 784-3580 between 10am - 5pm, or email him at tmhob@indynet.com

Results of the CIA O.T. & NosGas Meet of June 5 - 6, 1998

Saturday - winds 5 - 10 mph. *Sunday - winds 15 - 25 mph. Not many flyers!!*

Small OT Rubber Stick

1.	Ed Konefes	780
2.	Joe Williams	527
3.	Don Diggs	436
4.	Bob Laybourne	353
5.	Ed Sneed	326
6.	Bob Walter	316
7.	Roger Lane	107

OT HLG

1.	Bill Schlarb	321
2.	Tom Jones	262
3.	Lee Campbell	130
4.	Don DeCook	111
5.	JBM Griner	91
6.	Bill Barr	84
7.	Don Diggs	76
8.	Les Hallgarth	41

B/C NosGas

1.	W. Weisenbach	341
2.	Keith Fulmer	329
3.	Jack Marsh	300
4.	Shel Myers	247
5.	Lee Campbell	239
6.	Max Bleck	234

1/4A NosGas

1.	Rudy Kluiber	480
2.	Jack Marsh	459
3.	Shel Myers	360
4.	Elmer Jordan	346
5.	Bob Edelstein	311
6.	Bill Hale	305
7.	Les Hallgarth	297
8.	Max Bleck	277
9.	Roger Lane	225
10.	Paul Skelly	67
11.	Bill Barr	61

A/B Fuselage OT Gas

1.	Dan Harshman	328
2.	Don Boyer	301
3.	Ted Dock	219
4.	Bob Edelstein	182
5.	Ed Konefes	127
6.	Elmer Jordan	120
7.	Harry Murphy	117
8.	Max Bleck	113

NosGas Ignition

1.	Harry Murphy	480
2.	Dan Harshman	343
3.	Rudy Kluiber	280

Jimmie Allen

1.	Bob Laybourne	234
2.	Don DeCook	207
3.	Ted Dock	161
4.	Bob Walter	84
5.	Roger Lane	19

1/2A Nos & 1/2A OT Gas

1.	Keith Fulmer	360
2.	Don Diggs	360
3.	Elmer Jordan	323
4.	Jack Marsh	240
5.	Bill Barr	50

Early 1/2A NosGas

1.	Bill Barr	480
2.	Don DeCook	425
3.	Keith Fulmer	321
4.	Roger Lane	254
5.	Bill Hale	246
6.	Bob Edelstein	154

A/B Pylon OT

1.	Ted Dock	310

A NosGas

1.	Keith Fulmer	325
2.	Les Hallgarth	269

OT Fuselage Comb.

1.	Ed Konefes	360
2.	Bob Laybourne	243
3.	Robert Walter	214
4.	Don DeCook	106

1/2A Antique

1.	Harry Murphy	101

Large OT Rubber Stick

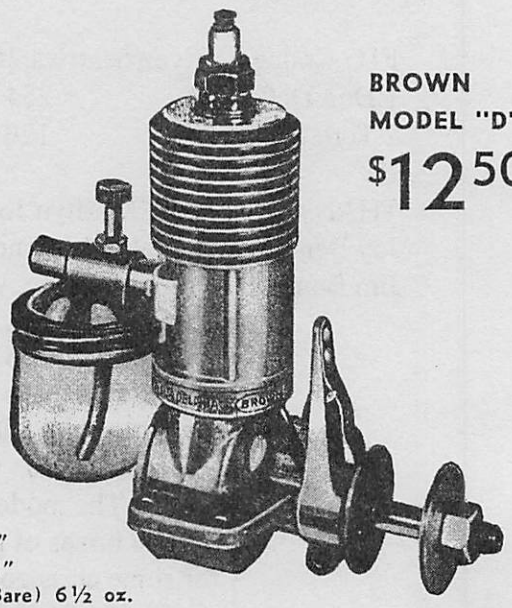
1.	Ed Konefes	360
2.	Bob Laybourne	120

C Pylon/Fuselage OT

1.	Bob Edelstein	317
2.	Dan Harshman	314
3.	Ted Dock	120

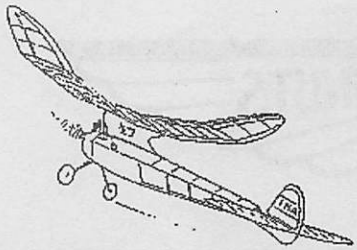
.020 Replica

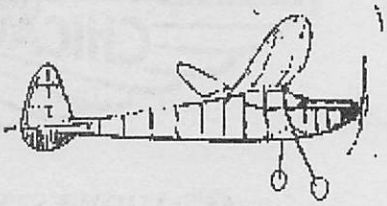
1.	Bill Barr	318
2.	Max Bleck	58



BROWN
MODEL "D"
$12.50

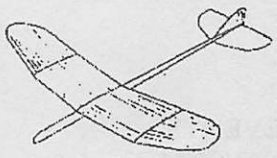
Bore 7/8"
Stroke 1"
Wgt. (Bare) 6½ oz.



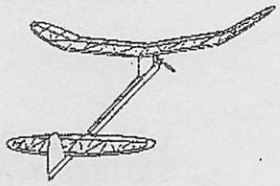


Northern Ohio Free Flight Association

Summer Free Flight Contest



Wright Patterson Air Force Museum Field
Dayton, Ohio
August 15-16, 1998
9:00am to 4:00pm



Saturday's Events	Sunday's Events
ABC Gas Combined PeeWee 30 Hand-Held Catapult Glider (NOFFA Rules) ABC Old Timer - Fuselage 1/2 A Nostalgia Gas Old Time Rubber - Cabin & Stick Combined P-30/Coupe Combined	1/2 A Gas Classic Open Towline Glider ① (non circle-tow) .020 Old Timer/Nostalgia Combined ABC Old Timer - Pylon Hand Launch Glider (NOFFA Rules) ABC Nostalgia Gas Nostalgia "Geef "Gas event ② (NFFS rules)
Junior Hand-Held Catapult Glider* Junior-Senior 1/2A Gas Power*	Junior Hand Launch Glider* Junior Rubber*
<u>Starting at 5:00pm</u> 3 Person Catapult Glider Team Challenge	
<u>Starting at 5:00pm</u> .020 Payload 1/2 A Nostalgia Payload .010 Open Gas Power	

High Point Trophy
To be awarded Sunday!
The more you fly
the better your chances!

Entrance Fees: <u>$10.00 Flat Fee</u> covers all events. All Juniors events are <u>FREE!</u> *

** A $.25 AMA fee is required for all <u>non</u>-AMA member Junior participants.*

<u>Contest Directors:</u>

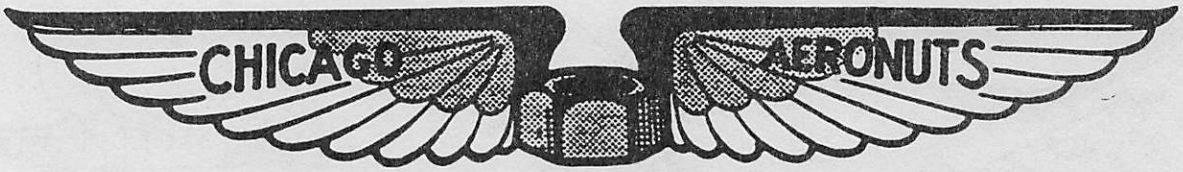
Charlie Jones
32130 Cambridge Circle
Avon Lake, Ohio 44012
(216)-933-7377

Warren Weisenbach
4568 W. 146 St.
Cleveland, Ohio 44135
(216)-671-8623

① **Classic Open Towline Glider (non circle-tow event)** – Any towline glider model is eligible. No circle towing allowed. No VIT functions allowed. Auto rudder is allowed. No weight or size limits. Towline length of 164ft. maxumin. Six attempt (flights are 20seconds and under) to make three flights.

② **1/2A Nos. "Geef "Gas event (NFFS)** – This event is a single design event for the "Geef" model. All NFFS Rules apply to this event.

All WPAFB field rules apply. Observe speed limits and seat belt laws when driving on the base. Chase bike riders must wear helmets and reflective vest.



55th MIDWESTERN STATES CHAMPIONSHIPS, 36th FALL OLDTIMERS AND 38th FAI INVITATIONAL FREE FLIGHT CONTESTS

INTERNATIONAL AEROMODELING CENTER, MUNCIE INDIANA
AUGUST 22 - 23, 1998

OLDTIMERS EVENTS
SATURDAY, AUGUST 22
8:00 - 4:00

A-GAS
B-GAS
C-GAS
020 REPLICA
NOSGAS 1/2A
NOSGAS EARLY 1/2A
NOSGAS ABC (COMB)
LARGE RUBBER
SMALL RUBBER
*TWIN PUSHER
OT HLG/CATAPULT

FAI EVENTS

SATURDAY, AUG 22

F1A SEVEN 1.5 HR
F1B ROUNDS
F1C
RD 1 11 -12:30
RD 2 12 - 1:30 etc
FLYOFFS AT 6:30 P

SUNDAY AUG 23

F1G 5 FLIGHTS-NO ROUNDS
F1H FLYOFFS AT 2:00
F1J

AMA EVENTS
SUNDAY, AUGUST 23
8:00 - 4:00

1/2A GAS
ABC (COMB) GAS
CD (COMB) GAS
ABC SLOW POWER
MULVIHILL
MOFFETT
P-30
HLG
CATAPULT GLIDER
*COMBO (ROCKET ELECTRIC, CO2, PAYLOAD')**

AMERICA'S CUP CONTEST

AWARDS: ENGRAVED GLASSWARE TO 3rd PLACE ALL EVENTS EXCEPT TWIN PUSHER MASS LAUNCH 1st PLACE ONLY.

SPECIAL AWARDS:
JR HIGH TIME - ALL EVENTS COMBINED TO 3rd PLACE
SR HIGH TIME - ALL EVENTS COMBINED TO 3rd PLACE
CELIA GOLDBERG - HIGH TIME 1/2A GAS
CARL GOLDBERG - H IGH TIME GAS EVENTS (13)
RUDY SCHUH - HIGH TIME RUBBER EVENTS (7)
GERALD RITZ - HIGH TIME GLIDER EVENTS (5)

(*) = Not eligible for High Time scores

Entry Fees: 1st event $10, $5 additional, $20 max. ($5 premium for F1A, F1B, F1C; $25 max)
Junior and Senior age $1 per event, $5 max, no premium for F1A,B,C.
** COMBO Event - One entry fee: Fly any or all!

CONTEST DIRECTORS: CHUCK MARKOS 847-945-9225
BOB JOHNSON 708-449-7662

ANNOUNCING "C.O.F.F.C." ANNUAL MEET

DATE : AUGUST 29/30, 1998 **TIME : SAT. 9.00 AM TO 5.00 PM EST.**
HELD AT **AMA FIELD** (MUNCIE INDIANA) **SUN. 8.00 AM TO 4.00 PM EST.**

******Merchandise Certificates Awards *******

There will be a HIGH point 1st and 2nd place gift certificates given for gas and non-gas categories. Certificates will be redeemable at Bob Laybourne's Hobby Hanger hobby shop, Box 33(6914 W. National Rd.) Donnellsville, Oh. 45319 Ph. (937) 882-6775.

A gift certificate in the value of $100.00 for 1st and $50.00 for 2nd place in each of the TWO categories will be awarded. Fly all the events in a category and increase your chances to win.

EVENTS FLOWN AUG 29th

ABC	NOST COMB	(JSO)
	PEE WEE 30	(JSO)
A	OT PYLON/CABIN	(JSO)
OT	STK/CAB RUBBER(LARGE)	(JSO)
AB	AMA GAS	(JSO)
	AMA MOFFETT RUBBER	(JSO)
F1J	FAI	(JSO)
F1G	COUPE	(JSO)
	HH CATAPULT GLIDER	(JS/O)

EVENTS FLOWN AUG 30th

	MULVIHILL RUBBER	(JSO)
1/2A	NOSTALGIA	(JSO)
CD	AMA GAS	(JSO)
.020	REPLICA & 1/4A NOST	(JSO)
BC	OT PYLON/CABIN	(JSO)
OT	STK /CAB RUBBER(SMALL)	(JSO)
F1G	P-30 RUBBER	(JS/O)
1/2A	AMA GAS	(JS/O)
	AMA OHL GLIDER	(JS/O)

TROPHIES
FIRST THRU THIRD PLACE AWARDED EACH DAY. J/S CLASS WILL HAVE SPECIAL AWARDS.

NOTE: Trophies are recycled.

ENTRY FEE FOR OPEN CONTESTANTS WILL BE $5.00 FOR FIRST EVENT, AND $1.00 FOR EACH ADDITIONAL EVENT, $10.00 MAX. ALL JUNIORS AND SENIORS FLY FREE. MOTOR BIKES CAN BE USED TO CHASE MODELS.

************************ **CONTEST RULES** ************************

AMA SAFETY REGULATIONS WILL BE STRICTLY ENFORCED.

AMA EVENTS ENDORSE CATEGORY III RULES.

HAND HELD CATAPULT GLIDER WILL ENDORSE CIA HAND HELD CATAPULT RULES.

OLD TIME .020 REPLICA AND 1/4 NOSTALGIA WILL BE 9 SECOND ENGINE RUN, HAND LAUNCH, AND 2 MINUTE MAXIMUM FLIGHT.

NOSTALGIA GAS EVENTS WILL ENDORSE "NFS" RULES WITH 9 SECOND ENGINE RUN, HAND LAUNCH, AND 2 MINUTE MAX.

PEE WEE 30 EVENT WILL ENDORSE WEST COAST ORBITEERS RULES WITH A 2 MINUTE MAXIMUM FLIGHT TIME.

OLD TIMER EVENTS WILL ENDORSE "SAM" RULES, BUT USE ONLY ORIGINAL IGNITION ENGINES, NO DIESEL. CONVERSION OR GLOW ENGINES ALLOWED. WEATHER PERMITTING, ENGINE RUN WILL BE 16 SECONDS. 2 MINUTE MAXIMUM FLIGHT TIME.

FAI F1J WILL BE FLOWN BY ROUNDS STARTING AT 0900, WITH FLY OFF FLIGHTS STARTING AT 1500.

CONTEST DIRECTOR: LARRY WILLIS

FOR MORE INFORMATION CONTACT:
LARRY WILLIS
336 S. Sugar St.
St. Louisville Oh. 43071
ph (740) 745-5314

1998 CIA AREA FREEFLIGHT CONTEST CALENDAR

Jun	6,7	CIA OT & NosGas FF Meet	AMA - Muncie, IN
	6,7	Hoosier Cup (America's Cup Meet)	AMA - Muncie, IN
	12-14	AMA Homecoming	AMA - Muncie, IN
	20,21	FFMAS Small Field/FAI Qualifier	WPAFB, Dayton, OH
	27,28	MAM OT FF Meet/RC Assist (Incl Slag&Nos) (Collecto on the 27th)	Sturgis, MI
	27,28	Intra City FAI	AMA - Muncie, IN
	28	Aeronuts Fun Fly	Bong, WI
Jul	4,5	4th of July weekend	—
	5	Aeronuts Small Field Annual	Flossmoor Meadow (Chi)
	12	IMAC Annual	Bong, WI
	16-19	FAC NATS	Geneseo, NY
	18,19	FAI Qualifier/Practice Session	WPAFB, Dayton, OH
	19	Aeronuts Spring OT FF Meet	Bong, WI
	27-31	AMA FF NATS	AMA - Muncie, IN
Aug	7-9	Empire State FF Champs	Fayette, NY
	9	Bong Eagles Annual FF Meet	Bong, WI
	11-13	Great Grape Gathering FF & RC Assist	Gananoque, Ont.
	15,16	NOFFA FF Meet	WPAFB, Dayton, OH
	15,16	Cuckoo Challenge FF Meet	Cuckoo, VA
	16	Pelicans OT Meet	Bong, WI
	22	Aeronuts Fall OT FF	AMA - Muncie, IN
	23	Aeronuts Midwestern States FF Meet	AMA - Muncie, IN
	29,30	COFFC FF Meet	AMA - Muncie, IN
	30	Bong Eagles Special Meet	Bong, WI
Sep	5,6,7	Labor Day Weekend	—
	5,6	FF Practice Session	WPAFB, Dayton, OH
	13-18	SAM Champs	AMA - Muncie, IN
	19,20	CIA AAA FF Contest	AMA - Muncie, IN
Oct	3,4	Tri-County Aero Club FF Meet	Lawrenceville, IL
	11	MAM Fall Meet	Sturgis, MI
	17, 18	CIA Fall Scramble	AMA - Muncie, IN
Nov	1	MECA Collecto	Columbus, OH

The **INFORMER**

CENTRAL INDIANA AERO MODELLERS

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New Palestine,
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46163

1998 President
Mark Wood

Vice President
Sean Cochran

Sec'y/Treasurer
Les Hallgarth

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