



ZOG-43

DECEMBER 2000



PHOTO: Paul Miller's V-2

Photo By : Paul Miller

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THE ONLY NAR NEWSLETTER PUBLISHED MONTHLY !!

From the Editor:

The holidays are now upon us, the year seemed to have just flown by. You may have or may not have noticed that over the years I like to use this space of our newsletter to convey positive information about our club or hobby. So even though the column is titled "From the Editor", I basically have the ability to use it for any means I see necessary. It has only been a few weeks since the last edition of "ZOG-43" went out (*That does happen from time to time when you publish a monthly newsletter*) and I have not heard comment one from anyone about the editorial from this column. I might have thought some of our club members might have had some comment or rebuttal. The reason I say all of this is simple, I don't necessarily like to criticize anyone or anything about the association, especially since almost all of the work done in the NAR is strictly volunteer time. However, sometimes I wonder about the shortsighted efforts of some when it comes to the good of the overall association.

Another such topic has come to light here in the recent week gone by. The NAR "Trained Safety Officer" program was mentioned in light of the NFPA meetings. The NAR hierarchy is stating that although this program is currently a volunteer thing only, it could become a mandatory thing for sections participating in HP activities. NARHAMS members I know what you are thinking, we don't fly anything over a "G" at any of our launches. This is true, but as many of you know there are three sides to every story. Which do you believe? The association is saying that this might become a requirement on HP launches, what is stopping it from becoming a necessary thing at EVERY NAR launch? The current program was rolled out at NARAM-40 in Muncie In. At that time the association was saying this was a great program for those who wanted to participate to be trained in the aspects of a HP range. My complaint at that time was simple, if you want to have HP launch TSO's (Trained RSO), should the aspect of Model Rocket ranges just be overlooked? I put that out there again last week and although I got a few responses, basically I believe my concern is not being viewed as valid or even as a concern. Well, you can say or think what you want, I believe that some sort of system is indeed necessary. I will not and never will turn over the RSO duty to just anyone on the range at one of our launches. Being a good RSO is not a difficult task, a lot of it is simple knowledge, common sense, and good judgment. My own RSO skills were obtained by simply watching some of the good ones within our own club, Alan Williams, Ed Pearson, and Tom Lyon. Being able to RSO at a NARAM contest range left me with the feeling that I was indeed a competent RSO. I only hope my peers see me the same way.

In closing, I don't think it would be too much redtape to have a simple written RSO test that could be administered by any section advisor for anyone who wanted to participate. From there if you or your club fly's HP, then have a system for level 1,2and 3 High Power RSO training.

HAPPY HOLIDAYS
Jim Filler

LAUNCH WINDOWS

SPORT LAUNCH

Middletown Park Holiday Theme
December 9th 10AM - 4 PM
Contact: Jim Filler 301-371-3365
Planned Notam for up to 3.3 lb.
Limited to "G" class motors

NO SPORT LAUNCH

Scheduled for January.
All NARHAMS members are invited to
KING ZOGS Castle for a building session
to be followed by a movie session.
Bring your own chair!
Contact: Jim Filler
Jan. 13,2001 10AM-8PM
Call if you need directions 301-371-3365

SPORT LAUNCH

Middletown Park Icicle / Winter Theme
Feb. 10th 10AM - 4 PM
Contact: Jim Filler 301-371-3365
Planned Notam for up to 3.3 lb.
Limited to "G" class motors

SPORT LAUNCH

Middletown Park Odd-Roc Theme
Pot-o-Gold Spot Landing fun event
Mar. 10th 10AM - 4 PM
Contact: Jim Filler 301-371-3365
Planned Notam for up to 3.3 lb.
Limited to "G" class motors

OSTRICH-I REGIONAL MEET

Middletown Park Mar. 24th 10AM - 4 PM
Contact: Jennifer Ash-Poole
Events: OSL, C-ELD, A-SDmr, SpSc, RDD,1/2A-BG
Planned Notam for up to 3.3 lb.
Limited to "G" class motors

NAR S&T #66

The following motors have been certified by NAR Standards & Testing for general use as model rocket motors effective October 12, 2000. All are certified for contest use effective December 11, 2000.

Public Missiles Ltd. Thrusters:

29mm x 98mm:

F50-6T (80.0 Newton-seconds total impulse, 37.9 grams propellant mass)

29mm x 124mm:

G40-4,7W (120.0 Newton-seconds total impulse, 55.1 grams propellant mass)

G80-4,7t (120.0 Newton-seconds total impulse, 56.9 grams propellant mass)

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

PRATT HOBBIES ANNOUNCES:

Our SureFire 12 launch system with the built-in 12v battery is very popular. But why pay for a battery when you drove to the field with one...and charged it while you were driving? We decided to come up with a simple, durable and safe system that would use that nice big battery in your car.

The GO Box starts with a 10-foot long cable that plugs into a standard (center positive) car cigar lighter. We used the same continuity-sensing circuitry used in the SureFire system. A nice loud buzzer in the controller serves as proof that you have a complete circuit through the igniter. It also acts as a warning that launch is imminent. Instead of a safety key or switch, we decided to completely separate the wires that run to the pad from the controller. This has several advantages. It's foolproof; there is no way current can get to the igniter if the wire isn't plugged in. It's simple; there are no keys to keep track of. If you want a longer wire than the supplied 25 feet, that's easily done. And it's economical!

The GO Box comes with illustrated instructions showing how to connect it to every common igniter. The system sells for \$24.95. All you supply is the car. See it at www.pratthobbies.com.

Cooperative Satellite Learning Program Demos

By Alan Williams NAR 14137 SR

NARHAMS has always been known as an education outreach-oriented club. We always try to remember that one of the main selling points of sport rocketry has always been its unique ability to make the science of space fun. So, it was a

pleasure once again to be a part of the Cooperative Satellite Learning Program. This is a really neat education program spearheaded by longtime friend and satellite jockey Marilyn Glass, of Goddard's WIRE Satellite Operations Team. It's an outreach-mentoring program that teams high schools up and down the central East Coast with scientists from a broad spectrum of the astronomy flight program at NASA.

Students learn the basics of satellite flight ops by tracking rockets or balloons; gather an understanding of the detectors aboard their assigned flight program; then actually do science investigations using data from that satellite's data system. Finally, in mid-October, all groups visit Goddard Space Flight Center to give reports on their team's experiences and results. This year's gathering was October 19th.

As in past years, NARHAMS was involved in the meeting by way of a rocket display and talk. Present were world contest medallist Dave O'Bryan and talking head Alan Williams. As the main session concluded, Dave and I set up shop in a back corner of Building 8 Auditorium. We had my "Photography How-To" slide show going and a fair assortment of models from mini motors to Dave's S8E RC glider with the occasional high-power and contest models thrown in for fun.

We had about 30-40 students from mostly local schools this year. They were very interested in our dog and pony show. I did about 40 minutes on the basics of hobby construction propulsion, flight technique and tracking. I had a lot of nice questions, with only one guy asking about "blow-ups" over and over. The slide show came in handy in many cases to illustrate answers. This was followed by Dave O'Bryan's more detailed talk on the specialized modeling skills needed in the international contest community. Unfortunately, Dave was only half way through his part when a surprise extra program on the main stage put a halt to our activity. Too bad, the kids were really enthused by his talk. Finally, I put on my tour guide hat and gave about 80 kids from DuVal High on a trip through the Solar and Heliospheric Observatory (SOHO) Control Center and Communications Center. DJ Emanuel from the Visitor Center staff did a similar tour for other students up at Testing and Evaluation. We had about 300 people in the room. A sizable number came over and took in our presentation. Another NARHAMS outreach success!

The Christmas Surprise

Paul Miller, NAR 51615

What's rarer than the elusive flying Z cloud? Why, it's a Christmas Eclipse. Difficult to believe, yet, true, Santa will bring all of us a special gift on December 25 - a partial solar eclipse!

The twenty-fifth always brings us special birthdays. Jesus was announced with a dazzling celestial display about two thousand years ago. On Christmas Day 1642, Isaac Newton was born in Lincolnshire, England. His contributions to astronomy were spectacular and, perhaps, unmatched.

December is the birth month for other famous astronomers. Tycho Brahe, the great Danish observer, celebrated on the 14th. (Continued on the next page)

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His protégé, Johann Kepler came to us on the 27th. Kepler's four laws of planetary motion later helped Newton formulate his theory of universal gravitation.

Frosty December nights will boast Jupiter and Saturn again. Just past opposition last month, both planets shine brightly. Check out this duo at dusk between December 8 and 10 above the eastern horizon. They join the Taurid alpha star, Aldebaran the Pleiades cluster, and the "Full Cold Moon" or "Full Long Nights Moon."

The Geminid meteor shower battles this bright nearly full Moon when it peaks on the 13th, Known for its bright meteors and occasional fireball, the Geminids can please the patient observer. Bundle up, let your eyes adapt to night vision, and face Castor and Pollux.

While waiting for these fleeting diamonds in the sky, find the most prominent winter constellations: Orion, the Hunter; Taurus, the Bull; and Canis Major with our brightest nighttime star- Sirius.

As any thermometer can attest, winter is here. Winter is really here (winter solstice) at 8:38 am on December 21st as the Sun moves to that magic position with respect to our Earth. Now the days will SLOWLY get longer!

Venus will join the waxing crescent Moon at dusk on December 29th in the southwest. If the skies are clear, this will be beautiful.

The Christmas Eclipse is definitely the astronomical event as 2000 closes. While waiting for the white button to pop on your turkey, gather your solar eclipse stuff: a #14 arc-welder's glass, a REAL quality solar filter or a pinhole viewer.

The pinhole viewer can be made in less than ten minutes, two pieces of white cardboard, tape, a pine and a square of aluminum foil makes a SAFE, cheap and fun eclipse viewer. Cut a square hole in one piece of cardboard, tape on the foil and, with a pin, poke a hole in the center of the foil. Stand with your back to the Sun and place the second cardboard on the ground. Violá! There is your first Christmas Eclipse.

All of this begins about 11:05 in our neck of the woods. Around 12:40 pm, we will reach our maximum eclipse. As my grandson Garrett says, "The Moon is biting a piece out of the giant cookie." A little more than 50% of the Sun is blocked by our New Moon. Of course, another ingredient to this solar eclipse is a cloudless day. Oh no! Not a Z cloud!

The bottom line is: Don't look directly at the Sun! The magic word for all of this is syzygy, three or more astronomical bodies aligned.

The December 2000 Astronomy magazine includes two pairs of 3-D glasses to view the "3-d Universe, 28

breathtaking Photos." The January 2000 Astronomy will include a pair of safe eclipse glasses.

Here comes the Twenty-first Century! Have you purchased your 2001 Almanac? What a hoot. All the 2001 astronomical factoids and more are in this literary tome. You could log on @ www.almanac.com.

Non-Rocketry Activity Alert!

By Alan Williams, NAR 14137 Sr

On October 28th, I did an outreach of a different kind. The College Park Airport Museum asked me to be the haunted hayride as part of their Flight Nite Halloween Party.

I, dressed in my pirate persona, "Red Jack," struck terror into the hearts of the riders, telling of the awful death and even more horrible resurrection of Corporal Frank Scott who actually died on the airport grounds; based on a true story and accurate in every detail (except where I lied!). I had 'em whimpering for mercy, I did, Arrrgh! Seriously, I had a great time, with about 250 riders. Coming back to port singing and joining in the Pirate Cheer as we pulled into port, looking forward to next year's voyage. (Editors note: The College Park Airport is "homebase" for NARHAMS, it is the oldest airfield in the world and is home to oldest continually run NAR section NARHAMS)

BUILDING TIPS

By Dan Kirk via R.M.R.

Mix small batches of epoxy in the lid from a can of Pringles potato chips. When you're done gluing, set the lid aside until the epoxy hardens, then flex it, and -- Presto! -- the leftover epoxy pops off, and the lid can be re-used.

Q-Tips make good glue applicators.

For places where a popsicle stick is too wide to reach, use a corn dogstick.

If you're impatient like me, build two kits at a time. While the glue, paint, etc. on one kit are drying, you'll be working on the other, and won't be tempted to mess with them.

Always test-fit your completed rocket's launch lugs on your launch rod before you leave for the launch site.

Buy yellow glue by the quart. (You can find quarts at most hardware stores.) It's cheaper that way. Transfer the glue as needed to (an empty, clean) one of those little "school-size" white glue bottles with the pointy screw-open tip. It's less messy than the slotted tips you find on Elmer's Carpenter's Wood Glue bottles, there's less waste, and the glue doesn't dry out or clog the tip if you forget to close it for a few hours.

(Editors note: Send your favorite building tips & tricks to ZOG-43 for publication)

Die Rakete

Paul Miller, NAR 51615

THE ROCKET...What is the absolutely, positively first rocket that comes to your mind? My thoughts immediately imagine the first rocket I ever saw - the V-2. I was on the front porch at my grandmother's house on Hampden Avenue. It was the summer of 1948. My cousin Kenny had a stack of WWII trading cards. Most of them were airplanes and tanks, but two of them were Die V-Waffen (The V-Weapons). As I remember, the buzz bomb was neat, but the V-2 was spectacular. It was a sleek camouflaged "spaceship" that I would never forget. It looked a lot like the "new" Estes #1904 V-2 depicted on the cardboard insert.

In October 1950, National Geographic sent to our home V-2 photos with "Seeing the Earth from 80 miles up." That issue is long gone, but I bought another at a yard sale for 10 cents. Unfortunately, it "disappeared" in my classroom a year later. The V-2 No. 56 photos revealed the curvature of the Earth and the liftoff was published in color.

In the early '60s, my brother got a book by Willy Ley on space travel-those spaceships were V-2s in disguise! In 1962 my future wife from Hartford County took me to Aberdeen Proving Grounds. Guess what sat horizontally on a trailer under a huge shed" - my first real V-2!

At the NARAM 33 auction I got an Estes (K-22) V-2 from Tom Pastrick's collection. That was the first of our twenty plus model V-2s, ranging from 1/4A to K.

At NARAM 36 in Houston, the special event featured was the V-2. Not only did we take four of our own V-2s, we also took John McCoy's Estes (#1926) V-2. Despite spending 24 hours in the Texas brush, John's model earned a first place category. We managed to get both Vern Estes and G. Harry Stine to sign John's V-2. At first, Mr. Stine refused to sign it, but after Andrew showed him several Quest models we had built, he obliged. Our 1:35 PMC V-2 catoed, spraying plastic over the Johnson Space Center tarmac. The remaining 3 qualified for two first and one second place awards.

Last year, I penned an article for a V-2 I built using G. Harry's plans and predominately Silver Comet parts. (See Zog-43, December 1999, Volume 21, Number 12). To date, this is the best scale V-2 in our collection.

The announcement this year that Estes planned to reissue the 1984 version of the V-2 was met with anticipation and apprehension. I found some 1994 bonus bucks from Countdown Hobbies and sent them off to P.T. Barnum Square. In mid-July the #1904 Estes kits finally arrived on our porch. #1901 Numero Uno was built and painted in August without decals. John McCoy later supplied real decals to replace the nasty plastic stickers that came in the kit. This first V-2 was constructed as indicated in the #1904 instructions with 4 exceptions: a 20" nylon parachute, BBs and epoxy anchored

via bamboo skewer for nose weight; a shock cord upgrade; and genuine V-2 decals.

Ultimately, subsequent kits will attempt to approach a more scale-like appearance. It is also my plan to build a succession of V-2s to show the evolution of German paint schemes. Thanks to Scott Branche at the Laurel Hobby Works I now have two more kits, using our NARHAMS discount.

Back to Number one...the new kit introduces you to the substitutions/additions and updates the current parts numbers. The new procedures are boxed and the original 1984 instructions are provided. Basically, you get the new engine hook, a pre-assembled parachute, and those nasty "decals". Its still a skill level 4, "Recommended for the Advanced Rocketeers." And it's still a fun kit to build. Your price for #1904 can range from 22 to 29 buckaroos.

Visions of the finished model dance in your head as you build it. It assembles quickly with no trouble. Removing the "nibs" from the tail cone for the through-the-wall fins is the only tedious challenge. I used 5-minute epoxy for the final fin fillets. This provided a smooth strong scale-like finish. With the Krylon white primer totally applied, it took on the magic silhouette that only the V-2 can conjure up. It was my goal to achieve the same paint scheme shown on the cardboard kit sleeve. Scott suggested 3 Testors Model Master Enamels: Light Earth, Olive Drab, and Desert Sand. I added a hint of Gull Gray to get the desired effect. There are German military flats available, but I have not mastered the airbrush.

Having read Dieter Hölksen's V-Missiles of the Third Reich, The V-1 and V-2 with diligence and enthusiasm, I have concluded that there were countless versions and color combinations. In fact, the final A-4 productions in 1945 used only the RAL (Reichsausschus für Lieferbedingungen) 6003 Olive Green. The Germans used as many as 8 RAL colors for the V-2. In June of 1943 they introduced Test Scheme 1, a batiked (Gebatikt) camouflage similar to the Estes kit sleeve. The Estes representation lacks the German RAL Red Oxide and the batik is not as tight. A month later I added John's decals and, when completely dry, thinly coated the model with Krylon's satin finish. I made a camouflage base for the model which announces: "Vergeltungswaffe-2, Aggregate 4.: I hope to build several more using the #1904 kit as my base.

Does she fly well?? Dornberger and von Braun would have smiled. The initial flight climbed ~500 feet when the 'chute deployed slightly before apogee on an Estes D12-3. Although she came down faster than I expected, there was no damage. There were burns on the parachute. The next flight will go up with a D12-5 in the motor tube.

So what is next? How about the historic A-4 V-4 of October 3, 1942? Flying from Peenemünde only 75 days prior to my birth, the first successful launch reached a maximum speed of 2,998 mph and altitude of 52.8 miles. This same black and white paint scheme was chosen by the National Air and Space Museum for the A-4 in their collection (Minus the bare-breasted frau adorning the tail section of the A-4 V-4). Hmm...I wonder if John can make a decal of the fair maiden? So much for rocket dreams, Auf Wiedersehen!

REAL WORLD SPACE NEWS

Compiled By: Jennifer Ash-Poole

Ariane-4 carries out 11th successful mission

PARIS (AP) via NewsEdge Corporation -

An Ariane-4 rocket successfully placed a Canadian telecommunications satellite in orbit after the 11th successful launch of the carrier this year. The rocket took off at 8:56 p.m. local time (2356 GMT) Tuesday from its South American base in Kourou, French Guiana. The Anik F-1 satellite was placed in orbit 21 minutes and 46 seconds later. Ariane-4 is the second most powerful in the series of unmanned European launchers operated by Arianespace, the 13-nation European Space Agency's commercial arm. The launch had been delayed for 24 hours after the client asked for extra checks.

The Anik F-1 satellite weighed 4.8 tons, a record load for an Ariane-4 rocket. It was built by Boeing Satellite Systems for the Canadian telecommunications operator Telesat, a subsidiary of BCE Inc. The satellite, which was placed in orbit above the Pacific Ocean, will transmit digital signals to North America, South America, Alaska, Hawaii and the Caribbean during a 15-year period.

NASA: Endeavour to launch Nov. 30

The launch of the Space Shuttle Endeavour has been set for Thursday, Nov. 30, 2000, on a mission of space flight firsts that will spread Earth Observing Spacecraft Launched giant solar array wings -- the longest structure ever in space -- above the International Space Station, providing it with more power than any previous spacecraft.

"This mission will assemble the heaviest, largest and most complex piece of the International Space Station to date," Space Shuttle Program Manager Ron Dittemore said. "Every Shuttle flight for the next year carries its own set of firsts. But this mission, unfolding solar arrays of historic proportions, will make the challenge and grandeur of this entire venture more apparent than will any other single flight. It's a great mission to complete a very safe and successful year for the Space Shuttle team coast to coast." Endeavour's liftoff from the Kennedy Space Center on Shuttle mission STS-97 is targeted for 10:06 p.m. EST, in a launch window that will be less than five minutes long. Endeavour and its five-man crew will carry aloft a 17-ton package of immense solar arrays and their associated batteries, electronics and cooling equipment to be attached to the International Space Station.

Once deployed, this first set of U.S.-developed arrays -- three more sets of arrays will be added in coming years -- will measure 240 feet tip-to-tip and power the first station science experiments and laboratory, the U.S. Destiny Lab, to be launched on the next shuttle flight, STS-98 in January 2001.

Veteran Astronaut Brent Jett (Cmdr., USN) will command the mission. Michael Bloomfield (Lt. Col., USAF) will serve as pilot. They will be accompanied by Mission Specialists Joe Tanner, Carlos Noriega (Lt. Col., USMC) and Canadian Space

Agency astronaut Marc Garneau. Tanner and Noriega will perform space walks during the mission to install the arrays and prepare for the laboratory's arrival next year. Endeavour also will be the first Shuttle to visit an inhabited International Space Station, dropping off supplies and equipment for the three-person station crew -- Commander Bill Shepherd, Pilot Yuri Gidzenko and Flight Engineer Sergei Krikalev -- that has been aboard the outpost since Nov. 2

Earth Observing Spacecraft Launched

November 21, 2000

Into a clear morning sky today, NASA's New Millennium Program's first Earth Observing flight (EO-1) lifted off from Vandenberg Air Force Base, CA, to begin a new era in Earth science. EO-1's mission is to test new technology land imaging instruments. Three revolutionary land imaging instruments on EO-1 will collect multispectral and hyperspectral scenes over the course of its mission in coordination with the Enhanced Thematic Mapper on Landsat 7. Its companion spacecraft, SAC-C, also launched aboard the Delta rocket today, will study the structure and dynamics of the Earth's atmosphere, ionosphere and geomagnetic field. SAC-C is a cooperative mission between NASA and the Argentine Commission on Space Activities (CONAE).

Russia Loses Contact with QuickBird 1 Satellite

By Andrew Kramer

21 November 2000

MOSCOW (AP) -- Russian ground controllers lost contact with an American commercial satellite on Tuesday after the small craft was blasted into orbit on a Russian rocket, officials said. The QuickBird 1 satellite belonged to the Longmont, Colorado-based company Earth Watch, and was the first of two satellites the company planned to launch on Russian rockets. The Russian Cosmos 3 rocket carrying the satellite blasted off Monday at 6 p.m. Eastern Standard Time (23:00 GMT) from the Plesetsk Cosmodrome in the Arctic and made the fiery ascent without trouble, the Strategic Missile Forces press service said. Controllers then lost contact with it. The Interfax news agency, citing unnamed specialists at the Russian Aviation and Space Agency (Rosaviakosmos), reported that the second stage of the booster rocket shut down too early and that the satellite would likely plunge back into the Earth's atmosphere.

The half-ton satellite was made by another Colorado company, Ball Aerospace. It was designed to take high-resolution pictures of the Earth's surface for commercial purposes, such as land management, mapping and environmental studies.

U.S. companies routinely use Russian space facilities to launch commercial satellites. The rockets are usually considered reliable and a good bargain compared with European and American competitors. The launch Tuesday was the 401st Cosmos 3 blastoff from the Plesetsk Cosmodrome, Interfax said.

ARTWORK FROM THE A-4 V-4

An artist impression of the carton which adorned the fourth A4 prototype, the A4 V4.



KIT REVIEW TINEE

By Kevin Johnson

Construction:

The kit includes: 5 laser cut balsa parts, 1 balsa nose cone, 1 13mm motor pod tube, and 1 launch lug.

I ordered my kit from Discount Rocketry and it came bagged with all the parts and 1 8x11 inch sheet of instructions. There was a crack in my wing, but it didn't go all the way through and was easily fixed with a little glue before construction started.

The instruction sheet was clear and the illustrations were easy to read and showed where all the pieces fit together. All you need to build this kit is a tube of white glue. This kit is geared to be a "first" boost glide model and would be a great project for young hobbyists to complete with their parents. The typical Edmonds interlocking design makes for a quick and accurate building experience.

Finishing:

The kit didn't come with any decals, and the finished glider looks great in the bare balsa. I did color mine using magic markers to make it easier to track in the sky. I got joshed a little for using green and yellow though.. nothing like hunting for a grass-colored rocket!

Construction Rating: 5 out of 5

Flight:

There isn't any mention of glide testing the TINEE in the instructions. I found, like its bigger brothers, this model tracked straight and true when built following the directions. Prepping this kit is easy since the ejection charge spits the spent casing out of the pod. Just be careful if you fly from a dry range, and call "heads up".

My first flight was on a 1/2A3-2T and was a partial success. After a nice straight boost the ejection charge went off and broke the fuselage right behind the canards. I found all the parts and took it home for some repair work. I'd probably recommend coating the body just behind the canards with thin CA for added strength before your first flight, which is what I did to repair the damage sustained.

On the second flight, again with a 1/2A3-2T, everything went as just as you'd expect. Another good boost and after ejection a quick half-loop into a nice flat glide.

Recovery:

The TINEE doesn't have a lot of wing area so I don't think you'd be likely to see it fly over the horizon, never to be seen again. That said, the glides are really nice, and for a young flyer seeing something they built actually work well will make this kit one of their favorites.

Flight Rating: 4 1/2 out of 5

Summary:

I can't think of any cons for this kit. The ease of assembly and quality laser cut components are typical of Edmonds product. If you have a junior rocketeer that wants to build something more than a 3FNC, or have never built a boost glider before, the TINEE should be your first choice.

Overall Rating: 4 1/2 out of 5

Editors note: Fellow club member John McCoy made the suggestion that if you want to use this model in a NAR BG event, he recommends that you upgrade the motor tube and nosecone to 14mm diameter. This will allow for a streamer to be taped to the motor casing. The design of this kit is such that it kicks the motor on ejection. Y simply adding the streamer the model becomes rule compliant.

Club Initiates Junior Incentives NAR and Alex Kovacic Winners

By Ole Ed

NARHAMS initiated a junior-member incentive program this past month. The program hopes to help attract young flyers for our club by providing them a significant financial NAR-membership subsidy.

Club President Jim Filler outlined the subsidy program in explaining a proposed budget line item at the November 2000 NARHAMS meeting. Basically the club will provide \$15 of a new junior's NAR-membership. The program is only open to junior-aged rocketeers who have not flown for the club in the previous year and who show good faith by pledging to fly for the club in at least two contests after signing up for the subsidy. The subsidy represents 60% of a junior membership \$25 annual cost. In explaining the rationale, Jim said he hoped the program would both help NAR membership and NARHAMS contest participation.

The program became immediately effective when the club approved NARHAMS 2001 annual budget of \$1,400-plus. The subsidy allocated was for ten new juniors or an allocation amount of \$150. New club member Alex Kovacic immediately benefited from the program as his dad, Eric, wrote out a \$25 check to the NAR at the meeting and the NARHAMS treasury reimbursed Eric \$15 in cash.

No formal name was given to the program, but one was after the meeting suggested Bringing Rocketeers Into Beneficial Experiences.

In another move to increase junior participation at club meetings, Jim announced that starting January the club would arrange the agenda so that the planned activities (workshops, presentations, films, etc.) would occur first and club business would occupy only the last hour. The meeting business would be conducted from a topic agenda to be filled out by members during the planned activity portion of the meeting.

Monthly club meetings occur at College Park Airport on the first Friday of each month from 7:30-10:00 p.m. With the new format, the planned activities will occur 7:30-9 p.m. and business run from 9-10 p.m.

This format was suggested at the annual planning meeting held Saturday, October 28, and attended by eight members/officers. The planners also generated the monthly meeting planned activities presented elsewhere in this ZOG. There was a general recognition that the current business-first format was not interesting or encouraging to junior members and that the key to growth was through new memberships.

The November meeting at which these membership incentives were announced brought out more than 25 people. This showed that NARHAMS meetings are still well attended. However at that meeting only two juniors stayed throughout (Alex Kovacic and Josh Hickok); two others left early and another stayed in his dad's car rather than sit through the business session.

NARHAMS 2001 Contests

OSTRICH-1 (Old Spring-Time Regional to Inspire Competition Hilarity) is a Regional Meet March 24. Jennifer Ash-Poole will CD. Events are OSL, C ELD, A SD MR, SpSc, RDD, 1/2A BG.

OPOSSUM-5 is an Open Meet April 21 and will coincide with the sport/night launch. Chris Kidwell will CD. Events are RDD, B SD, B PD, SpSc, A SRD.

ECRM-28 is a Regional Meet May 19-20. Jim Filler will CD. Events are C ELA, B PAY, 1/2A FW, C SD, SpSc.

RAMTEC-9 is a Regional Meet June 16-17. Glenn Feveryear of SPAAR will CD. Events are TBD.

NARAM-43 is a National Meet August 4-10. John Viggiano will CD. Events are 1/2A BG, 1/2A FW, A ALT, B SRA, C SD, C ELA, D HD, SpSc, R&D.

MATTHEW-5 is a Section Meet October 13. Khim Bittle will CD. Events are 1/2A BG, 1/2A PD, PRD, A SD.

C.2 EVENTS ABBREVIATIONS

ALT Altitude	PD Parachute Duration
BG Boost Glider Duration	PAY Payload
CA Cluster Altitude	SD Streamer Duration
R & D Research and Development	PRD Predicted Duration
DEL Dual Egg Lofting Altitude	RDD Random Duration
ELA Egg Lofting Altitude	RG Rocket Glider Duration
ELD Egg Lofting Duration	SPSC Sport Scale
FW Flex Wing Boost Glider Duration	
HD Helicopter Duration	SRD Super-Roc Duration
OSL Open Spot Landing	SRA Super-Roc Altitude

FOOTNOTES:

1) Sport Launches are held at Middletown Park from 10am - 4pm, waiver up to 3.3 lbs and "G" motors not exceeding 62.5 grams of propellant. All flights "E" power and above, are restricted to 5 degrees from vertical and between the hours of noon and four PM. Call ahead to confirm launch and waiver availability.

2) Business meetings are held at the College Park Airport Annex Building. Meetings will change starting in Jan. The building session or presentation will start about 7:15 until 9PM. The business meeting will go from 9PM until 10PM. If there is no specified building session, please bring whatever project you are currently working on.

3) Questions? Contact club president Jim Filler at (301) 371-3365

4) Visit NARHAMS online at <http://www.narhams.org>