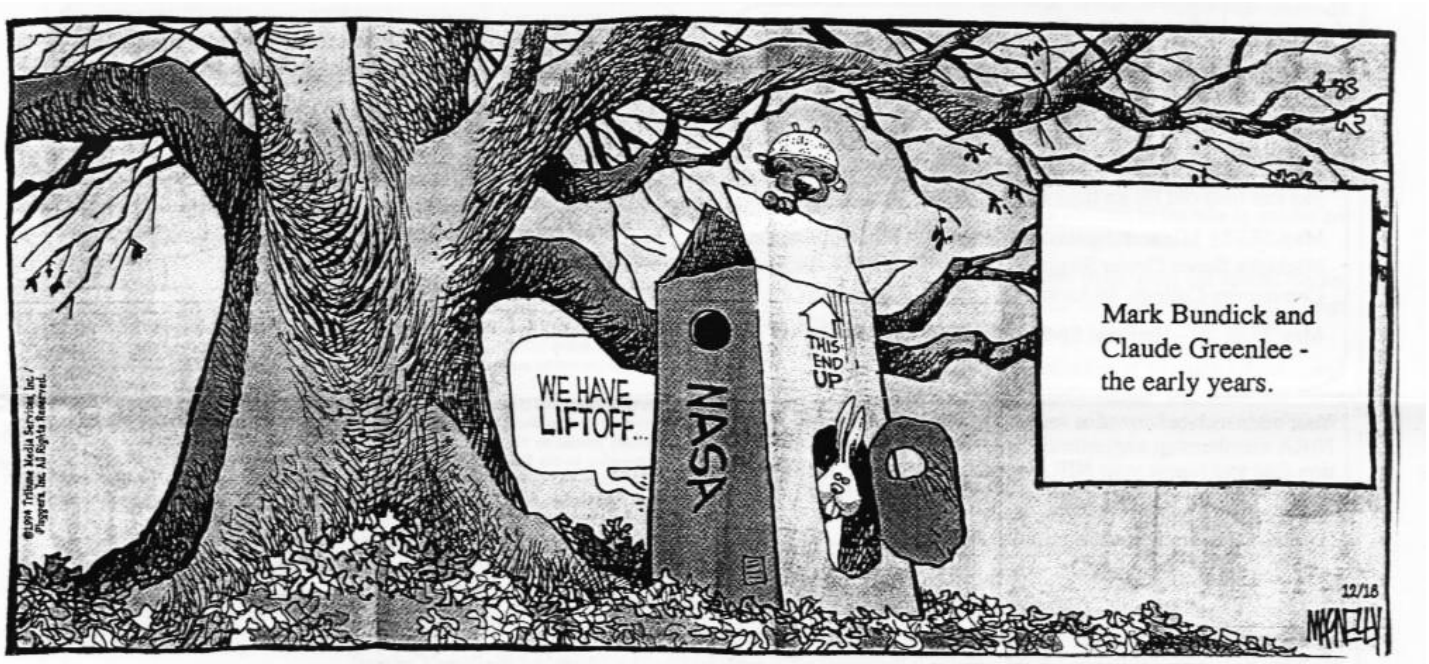
THE LEADING EDGE

Newsletter of the Northern Illinois Rocketry Association,
NAR Section #117, TRA #36

Volume 18, Number 2
March/April 1995



T MINUS 1 - NIRA'S CALENDAR OF UPCOMING EVENTS

MONTHLY MEETINGS

All meetings start at 7:30 PM, and include refreshments, entertainment and a brief business meeting. Don't forget a model for "Model of the Month" voting. We need volunteer speakers to entertain the troops after the business meeting, so call Bob Wiersbe at (708) 690-5442 if you can help with ideas or can speak yourself.

April 7 - Regular Monthly Meeting. Bob Kaplow will be teaching us how to safety check a rocket.

May 5 - Regular Monthly Meeting.

OTHER ITEMS OF INTEREST

April 22 - HUVARS 1/2A Section/Local Meet. Hamburg, MI

April 22 - High power rocket launch, Rantoul Aviation Center, 10 AM. For information call Jonathan Sivier 217/359-8225.

May 13 - Demo Launch at Moosehart. Call Bob Wiersbe if you can help out for an hour or so.

May 27,28 - Midwest Spacemodeling Championships at the Michigan Space Center Regional Contest (MSC^2). Jackson Community College, Jackson, MI.

May 27,28,29 - National Sport Launch, Amesbury, MA.

Your address label contains an item of vital information, your NIRA membership expiration date! Please check your expiration date and renew your NIRA membership before it expires. You will not receive any more newsletters after your expiration date has passed!

1994 CLUB LAUNCH DATES

All launches or other activities start at 2:00 PM. BYOL (bring your own launcher). Location for our 1995 launches is Community Park in Lisle. Get off Route 53 at Short and head west. If you have questions prior to any launch, call either Bob Wiersbe at 708-690-5442, or Mike Jungclas at 708-910-1267.

April 23: First launch of the 1995 season!

May 21: Regular Club Launch.

June 17 & 18: Midwest Regional Fun Fly! Two days and one night that you won't want to miss!

STAFF
Bob Wiersbe - FrameMaker/Scanner/Printer Interface
Ric Gaff - Xerox/Manual Assembly/Post Office Interface

CONTRIBUTORS
Lawrence Bercini, Mark Bundick, Jim Cook, Ric Gaff, Bob Kaplow, Kevin McKiou, George Gassaway, Bob Wiersbe

THE LEADING EDGE, published bimonthly by and for members of the Northern Illinois Rocketry Association, NIRA, NAR Section #117, is dedicated to the idea that Sport Rocketry is FUN! Articles, plans, photos, other newsletters, and news items of interest should be sent to Bob Wiersbe, 1835 Shetland Drive, Wheaton, IL 60187 (or electronically via Internet to hrbob@ixstar.ih.att.com.) Photos will be returned, other material returned if requested. Send membership applications (dues: $3/year, including a six issue subscription to the Leading Edge) and nonmember subscriptions ($5 per six issues) to Ken Hutchinson, 84 Jefferson Lane, Cary, IL 60013. Any item appearing in the Leading Edge may be reprinted by Sport Rocketry with proper credit given; all other uses require written permission of the Northern Illinois Rocketry Association. Getting the newsletter out will never be harder than trying to come up with a clever line in this space.

Model of the Month Winners!
Bryan Chesi (Klingon Cruiser) and Bob Kaplow (MANIACATO) were the winners in January. Damien Palmer (MPC Martian Patrol (when was the last time you saw one of those??)) and Mike Ugorek (unnamed red rocket) were the winners in February. Nice going guys!! Every MOM winner is automatically entered into the Model of the Year Contest!
See the special Model of the Year contest on page 11! Vote early! Vote once! You could win the raffle just by voting!

1995 Estes Catalog Review

by Richard Gaff

Estes has dropped the Saturn 5 kit! Its the END OF THE WORLD!!! ITS THE APOCOLYPSE!! AAAAAAIIIIIIEEEEEE!!!!! DOOM! DEATH! DESTRUCTION OF WESTERN CIVILIZATION!!!!! IT'S ALL OVER!!!!!! EEEEEEIIIIIIEAAAAAAIEEE!!!!!!!! or not.

Yes the Saturn 5 kit, like the real rocket it is a model of, is now history. Again. Why is anyone surprised?

Without a doubt the most interesting new model is the Mercury-Atlas kit. This 1/35 scale model uses a lot of injection and vacuum formed parts for the details making it much easier to build. The one we saw at RCHTA looked pretty good and you can bet that this will be a "hot" model this summer! The Mercury-Atlas is 33 inches tall, 3.39" in dia. and flies with either a D12 or E15 (lets hope they get the bugs worked out!)

The SR-X is another spiffy looking kit and is based on the US Air Force's classified Project Aurora hypersonic aircraft. The SR-X is a SL2 kit made mostly of foam, designed to be easy to build and fly. At ejection the model kicks out its engine pod and glides back. A neat looking model that should be a lot of fun.

For the R/C crowd the Sweet Vee joins Estes growing fleet of R/C gliders. Unlike it's sisters, the Sweet Vee has a more conventional design that may appeal to fans of slope soaring and people who want more performance. The wings are built-up using foam and covered with wood, the fuselage is blow molded and has a fiberglass boom. A very nice looking model that may even appeal to Internats fliers.

Speaking of gliders, the Transwing super glider is new and is rather unusual. The Transwing is a flop wing glider. It boosts like a normal rocket but at ejection the glider separates from the engine pod and the wings flip (or flop if you prefer) open increasing the glide surface. This puppy is not likely to win many prizes in competition but is rather interesting. The Transwing uses plastic parts for easier building and flies on "B's" and "C's".

With the last 3 new kits the emphasis is on flashy, eye-catching easy to build rockets. The Firestreak uses 2 metallic looking streamers for recovery and has a "fiery flame" look. The other interesting feature is it's use of thru the wall construction to attach the fins. The corkscrew is for all those people who want their models to spin but are unable to put fins on crooked. The model has a canted fin and engine designed to laugh at the idea that rockets should only go straight up. The corkscrew also uses thru the wall construction to attach the fins. Lastly for people with lots of bugs on their launch field is the Hi Jax. This is an absurdly easy to build model of the E2X line and has a clear plastic payload section for terrorizing bugs or other small invertebrates. All 3 models use standard size motors.

The most notable change (aside from the missing Saturn V) is that individual components are no longer orderable. Want a body tube? You have to order 3. Want a nose cone? You have to order a pack of 5, and all 5 are different. The same goes for transitions, centering rings, and stage couplers. There are a couple of new items that you might find interesting, BT-56 and NC-56 (the tube that's used for the Maniac and Astrocam), and clear payload sections. Again, you have to buy them as a set either for BT20/50 or BT55/60. There aren't prices for any of these new items yet.

Three Oaks Spring Launch

Announcing the upcoming Three Oaks, MI spring launch:

April 8-9, 1995

Waiver to 8,000 ft in effect from 8:00 am to 6:00 pm EST.

This is a Tripoli sanctioned launch sponsored by Team One, Michigan. All are welcome. Launch fees are $5.00 per day.

Official motel is the Comfort Inn in New Buffalo, MI. but there are several others available in a 10 mile area. Close enough for you Chicago folks to make a day trip. Call John Miller (517) 393-3043 for more information.

NAR S&T NEWS

Release 24 - NEW MOTOR CERTIFICATION

The following motor has been certified by NAR Standards & Testing for general use as a model rocket motor effective immediately. It is certified for contest use effective immediately.

The following is an Aerotech single-use disposable motor. It is an "RC" motor, with no delay or ejection charge.

Aerotech: 24mm x 70mm: E15-PW (40.0 N-Sec total impulse, 17.8 grams propellant mass)

Release 26 - NEW MOTOR CERTIFICATION

The following motor has been certified by NAR Standards & Testing for general use as a model rocket motor effective February 26, 1995. It is certified for contest use effective May 27, 1995.

The following is a North Coast Rocketry single-use disposable motor. It is certified with both a six second delay and ejection charge, and a version that is plugged (P) with no delay or ejection charge.

NCR: 29mm x 152mm: F30-6,P (73.0 N-Sec total impulse, 44.0 grams propellant mass)

Jim Cook, Secretary for NAR Standards & Testing <JimCook@AOL.COM>

Jack Kane, Chairman

NIRA REPRINT SERIES

The NIRA Reprint series, which has been available for months at NIRA meetings, is now available by mail. The reprint series is a an effort to get interesting useful information out of the collections of "Old-Timers" and into the hands of people who don't have access to the original material.

Sources for the reprint series include back issues of Model Rocketeer/American Spacemodeling/ Sport Rocketry, Model Rocketry Mag., main stream magazines, and the Internet's Usenet rocket group Rec.Models.Rockets (R.M.R.) just to name a few.

There are currently 8 booklets available.

1) Sport Plans of the Model Rocketeer. A collection of 10 easy to build single page plans. 16 pages

2) Sport Plans of the Model Rocketeer #2. A collection of 12 single page plans with the emphasis on ODD. 16 pages

3) Glider How-to articles from the Model Rocketeer. How to build, trim, and fly a rocket powered glider. In addition to the how to articles are several more technical articles. 20 pages

4) Boost/Glider plans from the Model Rocketeer. Collection of 7 interesting 1 and 2 page plans. 20 pages

5) Ideas. A collection of 10 articles about ... well ...IDEAS! Some things you may not have thought of such as launching from under water! or kitbashing. 16 pages

6) Reusable Rocket Ships. Set of 3 articles about the Delta Clipper (DC-X) from Popular Science, Air & Space and Sky & Telescope. 20 pages

7) Rec.Model.Rockets Glossary of Rocket Terms.

8) NEW! The NIRA Big Book-o-tips! 22 pages of tips, hints, suggestions and ideas that will help you with everything from building to flying!

Reprint booklets are FREE to members at club functions. If you want them by mail simply send 32 cents in stamps or cash for EACH booklet you order. Or (best of all) a large 9x12 Self addressed stamped envelope (the SASE can be used for several at once, be sure to include postage for EACH booklet) to:

Richard Gaff
3175 Norwood Ct.
Streamwood, IL 60107

NIRA Quote of the Month: "When it comes to rockets, it's not the size of the motor; it's the magic of the model." - Mark Bundick

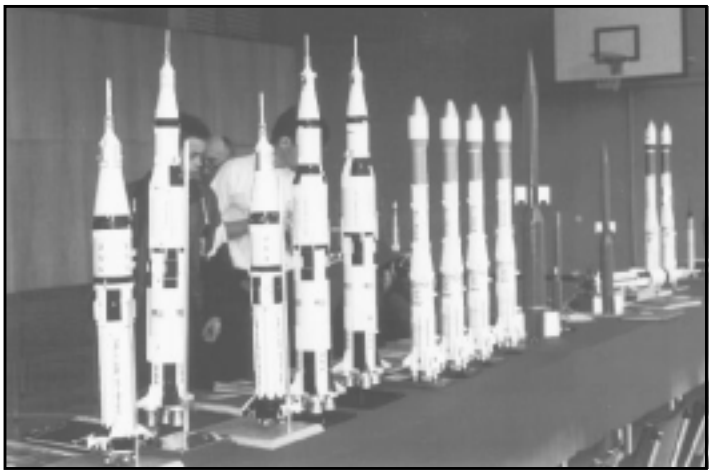
Bowling and Building

These pictures are from the January bowling party and February building session. Upper left - Mark Bundick and Mike Ugorek's son (sorry, don't have his name) are checking something out. Upper right - Bill Thiel worships at the scroll saw. Lower left - Kevin Smith is either converting his mailbox to fly, is developing a new tube launcher, or is preparing a surprise for his mail carrier. Lower right - Mike Ugorek (Al Borland's twin) and Tom Pastrick check out the remains of Tom's Bomarc. Bottom - the motley crew that showed up at Hesterman Bowl (I was taking the picture). Adam Elliot was seen stuffing motors into the finger holes of his ball, trying to create the sport of Rocket Bowling. His plan was foiled, however, when someone noticed the "NO LOFTING" sign (to the right of the clock). The kid in front mugging for the camera is my son Chris.
Building session photos by Ric Gaff, bowling photo by Bob Wiersbe.

1994 World Spacemodeling Championships
a pictorial review from Kevin McKiou

The 1994 WSC was held last September in Leszno, Poland. NIRA members Kevin McKiou, Ben Roberto, and George Riebesehl were there to compete in S8e (RCRG). Kevin brought back a ton of pictures, and after recovering for a month or so was able to put together this running commentary of the event.

The is the front view of the 19th century castle/palace in which we stayed. It had been converted to a hotel, but, the rooms were cramped and the plumbing was old (very old). Regardless, it and the grounds were beautiful.



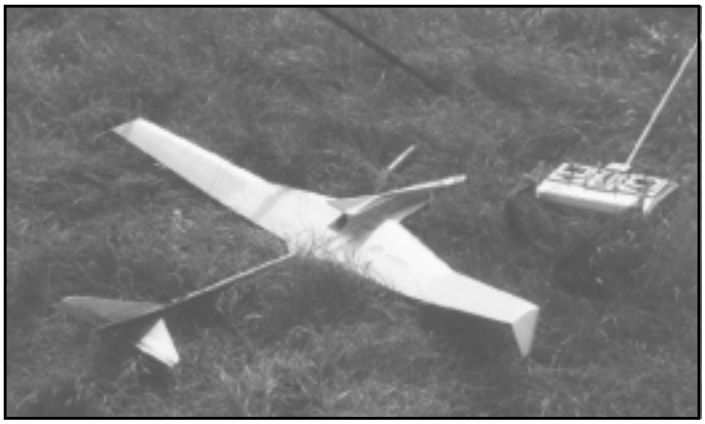
You want Saturn's and Ariane's??? They had them. This is a line-up in the scale room.

Check-in for S8e (RCRG). A large crowd gathered to see all the models as they were being checked in. This is Jiri Taborsky's (Delta Motors) model being checked in. Jiri is standing on the extreme left. Howard Kuhn is seated on the left in the foreground.

Dr. Bob Biedron (1992 S7 (Scale) world champion - USA) and two (Swiss?) competitors are examining some of the AWSOME scale models. BTW, this picture must have been taken by one of the people who helped Bob check in. The scale room was closed to the general competition public.

This was the first Juniors World Spacemodeling Championship and John Marsh IV (Jay Marsh's son) is the first US Junior World Champion. "Junior" won his gold in S3A (parachute duration) with three perfect maxes.

Franz Weissgerber (Germany - Silver Medal) is checking in with his fantastic molded models. They not only had elliptical planforms, but elliptical dihedral as well! Behind him is Ondrej Pajdlhauser (Slovakia) who won the gold in the Junior category.



Apparently the French thought there were going to be "style" points awarded in S8e. At least, that's the only reason I could come up with to explain this French S8e model.

This is how it looked to me when my model was launched. That's me with my back to the camera. My model is the blurry "cross" about 10 degrees above the horizon. This was probably my first flight. The sky was quite cloudy and the weather cold at the beginning of the S8e event. I can tell you that my knees were shaking, but it wasn't because I was cold.

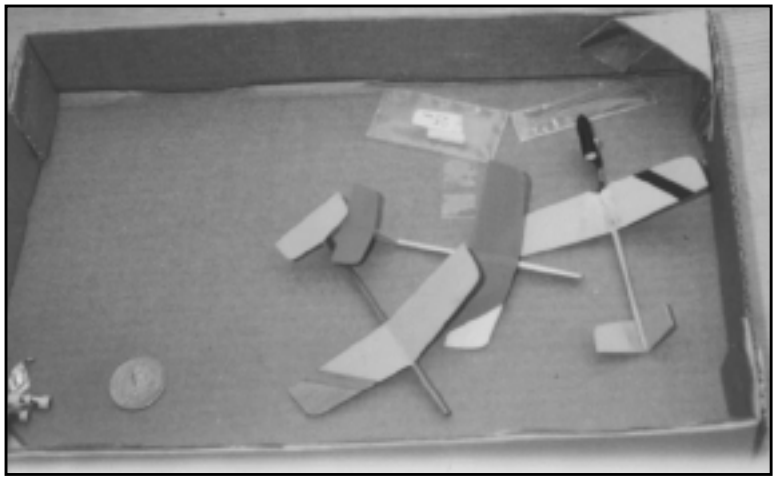
Here I am waiting for lift in the S8e contest. George Riebesehl is getting ready to fly next. Judging from the appearance of the sky and angle of the sun, I would say this is in the 3rd (and final) round of the 1st day of S8e competition.

The Chicago Mafia at the end of the first 3 rounds of competition. You will notice the big grin on my face. That's relief after flying 3 maxes. Left to right: Kevin McKiou, George Riebesehl, Ben Roberto.

Dr. Bob Kreutz is loading his Sergeant-Hydac S5C (Scale Altitude) model into the tower. Dr. Bob (as he likes to be called) was in 1st place after the static judging. This was an absolutely fabulous model. You have to be a masochist to fly this event. Dr. Bob probably had upwards of 1000 hours in this little model. Unfortunately there were problems with his flights. He had three flights with staging problems (prang!). On the third one, the second stage went horizontal and burrowed under the grass. Though we looked for about 2 hours, it was never found.

Jay Marsh is standing beside his S7 entry, a Saturn 1B. Scheduling was a bit tight for Jay and the paint was literally still drying on the model at check-in.

Ben Roberto helped Bob Biedron prep his Ariane. What a treat it was to watch this model fly. It had 7 motors in the first stage. The strap-ons peel away from the model at burnout and the second and 3rd stages are ignited via radio control. The flight was flawless. We all felt that Bob was shorted on flight points. But, the rules say that all the special effects must be listed on the flight card. Unfortunately they all were not. Still, Bob took the Bronze medal.



Jiri Taborsky is producing some itty-bitty rocket motors. These are boost gliders designed to fly with those motors. Notice the quarter laying in the box. I would say those models have a wing span of about 4 quarters. They flew quite well. PST! pop! The glider reached about 30 feet and circled out of sight.

For the first time an Experimental Class was included as a "demo" event. Here George Gassaway is loading his RC Space Shuttle model onto the launcher. US Team Manager, Dr. Jerry Gregorek is looking on. The flight of this model was probably the biggest crowd-pleaser of the whole week. George was absolutely mobbed by people wanting to get a look at his model. He was even interviewed by the local TV station. Now, that's diplomacy!

The day after the world championships concluded, an S8e World Cup was held. This is different from the World Champs in that each team can enter as many contestants as desired. In the World Champs each team is limited to 3 competitors per event. This is my favorite picture from this trip. It is a picture of my model lifting off during the World Cup. This is the strongest wind I have ever seen anyone fly in. It was gusting 30-40 m.p.h. It was blowing so hard, it up-rooted some of the tents in the background.

It really was a proud moment the first time the US National Anthem was played. Ross Hironaka placed 1st and Dave O'Bryan 3rd in S6A (streamer duration). The awards ceremony was held in front of the airport administration building, shown in the background.

Here are the USA contestants in the S8e World Cup. Front row, left to right: George Riebesehl, Kevin McKiou, Ben Roberto. Back row, left to right: Phil Barnes, Dave O'Bryan (the spitting image of Ed Lacroix!), George Gassaway. Phil was the highest US finisher in 6th place. He slope-soared his model on a tree line about 1/4 mile down wind.

While in the Czech Republic we visited the Czech Air and Space museum. It was very interesting. In this picture we are posed with the first Czech Cosmonaut (sorry I didn't write his name down). He is between Bob Biedron and Jerry Gregorek. On the far right in the back row are Howard Kuhn and our interpreter. The picture is taken in front of the actual space capsule flown in by the Czech Cosmonaut.

Giving Small Demonstrations
by Lawrence Bercini

Over the many years I have been active in sport rocketry, I have been involved in dozens of demonstrations, alone and in groups. When Bob Wiersbe asked me to prepare an article to instruct first time demo organizers, I thought, "What is there to tell, you just go out fly rockets, right?"

But after a moment's reflection, I realized I do have a few tips which will help others organize a demo which will make it go a little easier. So what follows is a somewhat disorganized list of thoughts gleaned from my CA-encrusted brain.

Hint #1 - *Plan out your demonstration.* Above all, remember, people are there to see a show. You have to make it:

- fast-paced
- appealing
- entertaining

To make it fast-paced you must have all your models prepped in advance - nobody wants to watch you install wadding and ignitors. You want to keep the pad constantly filled and in turn constantly launching. A good rule of thumb is to launch as many rockets as you can within a 45 minute timeframe.

To make it appealing, plan out a variety of model types, motors, and recovery devices. If you fly multiple 3-fins-and-nose-on-12"- of-BT-50-with-A8-3, your audience will get just as bored as you do when you read the phone book. Keep in mind your audience is not as experienced with watching models in flight. So don't fly a lot of those tiny mini-motor birds which "teleport" themselves from the pad to 300 feet up. Your spectators just can't see them! (however, a couple of these mighty mites interspersed in the demo adds variety). Larger, somewhat underpowered models with slow flights are real crowd pleasers (but don't overdo those either - variety is the spice of life!). Different body types, futuristic designs, and oddrocs are fun for everybody. On the other hand, scale models are not - they just don't care that much that you have a 1/100th scale Little Joe II! Possible exceptions to this rule are models of VERY WELL KNOWN rockets: Saturn V, Space Shuttle, Patriot and SCUD. Gliders, helicopters, and egglofters are always well received (remember to show the egg to the audience and if it's not already broken, break it for them!).

To make your demo entertaining, spend some time composing interesting facts about each model. This is what I call the "Harry Caray Rule". Cubs baseball can be dull enough, it would be even worse without Harry's commentary. Learn from Harry, and during the demonstration keep a running narration of the action to your audience. Ask them questions and answer the unspoken ones: Why is this one different from the last one? What effect will this motor have on this model? Ask your audience if they have ever seen a flying pyramid before. How does the streamer work? What makes the recovery device come out? Remember to add commentary to the recovery phase of the flight. If there is a failure of any sort, turn it into part of the show. Explain that there is no danger when there is a failure. Keep the patter light and fun, don't lecture. Whenever possible, encourage audience participation. Allow people to push the button. Encourage group countdowns. Keep in mind, effective narration is a lot more than telling the name of the model and the motor designation.

Hint #2 - *Do some homework on the flying site.* If you can't see the site in advance, ask as many questions as you can about it: How big is it? Which way does the wind usually blow? Is there a safe place for the models to land? Keep in mind, many people who request demos have no idea how much space is needed for flying rockets. They will tell you the field is very large and it may turn out to be no larger than a baseball diamond - not the whole playing field, just the diamond. It's a good idea to plan your first flight to be a "throw away" - fly something you don't mind losing and then adjust the launch angle (and even motors) to deal with range size and weather conditions.

Those of you who have been in NIRA for a while may remember a time we did not do a good job of finding out about our site. We did a demo for a hobby shop from a parking lot, no larger than 8 car spaces! In fact, we had to position the launcher so that the rockets flew between overhead electrical wires! We also had to tailor the motor selection and recovery devices to attempt to land the models in the backyard of a home beyond the alley which ran along the parking lot. Perhaps needless to say, that is not the recommended way to do it.

Hint #3 - I*f your demo is not going to be a club affair, you need to get at least one other person to help you, and better yet two.* The most important person you need on your side is somebody who will take charge of recovery. Remember, you are stuck there at the pad, you can't go running back and forth between launching and recovering, otherwise it will be a very slow and awkward show. Your recovery person does not have to be an experienced rocket hobbyist either, but I recommend you have an adult perform the task, preferably one with a commanding presence. That adult will either handle the recovery himself/herself or will oversee a SMALL recovery crew of his/her choosing.

Some lessons in life come in ways which burns them right into our brains. Such was my lesson on needing to have recovery controlled by somebody. When I was about 15 years old, I helped do a demo in the small town of Clinton NC. In fact, I spent a week there one weekend. The flying site was ample and the crowd was extremely excited about seeing rockets fly for the first time. The excitement took an ugly turn about 10 minutes into the demonstration. A crowd of 30 or so very enthusiastic, wildly energetic, and completely unsupervised youngsters decided to form an ad hoc recovery crew. This mob scene turned into one of those "king of the hill" things. You know: "I can catch the rocket before you can! Nyah! Nyah! Nyah!" Even after 24 years, I still have this vivid memory of two kids tugging on opposite ends of my Astron Avenger like two hyenas fighting over a slab of meat - shredding it before my very eyes!

If possible, you should get one more person to help you. You don't have to have this person, but it does make your job of working with your crowd much easier. Rather than try to glamorize the position your helper holds, let's just admit it, he/she is a "gopher". Their job is to keep the pad full, pull off misfires, replace ignitors, collect models coming in from recovery, and well, be at your beckon command. So at the start of the demo, introduce your gopher because he/she has a less than glamorous job. Then at the end, make certain you tell your spectators that your gopher was an integral part of the demo and allow them to express their appreciation. Remember to thank your recovery person too!

Closing Remarks

At the close of the demonstration, thank your audience and encourage them to come see you if they have any questions or comments. Many questions they ask may seem really, really stupid to your experienced ears. For heaven sake, don't act bored or irritated by the question, but answer it in a sincere and interested manner. Do your best to answer their questions and if you can't do it on the spot, take down their name and address and follow up later!

You may want to take some literature to give away serious inquirers (unless you have lots of it, don't display it during the demo because people take anything that is free, whether or not they truly want it). Catalogs, list of hobby shops, and especially NIRA flyers are recommended.

There you have it. You just go out and fly rockets, right?

[Editors Note - If you'd like to learn more about doing a demo launch, there is a great opportunity for you on May 13th. There will be an RC Airshow on the grounds of Moosehart that day, and several NIRA members will be there flying rockets. We will be doing 2 forty five minute demos, and could use some help with loading and recovering the models. All you need to bring is a bunch of prepped rockets, and show them off for the crowd. Bring out your best stuff to display! For more information, call Bob Wiersbe at (708) 690-5442.]

NIRA Needs Your Help!

What do you want to learn from NIRA? What aspects of rocketry intrigue you? What do you want to see in the newsletter? What would you like to see at the monthly meetings? We need your input!

A lot of people joined NIRA last year, and we need to take the time to find out what these people need. Many of the old timers (and us mid timers too) have "been there, done that", and tend to forget where others are at on the experience curve. What can we do to "share the knowledge"?

To help us know what you need, we need you to fill out this survey. Your input is important! Please take the time to send a copy of the survey (or write your answers on a sheet of paper), and mail it to Bob Wiersbe (see return address). Thanks!

Name: _____

How many years have you been flying rockets? _____

Are you a member of the National Association of Rocketry (NAR)? If yes, how long? If not, why not?

_____
_____
_____
_____

What types of rockets do you fly the most?

_____
_____
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_____

Have you ever attended a group rocket launch other than NIRA's club launches? If yes, when and where? If not, why not?

_____
_____
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Have you ever participated in a rocket contest (other than Model of the Month)? If yes, when and where? If not, why not?

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What do you think could be done to improve the newsletter?

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What topics would you like someone to speak on at a meeting?

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What benefit would you like to get out of being a member of NIRA?

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Please rank each entry in each column with an H, M, L, or N (High, Medium, Low, Not at all)	Which aspects of rocketry interest you?	Which areas are you experienced in?	Which areas would you like to learn more about?
Competition			
Payloads (cameras, staging systems, data recorders, etc)			
Clustering and/or Multi-Staging			
Scale Models of Real Rockets			
Designing My Own Rockets			
Research			
Computer Programs and Online Bulletin Boards			
Boost Gliders			
Rocket Gliders			
Radio Controlled Gliders			
Launch Systems			
High Power Rockets (HPR)			
Using Reloadable Rocket Engines			
Construction Tips and Tricks			
Improving My Finish Skills			
Flying Hints and Tips			

NIRA Field Rules

Rev. 15-Mar-95 - RGK

1.Motor, Mass, and Altitude Limits

All activities must comply with the NAR Model Rocket Safety Code(s) at all times. Only actual tested, certified motors may be used at any NIRA launch.

Subject to RSO approval, there are no additional limits on motor or model size other than the Safety Code. Altitude limit for all flights shall be 2700' unless cleared with the RSO at least 48 hours before the launch.

The RSO is responsible for contacting the FAA before each launch to give them the standard information and to issue the NOTAM.

2.Launch Coordinator

The Launch Coordinator will set up the range in advance and assign pad lanes to members as they arrive. Launch systems should be certified in advance, or be inspected at time of pad assignment to insure compliance with the safety code:

Adequate length cable (15|30|50'), removable safety interlock, spring return launch switch, sufficient guidance, rod above eye level or capped, adequate blast deflector, pad stability.

3.No "complex model" flights without preflight safety check.

All models over 453 grams, over a D motor, containing reloads, multiple motors (staged or clustered), any active electronics (electronic ejection, staging, RC, etc.), or of experimental untried design require examination by RSO before going to the pad for flight. Where required by the safety code, the launch system cable must be at least 30' or 50' as appropriate. The RSO will initial by "complex" box to verify this check.

4.Simplified Flight Cards

Member must fill in a flight card with their name, model, motor, pad number and box to check for "complex" rocket (definition above). Space is available for any additional comments. These forms will be available in pads from the RSO or coordinator. When ready to fly, deliver the filled out card to the RSO to enter the launch queue.

5.All flights must be announced by RSO.

The RSO will take the flight card from modeler. RSO or modeler may give countdown thru PA system. After flight, RSO to mark card with flight number (or check mark to indicate flown). The RSO will call heads up and warn spectators (and be sure they respond) in the case of any flight failure. RSO to also hold modeler at controller in the event of a misfire.

6.Barrier to separate spectators, prep area from launchers

People should not cluster in one place. The only things past the barrier are to be launch systems just past the barrier, wires, pads, and those people actively setting models on the pads and preparing for flight. No one should run thru the prep area or across the pad wires.

7.Recovery of flown models.

No one is allowed to chase after models without the permission of the owner of the model. Common courtesy says that it is OK to return someone elses model if you find it while chasing yours. PLEASE look around before picking up someone elses model, in case there are broken pieces in the area.

8.Anyone repeatedly violating any of these rules or the RSO's instructions will be asked by the RSO to leave the field.

Launch Controller Certification

We will be "certifying" launchers and pads at the April meeting, along with reviewing the new NIRA field rules. Please bring your launch systems (both pad and controller - except monster racks that would be a pain to haul around) to the meeting for inspection.

Certification of launchers is intended to insure that they comply with the NAR safety codes. The field rules describe the specifics that we will be looking for:

Adequate length cable (15|30|50'), removable safety interlock, spring return launch switch, sufficient guidance, rod above eye level or capped, adequate blast deflector, pad stability.

Note that reliability is not a concern unless you are flying clusters. Pre-approved launchers will be marked with a wrap of some day-glo colored tape (or something). One wrap==D certified, two wraps==G certified, 3 wraps==H certified. That way we don't have to inspect launch equipment every month.

Heard On The Street

Rumors and such, with apologies to the Wall Street Journal

Chinese Misfortune - A Chinese Long March (Chang Zheng) 2E launch vehicle was destroyed one minute after takeoff on Jan 25. The payload, Asia Pacific Telecom (APT) Satellite Co's Apstar 2 communications satellite, was lost. It has been reported that 6 people were killed and 27 injured by the falling debris.

Waking Up the Neighbors - On Jan 25 a Black Brant XII was launched from Andoya, Norway to measure plasma and field properties, and apparently tripped the Russian Air Defense System. The Russians were informed of the launch, but were concerned when it took a ballistic path instead of the "straight up" trajectory they expected. The flight was normal, and rumors that the Russians shot down a missile were greatly exgaggerated.

Welcome to the Club - Todd Gilsdorf, Ryan Brankin, Marshall Goldsmith, Norman Heyen, Steve Jurkovic, Anthony Turner and Sabrina Ugorek have joined NIRA in recent weeks, Welcome!

Moving Up in the World - Congratulations to Mary Roberts of Estes Industries on her recent promotion! Mary is now in charge of Technical Services. We wish her success with her new job.

How Time Flies - On January 8, Cosmonaut Valeriy Polyakov passed the one year mark in orbit. His flight is now the longest ever, beating the 365 day record of Vladimir Titov and Musa Manarov set in 1988.

Back In the USSR - NIRA's highly placed NASA correspondent recently reported: "I got a note from Jim Banke last night: he is in Moscow for the Soyuz TM-21 launch. He said he observed a model rocket launch from a park in Moscow this weekend!"


NIRA MONTHLY CLUB LAUNCH FLIGHT CARD

OWNER BOB WIERSBE

MODEL NIKE-APACHE

ENGINE(S) B6-4/½A3-4T

COMPLEX ☒

Look on back of card for definition of a Complex model.

FLIGHT NUMBER

To be filled in by Launch Coordinator

Comments ELECTRONIC STAGING - MERCURY SWITCH / FLASHBULB

MODEL OF THE YEAR CONTEST!

January

February

March

May

June

July

August

September

October

November

December

Jan: Ron Husak - Skinny Mini; Bob Wiersbe - D2D
Feb: Ron Husak - Eggspress; Bob Kaplow - Ticonderoga Pencil
Mar: Ron Husak - Equinox; Steve Koszuta - Loc Roc IV
Apr: No Meeting
May: Mike Alterio - V2
Jun: Ron Husak - Landviper; Mark Bundick - XV-4
Jul: Kevin Smith - Cheetah; Ron Husak - Clustered Thing
Aug: Ed Thiel - Boxcar RCRG; Mark Bundick - Altas-Centaur
Sep: Bob Kaplow - Archer
Oct: Lawrence Bercini - Jayhawk
Nov: Ron Husak - Explorer Aquarius; Ryan Noon - Bullpup
Dec: Bryan Chesi - Enterprise; Bill Thiel - Pringle-Roc

Pick 1 youth (Ron, Ryan, Bryan, Ed) and 1 adult (everybody else) model that you like best (the model, not the person!). Send your choices to me (Bob Wiersbe - see return address). Most vote getters will win something, and an entry will be picked at random for a special prize! Deadline May 1, 1995

THE LEADING EDGE
C/O Bob Wiersbe
1835 Shetland Drive
Wheaton, IL 60187

John Marsh took this picture at the closing ceremony at the World Spacemodeling Championships in Poland, when he spotted a very familiar face in the crowd!