

Volume 11, Number 5 -September/October 1988

25th Labor Day Launch

by Lawrence Bercini

It's the first Monday in September. Crowds of people shift expectantly between the display table and the baseball diamond, now bedecked like a scene from "Close Encounters". Autumn has begun to stake its claim on the Midwest, and all eyes shifted toward the cool sky as Mark Bundick peppered it with silver Alphas. Thus began NIRA's 25th Annual Labor Day Launch.

Over the next two hours, over 100 model rockets of all shapes and sizes delighted the crowd of approximately 200 people. Although the majority of models flown were kits, the variety was rich and colorful. James Crampton's Maxi-Brute V-2 and Honest John were favorites since they lifted off so majestically. The V-2 was featured on Tuesday's Daily Herald front page. Not to be left out of the spotlight, Peter Birren's Phoenix was featured prominently on Monday evening's Channel 2 News.

Throughout the day, either Bunny or Lawrence Bercini provided commentary on the models, NIRA, and the hobby in general. Augmenting this was the new NIRA display, featuring modeling memorabilia, photos, literature, trophies, and a variety of display models. Sharon Linder, Judy Kaplow and

Barb Bundick performed the superhuman task of handling the crowds of curious spectators. Meanwhile, Ric Gaff, Tim Marcy, Andy Apel, Larry Mika, Don Linder, and Harland Pell kept a steady stream of rockets "flight ready". Deep in the field, Don Linder (the Elder) supervised a gaggle of enthusiastic youngsters to recover that steady stream. All the while Dave Price and Bullet Bob Kaplow kept up with the safety check.

In spite of team precision, the day was not without mishaps. In the beginning, it was a rash of misfires. "Time to go back to igniter school!", quipped Bunny. Tim Marcy's flying castle, which performed flawlessly at the club launch, went back to nature. Perhaps the worst mishap was Karl Hintz's Crusader. The pivot wing glider looped erratically and power pranged, not far enough away.

On the lighter side, the day was not without the frivolous. Ric had his Pyramid on hand from previous years, as did Bullet and his Happy Meal.

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T Minus One - NIRA's Calander

MONTHLY MEETINGS
October 7, 1988 - Fall Field Trips
November 4, 1988 - Open
December 2, 1988 - Nominations for
1988 officers.

We need volenteer speakers to entertain the troops after the business meeting, so call Lawrence Bercini at 561-8098 if you have a topic to present, or if you have ideas about interesting topics others can speak on.

SPORT LAUNCH SCHEDULE

Remember our sport launches this year are on the THIRD SUNDAY of the month. Launches start at 2 PM, and take place at Ackerman Park, near the intersection of St. Charles and Swift Roads in Glen Ellyn. Bring your own launcher. Members usually retire after the launch to a local fast food resturant, so plan on making a day out of it.

SPORT LAUNCH DATES
October 16, 1988
November 20, 1988
(LAST LAUNCH OF 1988!!!)

CRAZY CONTEST SCHEDULE

October - Bathroom Scale

Your model must be either (a) made out of things from the bathroom or (b) a "scale" model of something you find in the bathroom.

November - A Engine Parachute Non Duration

Shortest flight with an A engine rocket recovered by a fully deployed parachute wins. Don't prang!

OTHER EVENTS

ASTRONAUT ADDRESS - OCTOBER 7

Harrison Schmidt will speak at Harper Junior College, the corner of Algonquin and Roselle Roads, Room J143, Friday, October 7, 1988, at 1 PM. Call Harper College, extension 2726 to make your reservation.

RC MODEL SHOW - OCTOBER 13-16

Sponsored by RCHTA, admission is \$5.00 with many, many RC suppliers and companies displaying their products. NIRA may be manning an NAR booth, if AMA ever lets us know the details.

THE LEADING EDGE

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NEWSLETTER OF THE NORTHERN ILLINOIS ROCKETRY ASSOCIATION Volume 11, Number 5 September/October 1988

September Club Launch

by Lawrence Bercini

With the remains of Hurricane Gilbert ramming up the Mississippi Valley, rain threatened the September launch. Grey skies kept many people home, but NIRA's diehards and some newcomers showed up to fly.

September brought the long awaited Separation Event. Contestants had to ponder how to get their rocket separated into as many pieces as possible, with one point for each piece separated and recovered. Club President Lawrence Bercini led off the event. His hopes for a 212 point score were thwarted when he forgot to glue in a nose block. His two points bagged a "dead last but finished" place.

Harland Pell tried using a superroc loaded with the tops of souffle cups (stolen from Burger King, perhaps?). Boosted by a C6-0, it struggled off the pad in slow motion before scattering about a third of its 800-odd parts into Ackerman's grass.

Bullet Bob Kaplow had to do some on the field conversion to ready his entry. His strategy involved using strings from fins to nose, with the strings holding clusters of paper rings. Noted Ric Gaff, "Your model looks like a lei!" This simple and creative idea was textbook perfect, except for the strings tangling. Amid the laughter, Bob's entry slid to fourth (i.e., last) place with a score of one.

Barb Bundick also used a superroc body, with a dowel in the nose cone stacked with "billions and billions" of paper hole reinforcers. On the pad, the bird sagged like a stack of pancakes. A few anxious moments preceded the less than perfect flight, but the end result was spectacular. With over 2,800 pieces lying about, the

recovery area looked like the first snowfall. Barb clinched a first place with ease.

While the "Separators fumbled with ungainly models, other flyers demonstrated normalcy. Andy Rechnagel finally decided to lose his Commanche-3 with a flourish. Using a D12-0/C6-0/C6-7, the bird shed fins every time it staged. Topped off with a recovery system failure, the entire bird was recovered! Too bad Andy didn't enter the separation festivities. He could have reaped a third place.

With Separation out of the way, Lawrence and Ric experimented by CHAD staging an old Centuri Satellite Killer. RSO Bullet Bob raised eyebrows at the sight of it, and the experiment was banished to fly from a remote pad. In spite of dire predictions, the flight was fine.

Meanwhile, Tom Brown and Any Rechnagel played dueling V-3's. Brandon Zielieski had enough trouble of his own with flying his Viking, a launch system that wouldn't cooperate and a bevy of nosey sisters. Tom Howe had similar launcher problems but finally managed to send his Crusader into a beautiful gliding flight.

After all the laughter had subsided, the many, many parts retrieved and the field cleaned, the famed Separation event was history. Just as the launch ended, the downpour began. The modelers scurried to their cars still laughing at the fun of the day. Let's hope that Bathroom Scale is half the fun. With winter fast closing in, don't miss out on your last chances to get in some flying by coming out to the October and November launches.

25th Labor Day Launch

(continued from front page)

Newer silliness was Lawrence's Eiffel Tower, and Randy Redd's Crazy Horse Miller model. Although not intentionally odd, Jim Crampton's X-24 Bug flew, well, oddly!

Large motor flights thrilled the crowd. Especially notable were Larry Mika's scratch built X-15, Lawrence's Strato Cruiser, Tim's Jauhawk, Paul Rambow's Heavy Lift Vehicle featuring twin Shuttles, and Jo Anne Rambow's D Region. On the other end of the power spectrum, spectators were stunned by the neck-snapping speed of Greg Hintz's Mosquito, and Marty Frank's Gnome. crowd also appreciated the variety afforded by competition models. Bullet's new Estes Eggspress, with evoked wonder. eqq. especially when he heaved the egg into the recovery area after a successful flight. Larry's RG and scale Nike-Apache complete with scale launcher both turned in pleasing flights. A. J. Streeter's one contribution was a smooth flying Delta Katt.

Finally, two Comets pierced the sky simultaneously and the demo was concluded. We had coverage in several suburban newspapers, and film on Channel 2 news. Four raffles of kits and memberships were held, and hundreds of flyers were passed out to people attending the demo. We even shared space with the Chicago chapter of the National Space Society.

Many many thanks go to the people who worked so hard to keep it running smoothly. Thanks also go to those who joined in the flying and helped the day become a memorable one. See you for Number 26!

Little Joe I Sport Scale

by Bunny

Ah, the joys of cleaning out one's basement. I managed to stumble across this cute plan from an old Centuri "Enerjet News". A couple of notes are in order to get you your own Little Joe I.

First, since Centuri isn't in business any more, you can't order these parts, at least not by these part numbers. The Mercury Capsule is identical to the one carried now by Estes. I'm sure you're all smart enough to pick an appropriate body tube from the current Estes catalog. Consider shortening the tube by about 2" or so and adding some noseweight. This version is a bit longer than required.

While you can build the fins from 3/16 balsa, you might want to consider building them up from thin plywood or plastic. Plastic would not require any finishing. You could also simulate the rivet work on the original vehicle.

The Little Joe paint scheme shown is essentially correct. The capsule on this round was white, with red-orange trim work. It also contained two spikes, not the one in the kit, but who's gonna notice?

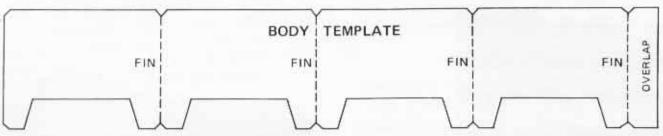
I wouldn't recommend the "Unibody" staging, also known as CHAD staging, at least not without some noseweight. A single 18" chute with sufficient shock cord should also suffice for recovery. Have fun with this little bird!

MERCURY LITTLE JOE ASSEMBLY PLANS

The real Mercury Little Joe test vehicles were designed and built in a very short span of time, soon after the first Sputnik was launched. Detailed scale data is somewhat scarce due to the hurried pace of the early days of the Space Race.

Our flying scale model is not authentic scale in every last detail, but it captures the spirit of the real Mercury Little Joe. For instance, the body is slightly lengthened for better flight characteristics and ease of parachute packing.

The following plan is intended only as a rough guide for constructing a semi-scale flying model of the Mercury Little Joe. The model is recommended for experienced rocketeers who have successfully built models from "scratch" before. The fully detailed capsule kit really "sets-off" the appearance of the completed model.



Qty.	PARTS LIST Name	Centuri Cat. No.
1 1 1 1 1 2 1 4	Plastic Mercury Capsule Kit Body Tube Balsa Sheet (3/16" x 3" x 12") Engine Mount Kit Launch Lug 12" Diameter Plastic Chutes 16" Shock Cord Wooden or Plastic Golf Tees OPTIONAL PARTS	MR-36 ST-2012 BFM-14 EM-20 LL-2 CP-12 SC-18 Not Available from us.
2	#8 Red Roll Pattern Decals (for the "United States")	DC-32
1	Engine Lock Enerjet Engine Mount (95¢)	EL-1 EEM-20

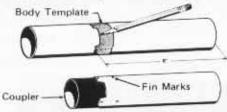
by Grant Boyd
Director, Centuri R & D FIN PATTERN
4 REQUIRED

LEADING EDGE

BALSA GRAIN

BALSA GRAIN

The 12" body tube needs to be cut to an 8" length with the 4 equally spaced indentations. Cut out and wrap the body template around the body tube as shown. Trace the indentations and mark the fin positions. Use the #20 engine mount coupler as an interior brace while cutting.



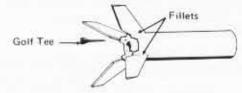
Assemble the #20 engine mount according to it's instructions, and install flush with the upper edge of body indentations. NOTE: If you choose to fly with Energet motors ("E" series only), we recommend shortening the engine mount tube by 2" to allow enough room for chutes.



Trace the fin pattern onto 3/16" thick stock, aligning grain with leading edge, and cut out. Cut and sand each fin to the symetrical, tapered shape shown.



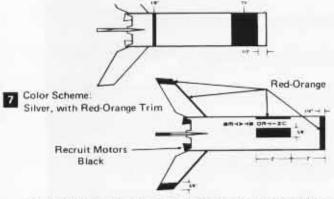
Glue the fins in place, being sure to apply glue fillets at the joints. The four Recruit rocket engines are easily simulated by using golf tees. Cut small holes in the engine mount centering rings, behind each fin, and glue the tees in place tilted slightly outward.



5 For a no-cost shock cord fastener, cut a shape from the scrap body tube as shown. Tie the shock cord around it and glue in place at least 1" down inside rocket, to allow room for the Mercury capsule base. Tie one 12" chute onto shock cord. Tie the other chute onto Mercury capsule as explained in its instructions. Glue launch lug on.



For added interest and authenticity, apply strips of tape or pressuresensitive paper around the body tube. These will simulate sheet-metal work, after the rocket is painted.



Here's the easiest way to paint the Mercury Little Joe vehicle: Spray paint the entire vehicle with bright red-orange enamel. When the paint is dry, cover the parts labeled "red-orange" with masking tape. Spray paint with bright silver. Removing the masking tape should then reveal a handsome color scheme. The two verticle "United States" decals (available on our DC-32 decal sheet) are applied between the rectangles.

The rocket may be launched with 84-2 or C6-3 engines. It may also be flown Unibody, with a 84-4 or C6-5 sustainer (see Enerjet News #1). The E24-7 is the recommended motor for Enerjet launches, however, about 2 ounces of nose weight must be added for stable flight. The Mercury capsule is intended to recover by separate parachute, to minimize damage to its structure.

September Club Launch Photos

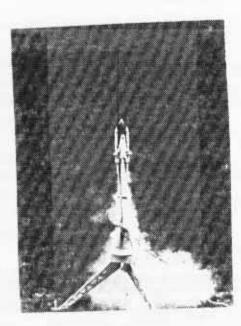


"One thousand and seven: one thousand and eight. . . " Barb Bundick preps her winning Separation entry.





"Of course, I've tested it." Bullet Bob gets ready to fly Separation.



Lawrence Bercini's Space Hail, Discovery! Shuttle Plastic Model takes off.

Heard On The Street

Report and such, with apologies to the Half Street.hournal

WALL STREET ROCKETRY

A bitter takeover battle has erupted on Wall Street for Damon Corporation, parent to Estes Industries. After four months of negotiations, American Magnetics broke off merger talks and began a cash tender offer to buy Damon stock at \$24 per share.

This offer is being managed by a front corporation, Nomad Partners. Reports prior to that action indicated American Magnetics had offered about \$30 per share for the company to Damon management. According to Dow Jones News service, a Drexel stock analyst put Damon's value at about \$35 per share, or over \$330 million.

Also according to reports in the Wall Street Journal, American Magnetics would consider selling Damon's instructional systems and hobby businesses, should the tender succeed. They left the doors open to retain these businesses "after a detailed review of Damon's assets".

After negotiations broke down, Damon began legal maneuvers designed to thwart the tender offer. A Massachusetts federal court has scheduled hearings on whether the tender offer violated certain securities laws. Damon attorneys were arguing that those laws prevented a takeover until financing for the merger was arranged, and that Nomad's repeated extension of the tender were illegal.

As of September 26, Nomad announced it had secured \$125 million in tender financing and \$145 million in merger financing in separate lines from AG Becker/Paribas, one of Wall Street's biggest investment banks. Nomad announced on September 29 that it held or had tenders for about 4.5 million of the 9.6

million Damon shares outstanding, or 59% of all outstanding common and 52% of all shares on a fully diluted basis. It also extended its tender until October 7. By that time the Federal court should have ruled on the tender's legality.

Securities analysts and arbitrage traders were predicting the takeover attempt would fail, valuing Damon's assets far over the \$24 tender price. Analysts also felt that Nomad Partners would not have sufficient shares tendered to make the deal go through. However, Damon stock remained lightly traded at 24 3/8 as of September 30, indicating little speculative arbitrage interest.

Negotiations between Damon executives and Nomad appear to be back at an impasse after only one meeting during September. Impacts on Estes remain to be seen and have not been openly discussed in the financial press.

ANN ARBOR TRANSPLANT

A hearty NIRA welcome to Rich Junglass, co-founder of the HUVARS section in Ann Arbor, MI. While a member there, Rich helped out in most, if not all, of HUVARS activities as well as being an active sport flyer. Rich has left UM's hallowed halls for employment at Bell Labs in Naperville. Welcome to Illinois, Rich!

REVERSING MOVES

Most NIRA members know Bunny is a Virginia transplant to Illinois. Now Illinois returns the favor as Larry London heads for graduate school at the Virginia Tech in Blacksburg, VA. Since VPI is Terry Lee's alma mater and not that far from Roanoke where Terry works, we should continue to see Larry involved in model rocketry.

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AIN'T NOTHIN' BUT A ROCKET ZUM, FLYIN' ALL THE TIME!

AIN'T NOTHIN' BUT A ROCKET BUM, &

DON'T Y'ALL TOUCH THAT OR. PEPPER OF MINE!"

YES, TERRY LEE SINGS ELVIS PRESLEY'S GREATEST HITS!

COMING SOON TO THE GLEN ELLYN TOY AND CARD SHOP!

FOR ALL YOUR CAT'S ROCKETRY NEEDS!