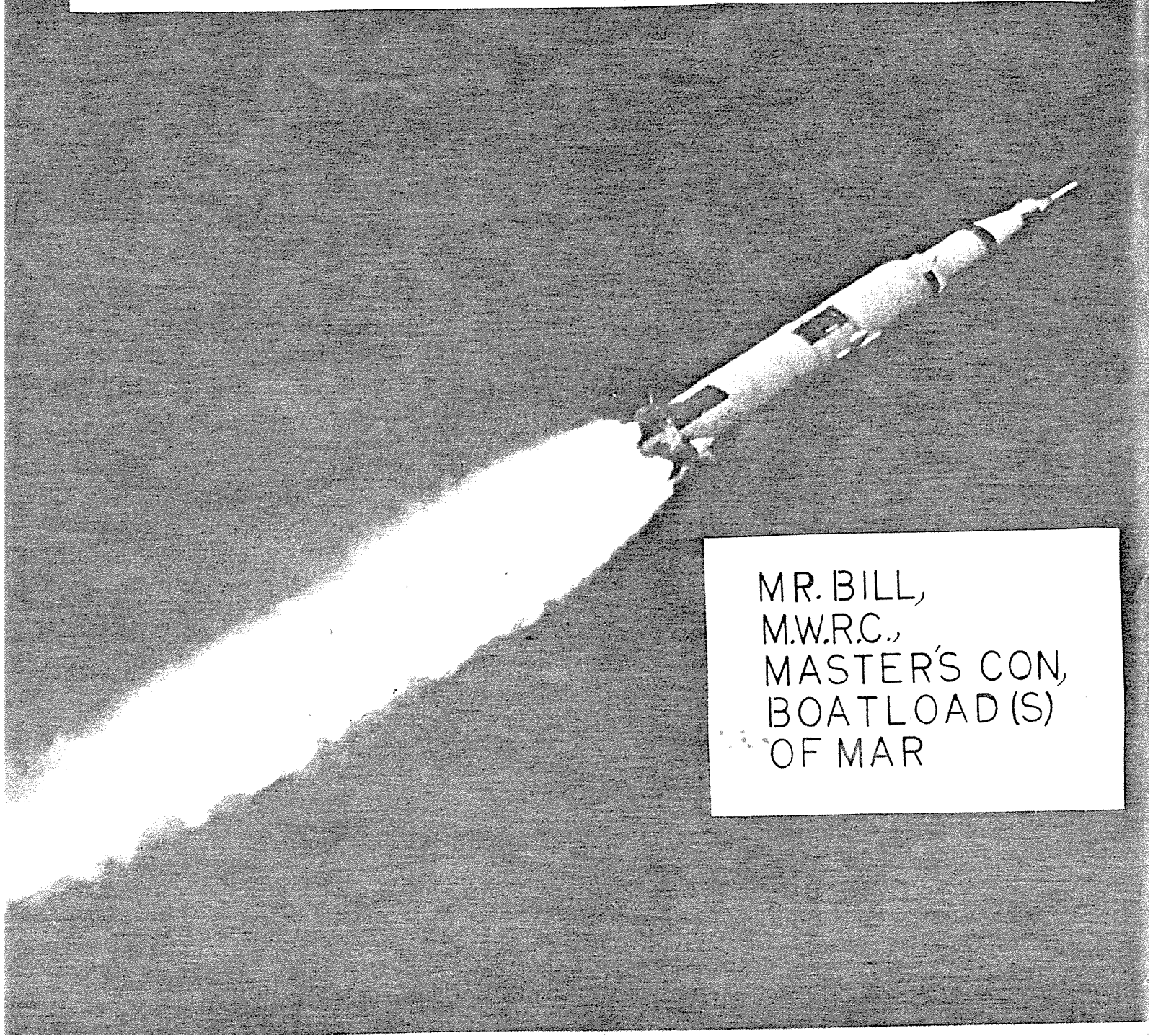




THE LEADING EDGE

VOL.4 NO.4

SPECIAL INFLATED NARAM ISSUE



MR. BILL,
M.W.R.C.,
MASTER'S CON,
BOATLOAD(S)
OF MAR

T minus ONE

MONTHLY NIRA MEETING

July 3rd.

Glen Ellyn Civic Center

7:30PM

ETR-11

July 4&5th

Sanctioned Regional Meet at Bong.

WISC.-81

July 25 & 26

Sanctioned Regional Meet. Tomah, Wis.

MONTHLY NIRA MEETING

August 7

Glen Ellyn Civic center

7:30 PM

NARAM-23

August 10-14

National Meet. Imagine going to a club launch and staying for a week!

MODEL ROCKET "HUMOR" BY GEORGE

I'm beginning to wonder if it was such a good idea to give our son one of those rockets that blasts off for his birthday. As of today, we've got the only cat in Northbrook who knows what our house looks like from three hundred feet up.

NARF-NARF-NARF

Before I joined NIRA all I could do was prang and misfire. But it's just the opposite now! Since I joined NIRA, I misfire and prang.

NARF-NARF-NARF

Some of these rookie rocketeers are really dumb! One of them thought a micro clip was something done by a midget football player.

NARF-NARF-NARF

NIRA PRE*NARAM POINT STANDINGS

A Division

Points/WF

Pat "Flexie" Peterson
Mark Schmidt

3066/12
894/6

B Division

"Jedi" George Riebesehl, Jr.

2802/12

C Division

Bunny
George Sr.
Sir Richard
Tommy P.
Bullet Bob
Braxton "TV" Miller

1503/12
1182/12
1172/12
579/6
408/12
213/3

TOTAL NIRA POINTS

11,529/12

JEDI WINS BOEING SCHOLARSHIP

"Jedi George" Riebesehl, Jr. captured the \$800 Rocketry Scholarship offered by the Boeing Company, July 12-13, 1981. George flew to the Seattle competition and proceeded to place in all seven rocketry events. With four firsts, two seconds and a fourth, the win was a piece of cake. (Ed. note: Jedi hasn't lost a contest in nearly two years!). George reports that Seattle grows huge thermals. His second B RC flight thermaled for over 7 minutes before disappearing OOS starward! A similar flight ensued in A PD. George also told of the fine facilities provided by the Boeing NAR section. Despite flying all the events, George still had time to wander over to the airplane competition and watch combat models mid-air repeatedly.

Congratulations and best of luck at Loyola from NIRA!

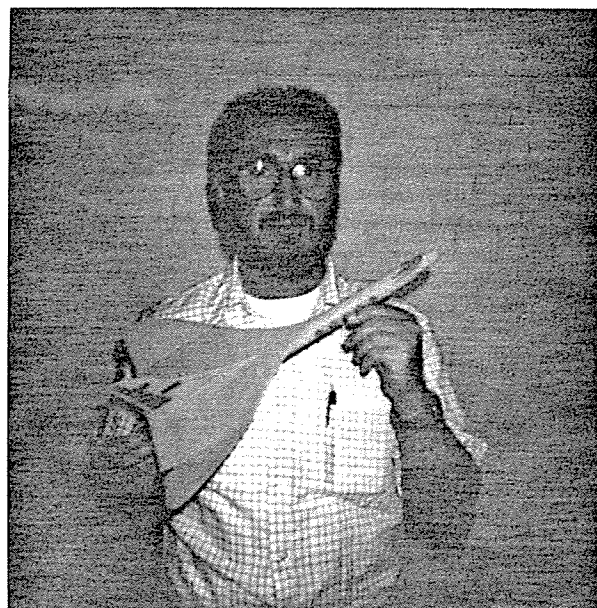
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monosodiumglutamate, tricalcium
phosphate, artificial colors and
flavor added.

MODEL OF THE MONTH WINNERS



The Model of the Month winner for May is IAN HALL (I remembered this time) and his Cruise Missile. Congratulations IAN !!



The Model of the Month winner for June Tom Pastrick and his Estes Sky Dart. Congratulations Tom !!

VOL.4 NO.4.2 JULY/AUGUST 1981

The Leading Edge is published bimonthly by and for the members of the Northern Illinois Rocket Association (NIRA), section 117 of the National Association of Rocketry and is dedicated to the idea that Model Rocketry is fun.

Articles, plans, newsletters and other items of interest should be sent to the editor: Ric Gaff, 331 third St., Northfield, Ill., 60093.

CONTRIBUTORS:

Mark Bundick, George Riebesehl, Bob Kaplow

All NIRA members are encouraged to give the editor their suggestions for articles and plans. Contributions are encouraged! We are trying to keep NIRA members informed about club and member activities, so we would like to hear from you.

MR. BILL GOES TO NARAM 23

OH BOY!
ANOTHER NARAM!!



BY: Conejo Cutis JR

<p>GEE SPOT, EVER SINCE WE WERE FIRED FROM NBC, WE'VE BEEN HAVING ALL THIS FUN REPORTING MEETS FOR NIRA.</p>	<p>I HOPE NIRA CAN WIN HERE AT NARAM, BUT THOSE PULSAR PEOPLE ARE TOUGH, HERE THEY COME NOW.</p>	<p>HI Y'ALL! MA NAME IS TERRY LEE!</p> <p>WOW, TERRY LEE! HE MAY TALK FUNNY, BUT HE SURE CAN FLY ROCKETS.</p>
<p>GOLLY, MA SWAN IS A TAD TAIL HEAVY. I NEED SOME CLAY TO TRIM HER OUT, HERE'S A CUTE CHUNK</p> <p>OH NOOOO, NOT SPOT!</p>	<p>SEE YA' ALL LATER. HONK! HONK!</p> <p>HE WAS MEANT TO ME. OH, HERE ARE SOME NICE PEOPLE, THE SYKOS FAMILY.</p>	<p>LIKE TIME SURE! JUST CUT ONE TREE DOWN WITH A CHAINSAW AND IT'S ECO-DISASTER CITY!</p> <p>NEXT TIME CLIMB IT MIKE</p> <p>SURE WISH I COULD UNDERSTAND THESE EASTERBERRS.</p>
<p>OH NO! HERE COMES SNAR. THERE'VE BEEN MEANT TO ME EVER SINCE WE TOOK...</p>	<p>OK BILL. WHERE IS IT?</p> <p>WHAT?... DID YOU LOSE SOMETHING?</p>	<p>WHAT DID SNAR WANT? WILL ME. BILL END UP IN A BOX OF CORN FLAKES? AND WHAT ABOUT SPOT? FOR THE ANSWERS TO THESE QUESTIONS WATCH WHAT HAPPENS AT</p> <p>NARAM 23!!</p>

NEW CONTEST BOARD CHAIRMAN APPOINTED.

I've just learned that our hard-working NAR Rabbit is soon to give up one of his Association hats. As of September 1 Mark Bundick will no longer be chairman of the Contest Board. Mark's main reason for leaving the chair is that he feels he has accomplished almost everything he set out to do when he took the job three years ago. Revising the rule book, reprinting the pink book at no cost to the general fund, and a complete revision of internal Contest Board forms, policies and procedures. Mark now plans to devote more time to easing some of Pat Miller's workload.

Taking Mark's place as Contest Board chairman will be NARAM-23's CD Charlie Sykos and for those of you pleased by Mark's decision, don't cheer too soon you probably won't like Charlie very much either.



Photo by Tom Beach at NARAM-22



Borrowed from "All Ends Up" by Sidney Harris.

The Masters

BY GEORGE RIEBESEHL

The Masters convention was held on the weekend of April 25 and 26. 6 NIRA members attended accounting for half of the attendance. Although this was no Wiscon, it turned out to be an enjoyable event.

The Masters convention was just as its name implies; a convention of masters. All of the people who attended the convention have been around in model rocketry for a long time and have a great deal of experience. Too bad there wasn't anyone to teach.

The first discussion group was held by Bunny at 9:15. Since there were no inexperienced rocketeers to explain things to, the format of the discussion groups were geared more to the advanced rocketeer. Bunny's talk was on starting beginners in model rocketry. Bunny talked of the importance of building and reliability to keep the beginner from becoming discouraged.

The next talk was on computers by Bob Kaplow. Bob brought his magic box with him and demonstrated what the machine could do.

Tom Pastrick was next in line with a talk on gliders. It is surprising how people have different opinions about B/g's.

At 2:00 Tom Hoelle led a group on advanced scale. Tom stressed the importance of taking your time and making what you have to do into what you want to do.

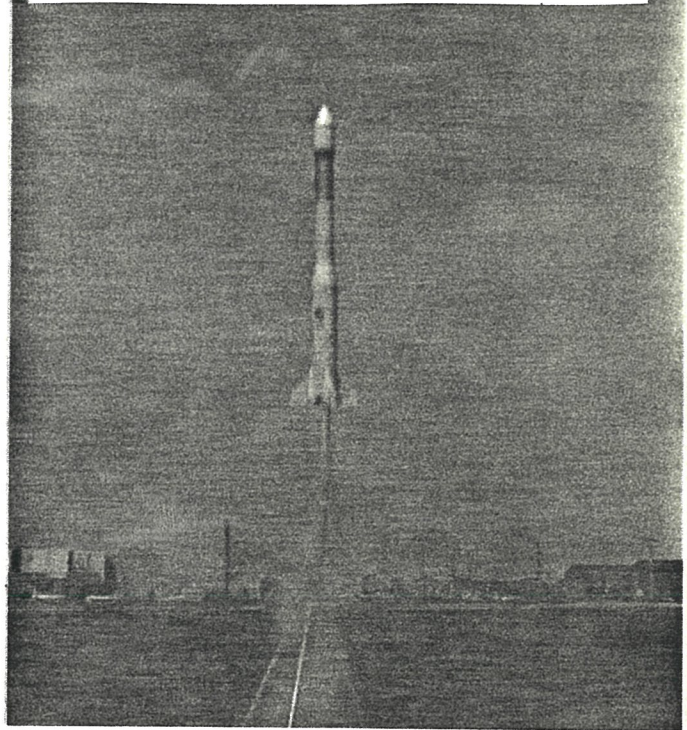
The final talk of the day was on pulse R/c gliders by Bunny. Pulse is a cheap and easy way for a beginner to start in R/C.

After a half hour drive we finally arrived at dinner. (Thanks for the tour of Wisconsin, Warren)

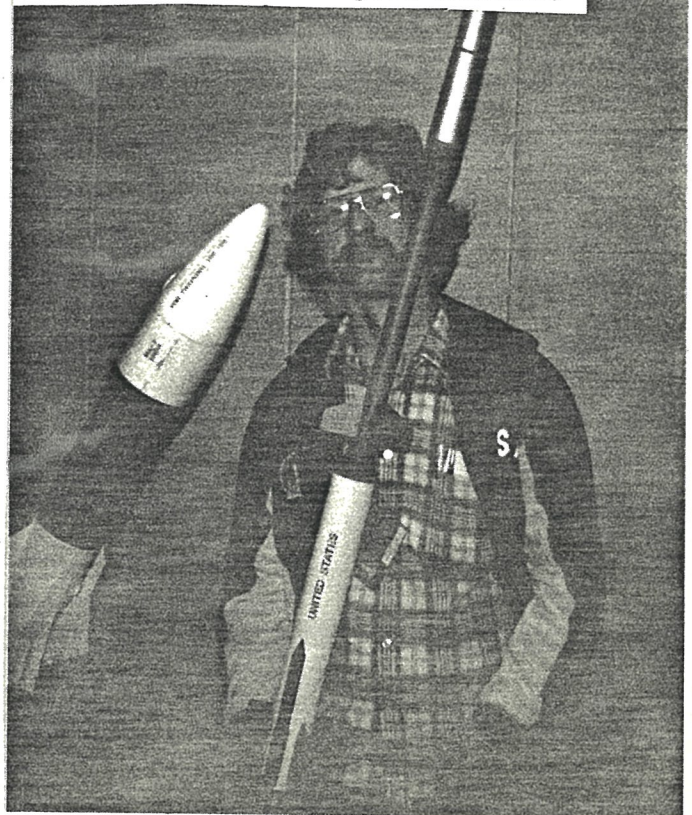
Two talks were held on Sunday: one by Bob on nostalgic engines and one by Tom Pastrick on parachutes.

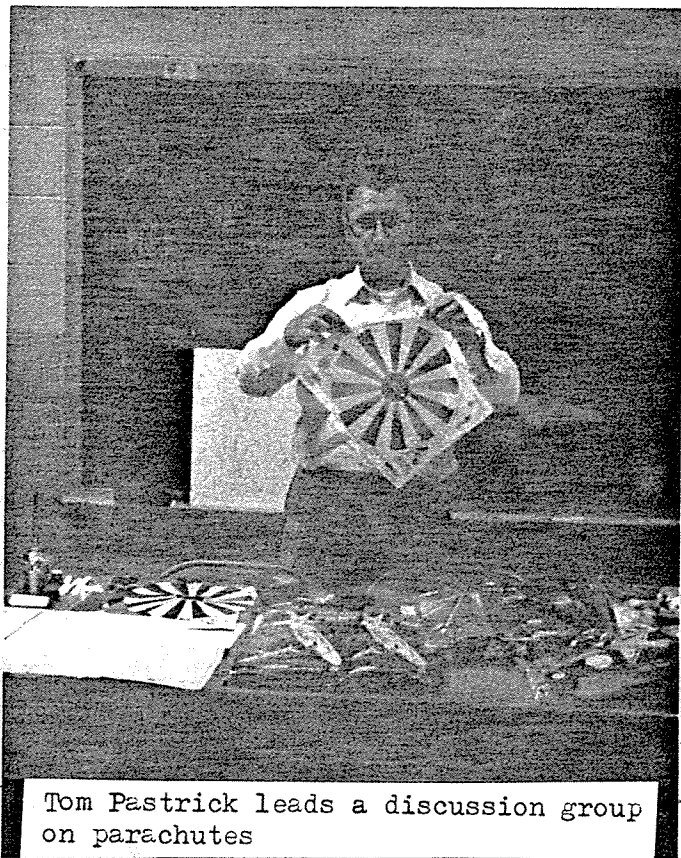
A launch was held that noon and Tom Hoelle's Ariane flew well as George's R/C bit the dust.

Tom Hoelle's "boilerplate" model of the Ariane flies beautifully at the Masters launch.



Tom Hoelle with two good friends.

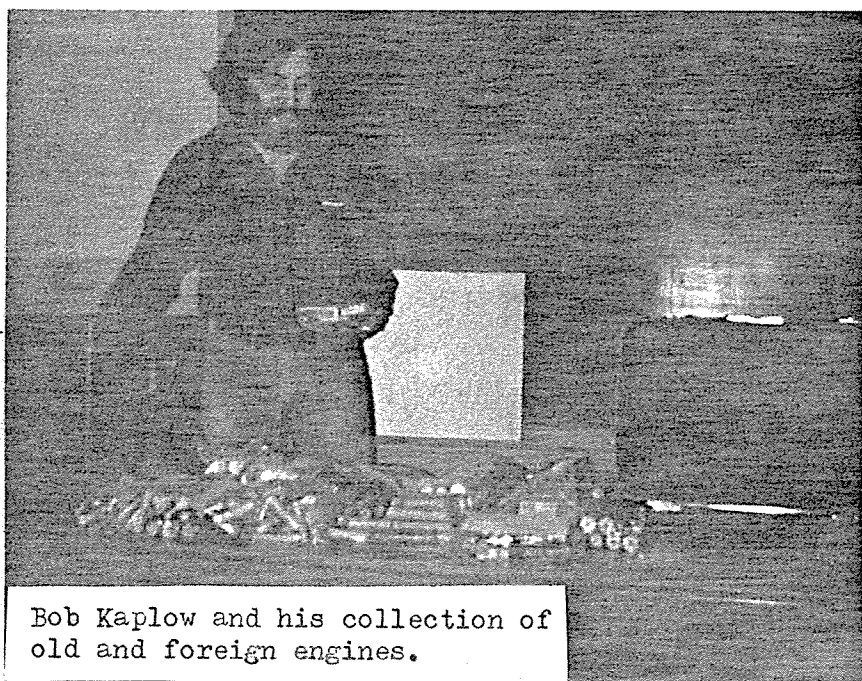




Tom Pastrick leads a discussion group on parachutes



Jedi George and his RC B/G.



Bob Kaplow and his collection of old and foreign engines.

BOB KAPLOW'S

RENT-A-KAT

..... HAS MOVED!

NEW ADDRESS:

1628 WATERFORD LN.
PALATINE, ILL 60067

NEW PHONE:

(312)-934-1160

OLD NAME

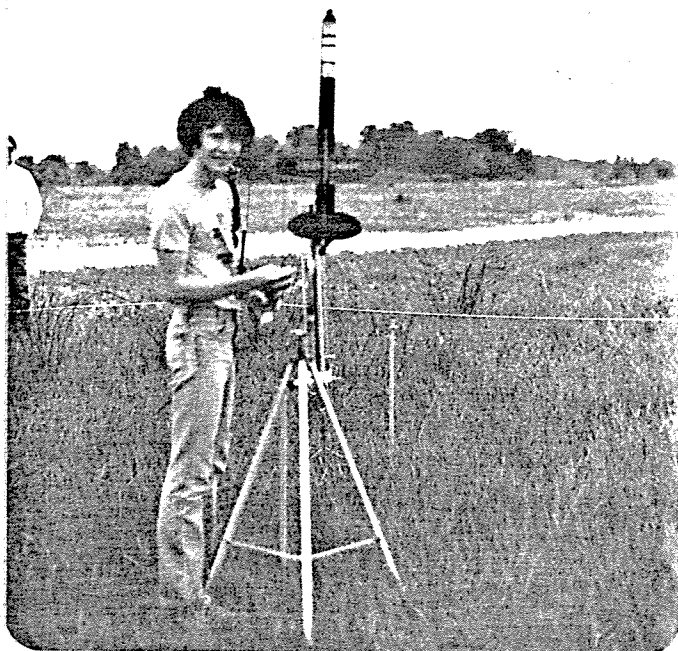
BOB "Keypunch" Kaplow

MIDWEST PRANG FILM
will be shown AT

NARAM-23!

NIRA SWEEPS M.W.R.C.

George with his parasite blew away the competition in F B/G.



Bullet Bob redeemed himself in B Payload. His orange epoxy paint finished model went 197 meters in a fairly stiff breeze, some 44 meters higher than his closest competitor. Aside from that, there weren't any really superlative flights. The wind messed up most people, causing crooked boosts and lower altitudes. Towers helped a lot. There weren't any good prangs either.

C Helicopter was another NIRA disaster. We just couldn't seem to put two good flights together. Everyone flew Rotarocs, except for the WWAR club. They did quite well with Don Quoxite/flexible blade models. I don't think any thermaled away, and one flight set a national record.

B Eggloft Duration "cracked us up." The Holy Handgrenade, a model based on a L'Eggs capsule, worked well last fall at Shooting Star, but failed us here. The large parachutes used got charred by the ejection charge and didn't open. NIRA did manage a 2-3-4 placing in C, Bullet's :33 being the best, but overall, the times were disappointing.

Weather was generally good for the 1981 version of the Midwest Regional Championships, May 30-31 at Bong Field, Wisconsin. NIRA's eight man group took places in all nine events, sweeping two of them. Not surprisingly, NIRA won the meet with 2,898 points.

Predicted Duration was the first event, and things didn't go well. Many of our B engine, Alpha-type rockets didn't stay in the air anywhere near as long as our practice flights. It took less than 10% to place in C Division. No general strategy appeared; the winners were just a bit luckier than most folks.

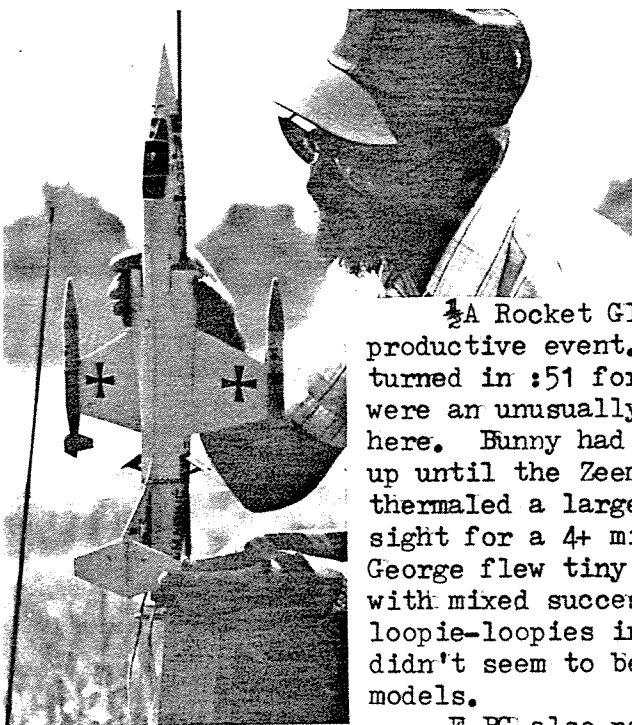
A Streamer Duration held better times for us. Bunny flew his ever-reliable Pipsqueek V for 2:57, the best time of the contest. Jedi George won B Division with a 2:53 total. Many modelers used tracing paper streamers, but they didn't always work. Some stripped off, others just didn't whip around enough to produce high drag. It seems the paper has to be of a certain stiffness to work well. Six NIRA-ites placed.

Trackers were set up during the lunch break, and Ric Gaff's phone system handled the communications. Martin Huber armed with TI-59, computed all the altitudes.

In A Altitude Efficiency, you have to get as much altitude with an A engine and a model weighing between 25 and 30 grams. NIRA swept this event, Braxton Miller's 231 meters with a swept finned, orange model being the best overall. Mark Schmidt's unpainted Pipsqueek V gave the trackers fits, but generous amounts of tracking powder put Mark in the winners' circle. Bullet Bob Kaplow managed to tip-off/go-slightly-unstable for one of the few mishaps in the event. An interesting design note: many people chose to ballast their small models to the necessary weight. Tom Pastrick simply flew a very long model, made the minimum weight easily without ballast, and got better stability out of his bird to boot.

MWRC

Tom Pastrick and his nicely built F-104 Plastic Model.

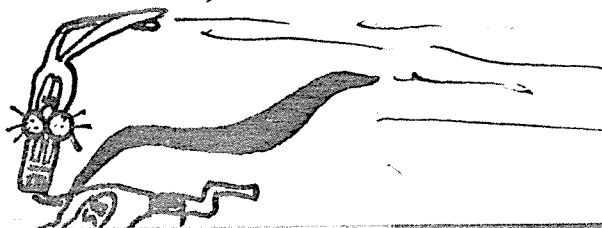


1/4A Rocket Glide was our most productive event. Mark Schmidt's "Rebel" turned in :51 for 1st in A division. There were an unusually large number of shreads here. Bunny had another 1st all wrapped up until the Zeemacz Team from Michigan thermaled a large slide-wing model out of sight for a 4+ minute time. George and George flew tiny (15 sq. in.) slide wings with mixed success. Jr. won, but Sr. had loopie-loopies in the boost. And there didn't seem to be any differences in the models.

F BG also paid off big, though only three NIRA-ites placed. Jedi George won in B Division with an excellent parasite glider on a 3 D12 booster. Mark Schmidt won A Division with an E20/1/4A parasite. Mark's wings were reinforced with epoxy, and the flight amazed everyone on the field! Bunny's Apteryx, "a wingless bird with hairy feathers" boosted high, but glided steeply for a second place in C Division. Chuck Hoffman's multiple touch-n-go F7 was the best prang here.

Plastic Model brought a 60+% DQ rate, and George's Cylon Raider (no parachute) was the only weird model. Tom Pastrick's 1/32 scale F-104 was the best static model, but a topsy-turvy crash put him out. Bunny's 1/72 scale F-104 boosted fine, but no chute. That left George Sr.'s Saturn V to take first. Pat Peterson's modified (?) Space Shuttle won in A Division.

Good events, good weather and good organization by CD Tim Vaccaro made MWRC a success. NIRA salutes RAC for a fine meet. Don't miss the 1982 version!



Tom's "camera fodder" Plastic Model Flight.

Photo's by Bob Kaplow

Bunny's Apteryx "a wingless rabbit with furry feathers" pulls a second place.

Lift-off of Jedi George's F B/G.



BOATLOAD(S) OF MAR

Boatloads of MAR certainly lived up to its name for NIRA members. NIRA literally crushed its competitors, sweeping 4 of 9 events and winning all three divisions. Seven NIRA-ites posted 3,876 points, a club record.

Maxes were somewhat difficult in $\frac{1}{2}$ A Int. SD due to wind and lack of thermals. Tom Pastrick missed one by eight seconds, then posted two maxes in a row to win C. George Sr. had three OK flights to finish 2nd. Pat Peterson followed George Sr.'s strategy to squeek out a win over Ken Czerwinski of Michigan.

In A SD, many people flew either the same rocket or the same design as the $\frac{1}{2}$ A event. Bunny's primary model cato'ed, but that just let him catch the only thermal of the day and post a 2:17 first flight. He didn't need another flight to win. Pat Peterson had a 1:44 to pace the crowd in A Division. The tracing paper streamer problems of MWRC were thankfully absent here.

Mark Schmitt seems oddly pleased with his scrambled egglofter.



"Jedi" George's "Oh God!, not another picture!"

Since the wind was still fairly brisk, NIRA put away the BG's and flew altitude. Mark Schmidt showed the soundness of that decision by posting a 1% error in Predicted Altitude. Jedi George had the Force with him here since he didn't have his tracked model. He guessed an altitude and placed anyway. Bunny and Bullet went 1-2 in C with the same design, Big Berthas. Tracking was OK here with a 92% closure rate.

Tracking went to pot shortly after Predicted was over. B Eggloft was especially hard hit. The low elevation angles (8-14°) required great accuracy on the tracker's part and quite a few 15% errors resulted.

Flying-wise, the event was not kind to the club. Pat, Jedi and Ric swept Payload, but below them were quite a few empty spots. "Track lost" cropped up here, too. Combined with a 73% closure rate, we missed opportunities right and left. Maybe we'll learn something at NARAM, and fly Payload better next season.

Eggloft was even worse. Tracking went to a 26% closure rate, and egg yolk rained everywhere. Bunny broke his egg on the way up; the acceleration cracked the egg against

the shock cord mount of his Easter Egg. Pat Peterson's first in A saved some points for the club.

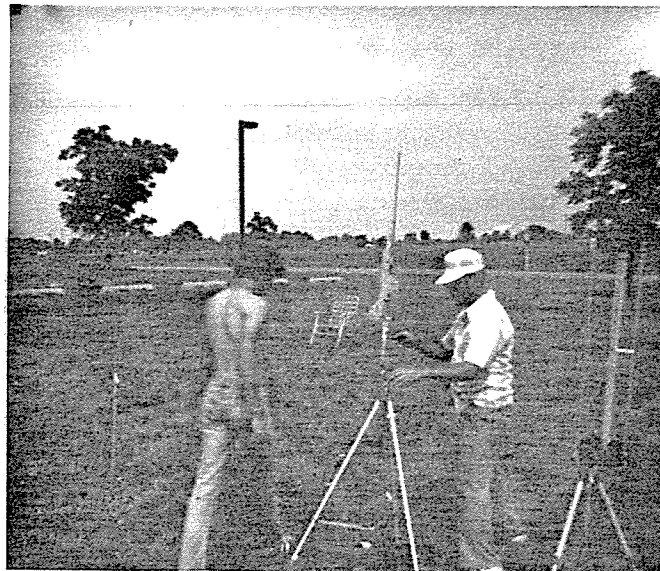
Things improved lots on Sunday. The wind went away, and thermals grew. Pat kept up his winnings with a 2:28 in $\frac{1}{4}$ A PD, Jedi won in B, and Ric Gaff's single qualified flight took C. A lot of fried mylar chutes here. Try more wadding, folks.

The glider events really came through. Pat's mylar flexies have really come around, and he nearly maxed out in $\frac{1}{4}$ A Int. EG. The flexies were well trimmed, and deployed promptly at peak. Jedi George flew a fixed pod model (see plans in Leading Edge, Vol. 4, No. 3). That disadvantage was offset by one honking boost from a piston! Nobody in B came close to George's two maxes. Bunny and Tom Pastrick fought it out in C. Bunny's last flight centered in a mild thermal, set a US record and put him in first. Tom had a couple of good flights, but a DQ hurt his chances. Both flew pop-pod birds.

$\frac{1}{2}$ A RG saw Mark Schmidt's ever reliable Rebel put up two good flights, both of which had very wide turns. Pat Peterson was a close second. Jedi George won B Div. easily. In C, Tom and Bunny reversed their placings of $\frac{1}{4}$ A Int. EG. Tom flew a fairly large model that was well-trimmed, whereas Bunny had a slight case of the "stalls".

Plastic Model ended the contest. In sharp contrast to MWRC, most PM's worked well. Pat Peterson's Saturn V flew well on a D12 for first in A. Mark Schmidt's A-7 Corsair boosted fine, then failed to eject its chute. Crunch. Jedi's 1/32 scale F-104, done in Canadian markings, flew well, but got edged in static points by Dave Wolf. In C, Tommy P's new F-104 killed everyone in static points, but inexplicably broke $\frac{3}{8}$ " wide elastic shock cord and crashed. That left George Sr.'s Saturn V to slip into first, just like MWRC. Bunny got his 1/72 scale F-104 to work, and Ric's rip-snorting MIG 21 flight took third.

Pat's seven first's and two seconds left him with only 963 points. Mark Schmidt's 354 points took second in A. Jedi's 747 total let him squeeze by Dave Wolf for first in B, and Bunny's 606 made it a clean sweep. All in all, the good weather, and willingness of people to help run the range (thanks, Mr. Peterson!) made Boatloads of MAR a meet you shouldn't have missed. See you next year!



Tom Pastrick preps his beautifully built F-104 Plastic suicide model.



Tommy P. with his Eggloft model, the "Pregnant Whale".



Bob Kaplow attempts Hari-Kari with Eggloft-er and piston while onlookers cheer him

UNCLASSIFIED AD's

FOR SALE: Used, one owner stasis suit. Good place to store anything for eternity. Suit still in use by former owner, but can be removed, if you don't mind having a psychopathic Thrint in your lap!

Contact: Marine Ins.

FOR SALE: Beautiful beach front property, excellent opportunity to get in on the bottom. We supply the beach, you supply the water.

Contact: Mos Bisley C. of C.

FOR SALE: Large and growing lump of pulsating gray goo. Completely house-broken except for slight trail of slime when it moves. Loves children, pets, adults and all other forms of organic matter. Entire lump to first caller or can be divided.

Contact: P. Newman

FOR SALE: Scrap concession of used Death Star, only slightly radioactive, already in small pieces for easy removal.

Contact: R. Alliance

Wanted: Earth. Contact Capt. Adama

LOST: One space shuttle on routine deep space mission. Last seen passing orbit of Jupiter. Excellent reward. Would also like return of astronaut pilot.

Contact: N.A.S.A.

WANTED: L.A.C. newsletter award. Willing to bribe.

Contact: R. Gaff

WANTED: Nuclear strike on select portions of Chicago.

Contact: S. News

Wanted: Capt. Adama. Contact the Cylons

FOR SALE: MEGATONS!! That's right we have sand by the megaton and we're selling it cheap! Great for landfills, beach property or payload weights. Best sand available anywhere.

Contact: Tatooine C. of C.

PERSONAL: Father all is forgiven, please come home. Luke

TRADE: '75 Plymouth in good condition for Peace on Earth.

FOR SALE: 150 formerly prime acres west of Chicago. Properties original use as a landfill not detrimental to use as a rocket or airplane range. Land is very solid except for several spots where smelly, black liquid oozes to surface. Property totally devoid of annoying model eating trees, scrubs, bushes, weeds and grass. Property slightly flammable but nothing 12 inches of concrete can't fix. Must be seen to be believed.

Contact: Hooker Chemical

WANTED: Nuclear strike on select portions of Ohio.

Contact: M. Bundick

Wanted: Replacement TV series. Contact ABC-TV

For Sale: Slightly used RC components. Suitable for use in high-powered RC EG. Some minor repairs needed. Contact: B. Biales, Cambridge, MA.

For Hire: Tree climber replaced by new chainsaw technology at World Championships will recover your models CHEAP! Contact: M. Sykos, Somerville, NJ.

PERSONAL: Luke, this is your last chance.
D.V.

UNCLASSIFIED ADS CONTINUED ON PAGE 14

Contest Calendar



SHOOTING STAR

NARAK-23

August 10-14, 1981

1/2A Int. SD	B Payload
1/2A PD	B Altitude
A R/G	R&D
1/2A B/G	D Scale Alt.
A HD	B B/G- A div. only
	OR E B/G with RC- B&C only
	E B/G without RC- B&C on

SPONSORED
BY
W.W.A.R

SEPT.
5+6
'81

6

1/2A S.D.

1/4A H.D.

A R/G

1/2A P.D.

B ALT.

B R/G

C S.D.

C Eggs Dur.

CONTACT:

D B/G

JIM ZINGLER
324 W. MILWAUKEE ST.

TOMAH, WIS.

(608)-372-5397

54660

SHOOTING STAR-SIX

Tomah, WI Sept. 5-6

1/4A HD	1/2A PD
1/2A SD	A R/G
B Alt.	B R/G
C Egg Dur.	C SD
D E/G	

CONTACT: Jim Zingler, 324 W Milwaukee,
Tomah, WI 54660

NORTHERN ILLINOIS ROCKET ASSOCIATION

MEMBERSHIP/ SUBSCRIPTION FORM

Please fill in completely, print or type

NAME _____ DATE ____ / ____ / 19 ____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

NAR NUMBER _____ EXPIRES _____ AMA NUMBER _____

(1) How long have you been involved in Model Rocketry? _____

(2) List your favorite type(s) of rockets. _____

(3) How did you first learn about NIRA? _____

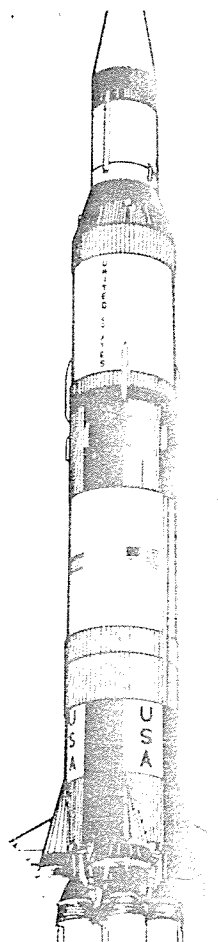
(4) List any other interests besides Model Rocketry. _____

Membership in NIRA- \$3.00 per year (includes subscription to Leading Edge)

OR

Subscription to Leading Edge along (6 issues)- \$2.00

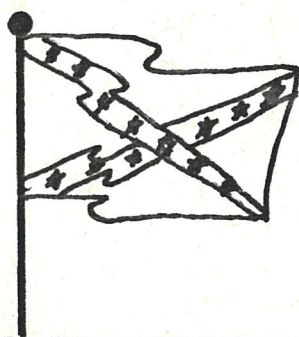
Please make checks payable to the Northern Illinois Rocket Association



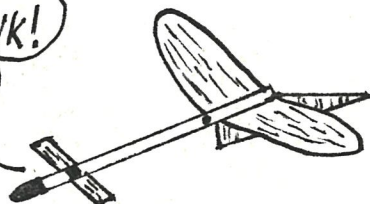
HI Y'ALL! MAH NAME'S TERRY LEE.

Down her' sout' of that there Mason-Dixon line, we ain't got nothing but small, littl' ol' launch sites, so some day, ah intend to come out to visit wi' Bunny and fly sum of mah Condors at Bong. But befor' ah go out to the range, ah'll just pay a visit to the one stop place for all yer rocket supplies: the Glen Ellyn Toy and Card Shop, 476 Main Street, Glen Ellyn

And jus' remember. This war ain't over till General Lee says so!



HONK!



A new company was showing it wares at Boatload of MAR, Competition Chutes makes some of the spiffiest chutes I've ever seen! C.C. chutes are available in two materials; nylon and polyester. The nylon chutes are available in sizes 18, 24, 30, 36 inches and any combination of Fluorescent orange, burgundy, yellow, white, black, blue, gold, red. The polyester chutes are 10, 12, 16 inches in colors; orange, yellow, black, white, & red. These chutes are strong and durable and will give years of service.

COMPETITION CHUTES

c/o J. Kuczek

49354 Bay Lane

New Baltimore, Mich 48047

Catalog is a one-pager so be a nice guy and send along a stamp.

UNCLASSIFIED ADS continued from page 12

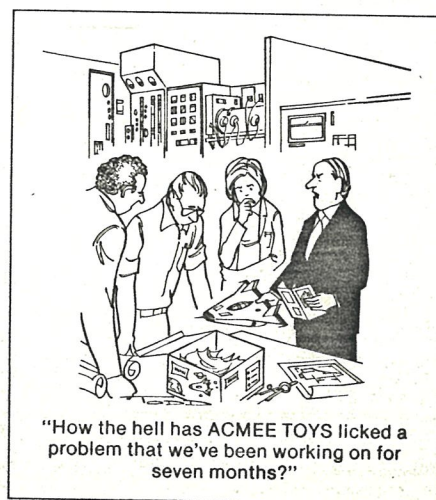
WANTED: Decent club newsletter with good plans, well-written articles and a well balanced editorial policy. Sense of humor desired but not absolutely necessary.

Contact: LAC newsletter committee

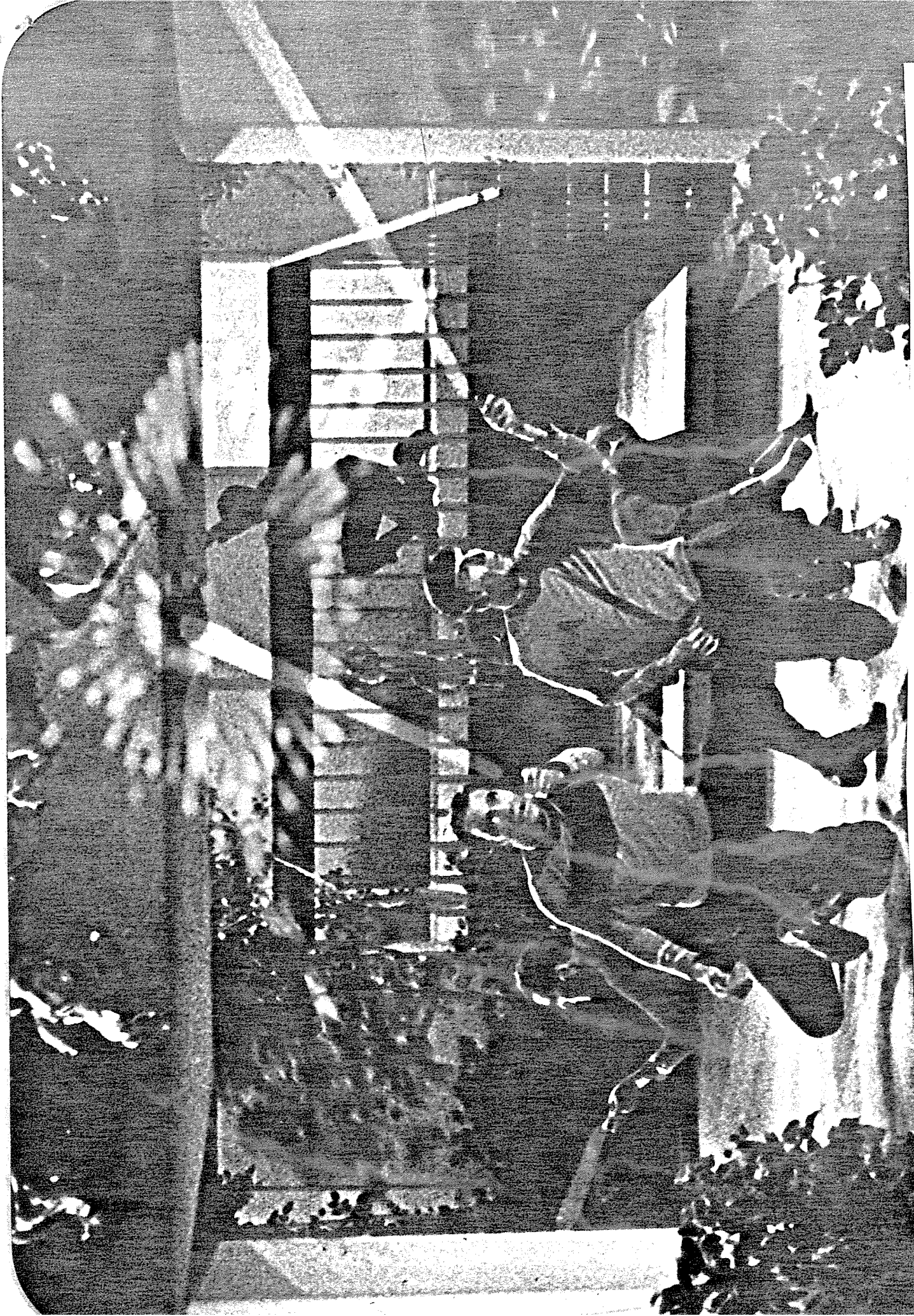
FOR SALE: We have tons of squashed body tubes, worm-infested balsa nose cones, bales of hopelessly warped sheet balsa, heaps of nozzelless rocket motors and much, much more valuble rocketry materials for sale by the ton, come haul it away!!

Contact: A.V.I. Astrohole Port

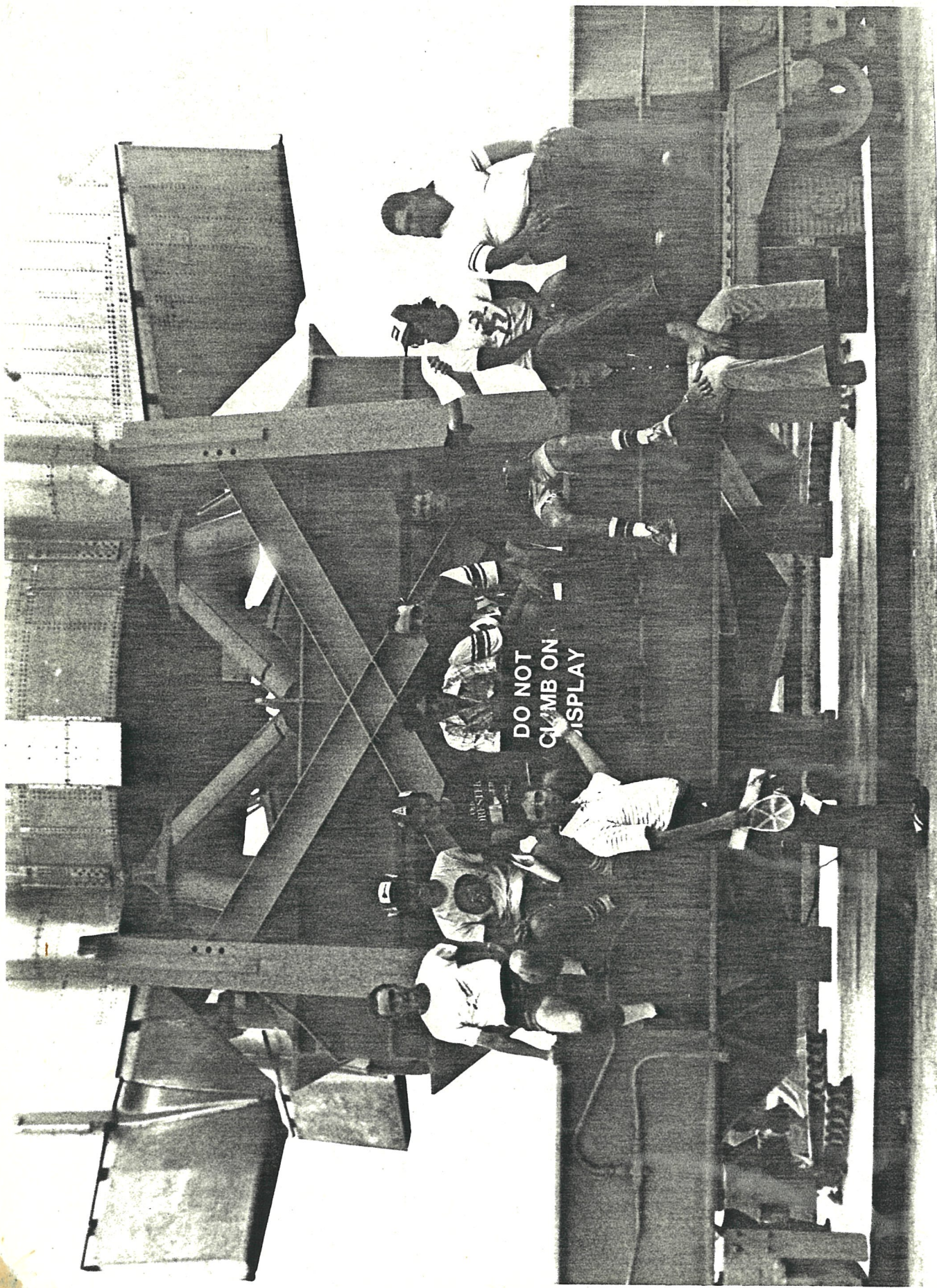
PERSONAL: D.V. Blow it out your ass.
Luke



"How the hell has ACMEE TOYS licked a problem that we've been working on for seven months?"



...AND BROWN THINKS HE HAS FLY PROBLEMS!



SPECIAL "JUST COLLECTING DATA, BUNNY" PHOTO

N-1 RAM-21 "Caught in the act" photo by Ric Gaff. How many of these clowns do you know?