

WINNER OF THE 1982 LAC NEWSLETTER AWARD

# T MINUS 1

MONTHLY NIRA MEETING July 1 Glen Ellyn Civic Center

7:38 PM

Review of ETR planning, and more; planning for Labor Day Launch.

MONTHLY NIRA LAUNCH Ackerman Park, Glen Ellyn July ?? 2 PM

More fun flying weather!!! Informal spot landing contest. Can you beat are rocket flyer Tom Pastrick???? Bunny will provide prizes for first and second places!

MONTHLY NIRG MEETING August 5
Glen Ellyn Civic Center 7:38 PM

Meet Report on ETR; FINAL PLANNING for Labor Day Launch. This is a very important meeting if you're helping with the Labor Day launch.

#### MINUTES OF JUNE NIRA MEETING

- NASA movie "America in Space: Within This Decade"
- MWRC meet report by Bob Kaplow.
- Tim Marcy nominated Rookie of the Year.
- ETR plans made and events discussed.
- 5. Uses for \$50 speakers fee from Kiwanis discussed, proposed uses include: (a) digital stopwatches, (b) tripods, or (c) NIRA flag and flagpole. Final decision posponed till July meeting.
- 6. Club launch dates set June 5
- Lombard mall display for June 18-19 discussed and plans made.
- Planning for Labor Day Launch started; jobs assigned.
- 9. Bob K. informs NIRA that the patches still have not arrived. Manufacturer gave us a 18% refund because they're so late.
- 18. NIRA picnic scheduled for August 21, possibly at Newton Park.



#### SPACEWEEK TO BE CELEBRATED

July 16-24 marks the 1983 observance of Spaceweek, a nationwide celebration of the anniversary of the Apollo 11 lunar landing. During Spaceweek, public events are held to explain the benefits of space technology in laymen's terms. Spaceweek is sponsored by aerospace companies, professional societies and other groups interested in different aspects of space technology. Spaceweek's ultimate goal is to create an overwhelmingly positive public attitude about technology in general and space in particular.

Nationally, events will be held in approximately 188 cities across the United States. Under the direction and support of Spaceweek national headquarters in Houston, Texas, local organizations sponsor events and coordinate activities that will educate the public concerning our future in space and the technology that underlies activities in space.

Locally, several events
demonstrating Chicago's involvement
in this national event are planned.
On July 15, 16 and 17, the Museum of
Science and Industry at 57th and
Lake Shore Drive will have a Science
Jubilee celebration marking their
58th anniversary. It will take
place in and outside the Museum. The
Jubliee will include special
exhibits, films, science 1
demonstrations, performances and
other events. A wide range of
exhibits are planned to demonstrate
the latest scientific advances.

The Chicago Society of Space
Studies and the American Society of
Aerospace Pilots will provide
exhibits for the space portion of
the Jubilee. There will be a 1/4
scale model of the Space Telescope
and continuous showings of the
latest NASA films. The main feature
of these Spaceweek exhibits will be
a training model of the Space
Shuttle cockpit with lessons
provided on actual controls. The
National Air and Space Museum will
also provide space exhibits.

During the rest of Spaceweek, the Shuttle Cockpit will be on display at the John Hancock Building observation deck, 875 North Michigan Avenue. Finally, the Chicago Astronomical Society will have a star party on the evening of July 23 at North Park Villiage Nature Center, 5881 North Pulaski, Chicago.

# CALENDAR

EIR-13 Bong Field July 2-3, 1983 "The unlucky last one"

Events: 1/2A BG, 1/2A PD, A RG, F BG, A SD, C SR Alt., C EL Alt. Open SL, Plastic Model.

UNOFFICIAL EVENT: F IRG

Contact: Mark B. Bundick 1925 N. Hudson Chicago, IL 60614 (312) 642-9828

Shooting Star B Sept. 17-18 Tomah, Wisconsin

Events: D BG, B PD, B RG, B HD, C Int. SD, D EL Alt. B Alt. Eff., Sport Scale.

Contact: Jim Zingler 324 West Milwaukee Tomah, WI 54668

#### RANGE RAT NEWS

Hearty NIRA congratulations to Pat and Jennie Miller on the birth of their daughter, Joanna Blair, June 21. The NAK's newest member weighed in at 6 pounds 3 ounces. Mom and daughter are doing fine, and the NAR managed to Keep running while Pat was buzy at the hospital. All the best to the Millers!!!

#### INTERNATS AGENDA SET

A recent note from Howard Kuhn indicated all is set for the 1983 US Spacemodeling Team to take to the field in September. The team's travels will take them from New York to Germany, and from there, by bus, into Poland for the contest. A practice session is scheduled for July 4th weekend at Allentown, PA. We'll try to have a report for you next issue.

With these events, those of use associated with Spaceweek hope to instill a positive feeling about space exploration and development in the public and stir support for space to the ultimate benefit of mankind.

Kenneth Anderson Spaceweek Director - Chicago

# MODEL OF THE MONTH WINNERS



The Model of the Month winner for May is Jim Houge and his puesdo-scale sounding rocket. Congratulations Jim!!



The Model of the Month winner for June is Henry Veldenz and his F5 plastic model conversion. Congratulations Henry!!



#### THE LEADING EDGE

is published bimonthly by and for members of the Northern Illinois Rocketry Association, NIRA, NAR Section 117, and is dedicated to the idea that Model Rocketry is FUN! Membership dues are \$3.88 per year and include a one year subscription to the Leading Edge. Nom-member subscriptions are available for \$2.88 per year. All membership and subscription fees should be sent to Bob Kaplow, 1628 Waterford Lane, Palatine, 1L 68867. Articles, plans, other newsletters and news items of interest should be sent to Ric Gaff Editor, 331 Third Street, Northfield, IL 68893, Any material in the Leading Edge may be reprinted if proper credit is given.

#### -COVER PHOTO-

\*DooDooDooDoo DooDoo". Come with Bob Kaplow into the Twilight Zone of rocketry as he flys a Happy Meal with a standard size 1/4A engine. (Yes, a standard size 1/4A!)

#### CONTRIBUTORS

MARK BUNDICK STEVE SANGERMAN KENNETH ANDERSON RIC GAFF

# M.W. R.C. 83

#### THE BONG 500

MWRC-83: The Bong 500

The Bong 588", more readily known as MWRC-83, was held over the Memorial Day weekend under cloudy Wisconsin skies. Upon arrival at Bong Field early Saturday, one could see a few clouds but otherwise pretty good weather. Surprisingly, Bong was fairly dry, not the huge mud puddle it was last year.

Most contestants chose to fly 1/2A Helicoptor first. The Don Quixote designs, which normally do well in HD, couldn't seem to operate properly. In combined A/B Division (Larry London was the only B Division Contestant), Larry London took first with a 49 second total. He flew a "Rose-a-Roc" from Leading Edge plans. The rotors are free wheeling for faster rotation. Second place went to Tim Marcy's 8 second flight; it was the only other qualified flight in A/B. In C Division, after Al Neinast's first flight didn't rotate, he turned in an incredible time of 72 second for first place. Dave Wolf finished second to Al with 49 seconds. He was followed by brother Dan and 39 seconds. Both flew standard Rotarocs.



Jim Zingler watches hopefully as a competitor flys.



Bunny and Beach salute a great MWRC.

Every contestant flying 1/2A Rogot at least one qualified flight. It was a tough event to win. In A/B, Howard Dison scored 112 seconds with a Geoff Landis design and won. Jedi George swamped C division with a 188 second first flight and a 33 second backup from a small slidewing. Al Nienast's swing wing trailed with 124 seconds. The battle of slide wing/swing wing continues with no resolution here in the Midwest.

In B BG, Bunny Bundick hopped over C Division competition. He lost his "Skokie Swift" RG to a boomer in Flight #1, but had a backup for insurance and won. Mark Schmitt was the A/B winner with a glider of his own design, similar to a "Flanigan Flyer". Howard Olson had a nice flight with a Bunny design, the "Icarus X", but was DO'ed for no return.

Saturday's last event was D RG. There were nine entries with but one DQ. After a cato shot Mark Schmitt's



RC RG across the field in a ball of fire, he pulled out the Hot Stuff, repaired the damage, and won A/B with 78 seconds. Dave Wolf took the C Division title with a D12 powered slide pod. Al Neinast looked like a sure winner here with a 218 second first flight, but flight two using the same model power pranged. The range shut down with the Judges gathering Space Systems models for examination.

Sunday showed a promise for rain as the range was set up for the day's flying. CD Bunny decided that B Altitude and C Superroc Altitude would be flown in rounds with pre-marked engines and weigh-in. All a contestant had to do after prepping was turn in his flight card and launch.

B Altitude saw many tracks lost as small two staged A models streaked into the black clouds forming overhead. Mark Schmitt had four engines purchased at the "Pat Peterson Going out of Rocketry Sale" cato. Al Neinast' fine 395 meter flight was edged out by NIRA's Henry Veldenz and 415 meters. Both flew stagged A's.



Dan Wolf forgot how to fly rockets. The nose come is upside down!

C Superroc was the last coent of e morning and was plauged with coping boosts and weathercocking models. The wind was getting stronger by the minute. The range was hit by a storm about 18 minutes after closing for lunch. Al Neinast avenged his B altitude loss with a fantastic 382 meter flight to win easily.

After the storm and lunch break, Space Systems contestants were given their launch windows, and they started prepping. Howard Olson's General Dynamics Cruise Missle had high static points and was the only entry to land in the recovery area. It won A/B by a convincing margin. Behind him was Larry London and a well finished LTV Scout from the Estes kit. Mark Schmitt's D Region Tomahawk had recovery problems, and my overweight Saturn V, after a 68 foot flight, plummetted to Earth before the three second delay was over. C Division was overrun with Mercury Redstones, as they made up 68% of the entries. Jim Zingler's won, followed by Dan Wolf's Centuri Little Joe 11, Dave Wolf's Mercury Redstone and Al Neinast's Astrobee

The range reopened for duration flights for an hour, but high winds cancelled all flying for the day. Overall awards went to Larry London's 732 points in A/B, followed by Howard Bison and 486 points. Al Nienast continued to win in C with 576 points. He was followed by Jim Zingler and Dave Wolf. The Prang Award went to Tom Beach who drove eight hours from lowa State University just to watch.

Bong Field improves with each visit. Picnic tables made prepping easier, and the outhouse on site looked nearly complete. The contestants thought Space Systems was too much bother, but everyone liked D RG. Look for that event and more at MWRC-84!

Steve Sangerman



THE WINNERS!! Larry London in A/B Div. and Al Neinast in C Div. Congratulations, guys!

#### MWRC 83 RESULTS

AZB DIVISION	E EG	D EG	1/2A RB	1/2680	B eLI	C SR ALI	SE SYS	PIS
1. Larry London	85/045-+	NG/32 -2	NG/48 -2	19/38 -1	TL/155-4	1005/ -1	378,25-2	722
2. Howard Glson	NR/STR-+	***	36/76 -1	ROT/UNS-+	UNS/298-1	NEJ/414 -4	587.28-1	486
3. Mark Schmitt	49/72 -1	78/ * -1	18/28 -3	ROT/UNS-*	TL/UNS-*	UNS/UNS -+	SEP -	432
4. Tim Marcy	43/5 ~2	***	24/18 -4	8/R0T-2	288/ * -2	932/UNS -2	***	276
5. Steve Sangerman	RB/RB →	***	***	NDF/ROT-*	SAF/250-3	782/586/-3	SAF	68
C DIVISION								
1. Al Nyenast	SAF/41 -6	218/PRG-2	41/83 -2	R07/72 -1	395/353-2	1159/ + -1	475.95-4	578
2. Jim Zingler	NG/75 -3	19/64 -5	45/26 -3	ROT/ROT-*	296/324-3	1885/ * -2	522.95-1	453
3. Dave Wolf	13/64 -4	81/148-1	34/HNG-7	30/19 -2	318/SAF-4	UNS/946 -4	491.25-3	447
4. Dan Wolf	125/SP -2	PRG/SAF-*	39/28 -6	15/22 -3	UNS/294-5	UNS/914 -6	514.19-2	294
5. Jedi Riebeseal	NG/RB -*	84/71 -3	188/33 -1	ROT/19 -5	***	***	***	284
6. Bunny Bundick	129/99 -1	78/ * -6	14/58 -5	***	UNS/ * -*	***	446.88-5	150
7. Darth Riebeschl	35/39 -4	44/92 -4	78/NS -4	***	***	***	***	108
B. Henry Veldenz	STR/STR-*	***	NG/19 -9	18/13 -4	TL/415-1	885/ + -7	***	75
9. Tom Pastrick	***	***	***	***	NE/TL -+	1813/ * -3	SAF -	42
18. Ric Gaff	***	***	***	***	152/ * -7	926/ + -5	***	8
Bob Kaplow	SP/ + -+	***	***	***	4**	***	***	ê
Tim Vaccaro	NG/44 -5	***	11/16 -8	MIS/11-6	165/ + -6	5P/ * -*	***	ë B

SECTION TOTALS:

NIFA - 1,962 WWAR - 1,515

PRANG AWARD:

Tom Beach, for driving over 8 hours just to watch!

BRK-Broke Egg CHU-No Chute MNG-Hune On Ros LST-Lost By Timers NG-No Glide MIS-Three Histines NR-No Return

NC-No Close NDP-No Deployment PRG-Franc NEJ-No Ejection

NVB-Non-vertical Egost SEP-Separation RB-Red Bacon

ROT-No Rotation SAF-Unsave Flicht

SHR-Shread SP-Spit Engine TL-Track Lost UNS-unstable



I'll huff and I'll puff and I'll ...
oops' Sorry' Wrong photo! Jedi lights
his DT.



DDDOPPS!! Mark Schmitt's RC B/G prepares to mow the grass at Bong.



The Marcy's posted for their first Regional at MWRC and did quite well.



A very laid-back "Jedi" demonstrates the "Mellow Method" of RC model airplanes flying.



Mark Schmitt inspects the damage to his RC B/G as Larry looks on.



Tom Beach; the only person to win the prang trophy without flying anything!

#### M W R 83 C



Bob Kaplow questions Dan about his new R/G design, the slide boom.



Al Neinast and his trained swing-wing.

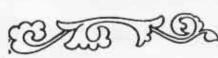


"This never happened to NASA." Steven inspects his pranged Saturn.

## ON ONE

### NIRAS PA AND

#### PHONE SYSTEM



HOW TO SET UP AND USE NIRA'S PA AND PHONE SYSTEM

NIRA has available for its use a combination public address and phone system. It is a fairly nice set up, even if I do say so myself. At MWRC, I discovered that it was not as easy to set up as I had thought. Someone had plugged everything in backwards' If the system had been labeled, it would be a lot easier to use. I will be labeling the system this fall. Still, it makes sense to go over the care and feeding of this equipment.

The main unit is shown in Photo 1. It is a simple blue box (but not a Tardis) with an on/off-volume control for the PA, a small jack for a mike and a large jack for a phone handset. Photo 2 shows a backside view. The small jack is for the PA speakers; two large jacks; for the phone lines. Both systems are electrically separate, though they share the same box. This means we don't have to use both systems if we only need one. If no tracking is to be done, the phone system need not be dragged to the field.

#### Setting up the PA System

Now we have this blue box and we want to use the PA. To do this, we will also need the other items shown in Photo 3. There are two speakers, one in an open wooden frame, the other in a cardboard box. The cardboard box is also used to store everything.



Photo 1: Front view of PA/Phone system.

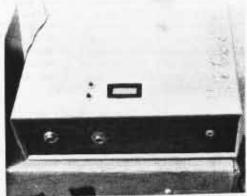


Photo 2: Back view of PA/Phone system.

To hook everything together, there are two long gray cables with connector plugs at each end. They are not the same plugs! Cable One has a miniature plug at one end. This is pluged into the small jack on the back of the main box. The opposite end has a larger plug which fits into the side of the wooden framed speaker. Cable Two has large plugs at both ends, so it doesn't matter which way you use it. Cable Two is used to connect the two speakers to one another.

The speakers should be set as far apart as possible, both from each other and from the amp. The mike is plugged into the small jack on the front panel. The large battery clips on the right side are hooked to a 12 volt battery (RED is POSITIVE, BLACK is NEGATIVE). The on/off-volume control is turned up full and you're on the air!

OOPS! You say you've done all that and it doesn't work? Then consider the following points:

- check to make sure battery is hooked up correctly; proper polarity with a jumper if two 6 volt batteries are used;
- (2) Is the battery any good at all?
  - (3) Check the hook up again.
- (4) Crank up your lungs, and kiss the PA goodbye!

Setting up the phone system, or "Who needs ya. Ma Bell!"

The phone system is a bit of a pain to set up and take down. The two rolls of wire shown in Photo 4 are the reason. They have to be strung along the ground from the launch area to the tracking stations. Stringing the line is not hard to do, but it is time-consumming.

At the free end of each coil of wire is a large, 1/4 inch plug for the large Jacks on the back of the main unit. To begin, wrap the end of the wire several times around some thing sturdy, like the launch control table, then plug it in. This way, if someone trips over the phone line, they break their neck and not the PA/Phone system! The easiest way to unroll the wire is to use a wooden dowel through the center of the coil as an axle. Two people walk to each tracking station with the coil unrolling between them. To take up the wire, the procedure is simply reversed.

Three handsets are used with this system, one for each tracker and one for the base station. The handsets all use the same plug and are interchangeable. The last thing to do is to power up the line. Photo 5 shows the batteries used with this system. The two large ones on the right are six volt gel-cells for the PA. On the left is a battery holder with a single 1.5 uolt cell. This is the entire power supply for the phone system. Any size 1.5 volt battery ,up to a C size, can be used. Higher voltages should be avoided. The extra volume is not needed, and the excess noise on the line would blow your ears off! We usually use a AA cell.

I hope this description of the PA/phone system has not put off anyone. It really is easy to set up and use. While a meet can be run without a PA, tracking is almost impossible without a phone line. The phone system is well worth the effort. Next issue, we publish complete details of what's inside the box!



# MIDCON-1

MIDCON-1 was a convention put together on short notice by the BLAR section. It was designed to serve the same sort of modelers that Kentcon did. By and large, BLAR accomplished their objective. The convention was held over the April 29 weekend, and attracted about 48 participants from several midwestern states and two Canadian proviences.

Things got started Friday night with Bunny's keynote address, "Twenty-five Years of Model Rocketry". Bunny covered the history of model rocketry by concentrating on economics, technology and management. Bunny concluded that the ups and downs of the hobby were tied to people in the field. When they worked hard, the hobby grew. When they didn't, the hobby suffered. The evening concluded with a number of slide shows, more than adequately narrated by the entire audience.

Life got off to a slow start Saturday morning, but the wait was worth it. Vince Bonkowski gave his "Kitbashing" presentation. The talk featured a slide show of Vince hard at work in his basement, an interesting twist to a discussion group. Vince stressed the need for lots of detailing to help hid mistakes and divert attention where you want it. He also said you need lots of basic and unusual parts. Scrounging was highly recommended. You'll also want to consider keeping symmetry in both parts and paint pattern.

Vince followed in the next time period with a discussion of static modeling. The slides here were from the International Plastic Modelers Society convention in St. Louis. A huge variety of plastic spacemodels appeared, including one with a bowling ball! Even if static models aren't your bag, you could pick up a lot of ideas for flying models from this group.

Bunny teamed up with Gary Flatt of GLAR to do "Computers in Model Rocketry". Few in the audience had home computers, so the duo stressed what to look for in hardware shopping. Knowing what sort of programs you want to run will help you decide what to buy. Shopping around was highly recommended, especially with the price of home computers coming down rapidsly.

After lunch, Chris Pearson did a group on "High Powered Models" and passed out a list of high powered manufacturers. Bunny did his "BG/RG" presentation with an emphasis on tissue covering, the art of thermal hunting, use of formulas to help design good BG's, and experimentation with new building techniques.

John Phillips and Woody Woo joined forces to present "Plastic Model Conversion". To insure stability, they suggested doing three swing tests. The first is done with the model perfectly balanced, the next with the model pointing nose down 18 degress and a final test with the model nose up 18 degrees. To center the engine thrust line, look at the model from the rear, draw a rectangle around the perimeter, and draw the diagonals. Volia! Instantly centered thrust line.

The Phillips Brothers, Sam, John and Joe, are no relation to the Marx Brothers, but they stood in for Tom Hoelle in Scale anyway. They showed some of the most interesting sport scale models I've ever seen. They included a Little Joe I, a Pershing scaled from the "Time" magazine cover on defense, and a Block I Saturn converted from the Centuri Saturn 18 kit. Sam emphasised that you didn't have to be a super builder at the start. Just get started, and keep at it. You're bound to improve.

A downpour killed the launch. Vince B. tried unsuccessfully to get more people to enter kitbash, but found few takers. People wandered off to talk in rooms or play ping-pong in the game room. The schedule slack made for a longer than normal dinner period.

After dinner, everyone was treated to the 1983 version of the GLAR slide show. This presentation uses two projectors, a dissolving device to fade slides in and out, and a sound track with automatic queueing. A huge round of applause ended this show. It's one of the best A/V presentations I've ever seen in the history of the hobby.

A manufacturer's display/sale followed. A half a dozen manufacturers were joined by Vince B. and Sam Phillips trying to unload excess basement stocks of kits and parts. Sam did his K-Mart imitation by offering three minute "Blue Light" specials with cut-rate prices. Vince countered by offering free Sure Shot igniters with any purchase. It was funny, but not nearly as entertaining as the WISCON auctions. The evening broke up with the usual war stories throught the motel and a video tape of "Star Wars".

Sunday morning brought Saveto Prato, the new CAR Chairman. He outlined several plans for improved CAR services and increased exposure for the CAR among the public and rocketeers. He also discussed the possibility of a CAN-AM meet to be held next fall, sponsored by the CAR and NAR, and sanctioned by the FAI. Bunny presented an NAR update next. He discussed various committee operations and the February Board meeting in Houston. Also outlined was the Board's current thinking on the issues of higher powered models. The Board is seeking input from the high powered motor manufacturers on all consumer safety issues relating to high powered motors.

The convention closed out with awards for the photo, kitbash and oddroc contests. The Chatham Rocketry Association from Canada was the convention's most active section. Look out for these guys in the future. They've got that sort of controlled insanity that builds great clubs.

Duerall, MIDCON was hit with its participants, and GLAR is looking to improve the next version of the convention. If you can spare a weekend and the six hour drive from Chicago, I recommend you try MIDCON. GLAR sponsored events have a tradition of being fun, and this one was no exception.

Bunny



A pleased Bunny with his SPEV after a successful flight.



Larry London with his weird \*Coke-Cane\* rocket.



Tommy P's Monokoted "Topcat" returns from its flight a lovely shade of algee green.

#### MAY LAUNCH

NIRA's 1983 launch scheduling luck seemed to be holding out fine. The weather for May's launch didn't look to be much better than any of the year's previous launch dates. There were thunderstorms around, and winds were brisk. Those who hung around were eventually rewarded with clear blue skies, though the wind remained strong.

Bunny Kicked off the launch with his ever-present SPEU. The veteran model seemed to set the tone of the rest of the launch. No radical or new designs came out. Prang fans didn't get too much action either.

Tom Pastrick seems to have moved to Monokote as his finishing method. His "Top Kat" design, seen both in the "Leading Edge" and Model Bocketeer, splashed down in the good ol" sewer plant. Its Monokote covering preserved much of the model even after spending a good 38 minutes in the drink. Tom also showed up with an "Infinite Loop/Estes Sprite" type model; Plans at 11, folks.

Bullet Bob was testing altitude models for the upcoming contest season. True to the Glen Ellyn Toy and Card shop ads, the orange birdie blasted off for oblivion. Would it have been tracked? Film at 11.

Jedi George didn't fly any rockets, but still kept his title of "Chief NIRA RC Pilot". His ancient "Gentle Lady" sailplane sported an .849 model airplane.motor. It powered the aircraft to impressive altitudes in the stiff wind. When harassed by Tom Pastrick about doing multiple loops, Jedi responded by doing four in a row, doubling Tom's best effort. Condor competitors at ETR: Beware this Jedi pilot!

Bunny livened up things during a lull by giving away free Estes catalogues and free rockets'!! Bunny had been doing some closet cleaning, and had a box of partial models, wrecked models, and complete, flyable models. It didn't take long for the box to be emptied. His old "Flying Jenny" model was promptly launched; it looped into a crash downrange.



Mark Schmitt with his unusual ring tail helicopter duration model.



Tim Marcy inspects the damage to his Centuri Satellite Killer after its prang.



All in all, it was a pretty quiet day with some OK flying. Maybe NJRA will show up in force once the weather finally decided to catch up with the "official" season. Don't miss our next launch!"

Ben Roberto lends a hand to Jedi as he prepares to fly an airplane (yech!).



Mark Schmitt prepares to fly his RC B/G with a bit of help from Ben Roberto.

#### JUNE 5 LAUNCH

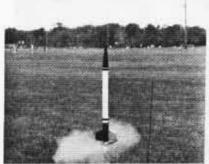
NIRA's loyal Rebel forces were rewarded with good weather at last on June 5. Turnout stayed small, though with only the "diehards" doing any flying.

Henry Veldenz Keeps
experimenting with helicoptor
duration models. To simplify thing
and speed the tests, he flew the new
blade assembly he'd build in a
clunky BT-60 bird. It didn't set
any US records, but it was an
effective test vehicle.

Tom Pastrick flew his WAC-Corporal featured in the last issue. He tested out both A's and B's. Both turned in good flights. This model, with a suitable photo, could be the simplest Sport Scale model ever. Tom also trimmed out his Old Timer "Space Plane" BG and a slide pod RG. The RG was nearly lost to a weak thermal.

Jedi George brought out a visitor. Ben Roberto from Indiana was on a mini vacation to the area and stopped by to discuss RC B6 with the troops. He loaned Jedi his radio gear (George was still waiting for a Tower RC order) to try out a new ship. The model was even larger than the last one, sporting about 168 square inches of wing area. Under D12 power, the model pitched down, did one half roll and crashed in the woods. Ben, Bunny and Jedi spent half an hour finding the remains. Despite its untimely intersection with a tree, the radio still worked.

Another quiet launch ended as the sun went down. Again, nothing new to report. Notable is our lack of confrontation with a single softball or baseball game this year. Come on out to the next, uncluttered launch!



Tom Pastrick's WAC-Corporal lifts



Bob K. and Ben R. checking out the grass at Ackerman Park.



Bunny and Tom discuss the relative merits of Helicopter duration.



Jedi George tries to convince everyone he was not flying a model airplane. No one was convinced!



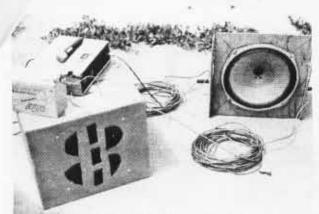


Photo 3: A compact view of the PA system set up.

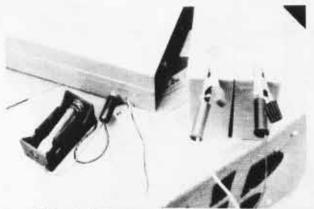


Photo 5: Side view showing 1.5 volt battery for phone and gel-cel's for PA.

# PA-PHOZE SYSTEM



Photo 4: A compact view of the phone system set up.



Photo 6: Everything needed for a complete PA/phone system.

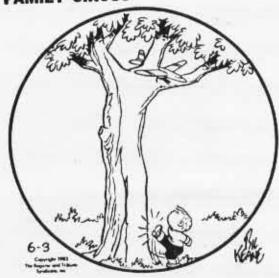


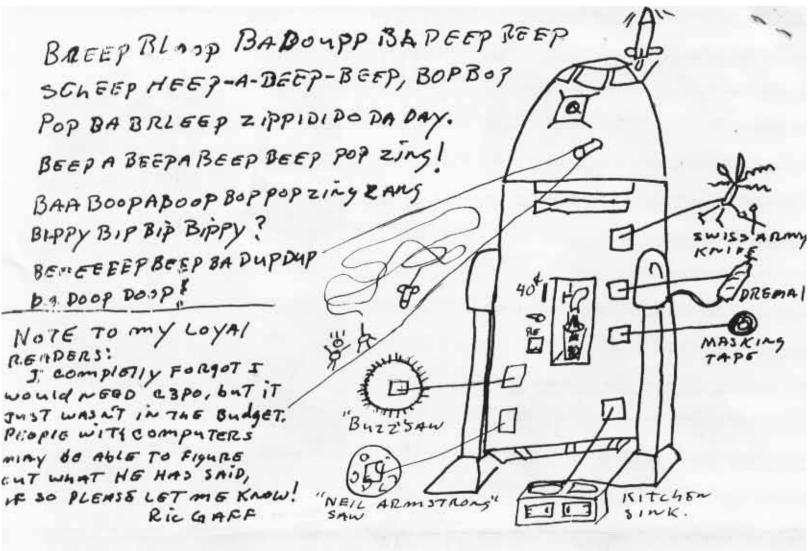
PHOOSH!





#### FAMILY CIRCUS





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