THE OFFICIAL NEWSLETTER OF NARHAMS SECTION # 139

ZOG-43

NOVEMBER 2000

PHOTO: Kevin & Jerry and Der Red Max 1x & 2x

Photo By : Jim Filler

IN THIS EDITION

THE ONLY NAR NEWLETTER PUBLISHED MONTHLY ! !

From the Editor:

Where is the NAR headed? I sit at my keyboard month after month putting together a newsletter for our little corner of the NAR. The National Association of Rocketry seems to be heading in a different direction then this group of people referred to as NARHAMSTERS. What do you think? I will tell you what I think. When I started flying model rockets back in 1974, I had never heard of the NAR. Maybe by chance, new neighbors moved in and found me launching model rockets at the ballfield. Through the efforts of a kind adult, I learned the ways of flying model rockets safely and for fun. A day trip to Allentown Pa for the NARAM banquet was a real eye-opener for a young man who's interests centered around the space program, sci-fi, on TV, and anything that had to do with aerospace or aeronautics. What I found was an entire group of mostly adults that shared similar interests that I had.

Fast forward to the present. A trip to NARAM is still a great experience. What is missing in my minds-eye is the lack of focus on the youth of today. When kids can sit at home and connect to the Internet or play arcade style games in the comfort of their bedroom, it does make it tough for the local rocket club to attract them to a hobby that requires the use of their mind, thought process, knowledge, experience, and some times a little luck. The thing the NAR has going for them is the people you find on the rocket ranges across the country. I would put our people up against any other hobby group and think we would hold our own. Where we fall down as an organization in my humble opinion, is that we don't put the kids first and foremost prior to getting them on the field.

I guess the ZOG has gone loony, someone grab him he's nuts! What I mean is simple, the NAR Sport Rocketry Magazine has a lot of great information and pictures in it for an adult. You could argue that this is something that the kids certainly want to see. But how about this, most of the time you see these big-honking rockets they are powered by "G" motors or better. Hello, you have to 18 just buy a "G", and anything bigger requires federal paperwork. I have mixed feelings about the on going fight for HPR regulatory relief. HPR motors today, model rockets tomorrow. I think the NAR is probably doing the right thing and the members' sure want to know all the details. However, look at the NAR website, I have a 10-year-old who sees nothing of interest on this page. I think we could do a better job of marketing our association to the youth generation of this country. Do I have all the answers, certainly not. Do I think the NAR is doing a bad job at what it is doing, no I don't. What I want to see is the phrase " Pay Forward" have some meaning with the youth of this hobby. Some say that flying RC airplane clubs are a distant cousin to the NAR, have you looked around at one for their events recently? I don't see hardly any kids at all. Lets not have this happen to the NAR!

From the top of a reinforced soapbox,

Jim Filler

LAUNCH WINDOWS

SPORT LAUNCH

Middletown Park Oddroc Theme
November 11th 10AM - 4 PM
Contact: Jim Filler 301-371-3365
Planned Notam for up to 3.3 lb.
Limited to "G" class motors

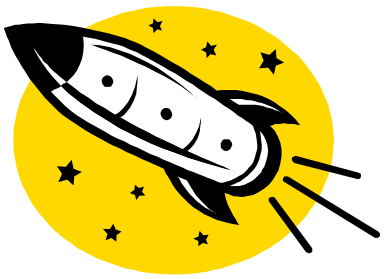
SPORT LAUNCH

Middletown Park 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 !

Jan. 13,2001 10AM-8PM
301-371-3365



Air Fair Part Two:

Goddard Community Day, Sept. 23, 2000

By Alan Williams, NAR 14137

After a busy day being congratulated for my usual excellent air fair announcing job, I, and certain NARHAMS members, did it all over again at NASA Goddard. We were asked to provide a demonstration to close out the Fall Community Day. (I believe that we have actually covered every NASA Community Day since the early 1980's) Our club members came through again.

We started out with the usual fire power demo. This launch featured Quest Falcons with identical paint jobs (Thanks to the gift shop for providing NASA "meatball" decals). Models flew with A's through E 30s with 2 modified E30 Falcons drag racing each other. The crowd went mad! We then flew a 25-year old Nike Ram of mine on its first flight, F-20 power put it up almost ¾ mile high. The crowd went mad! We put up an egglofter on a C6-3. The egg broke. The crowd went mad! We flew Robert Edmond's gliders of every description and the crowd went mad! We flew scale models. We flew dual drag racing flying saucers (Quest and Tri-FO). The crowd went mad! We flew composites. The crowd went mad! We flew mini motors. The crowd went mad! *I told jokes, the crowd got mad!*

We flew a full hour demo and were given "excellent" marks by Public Affairs Personnel and had a great time. I'd like to thank Jim Miers for launching and providing firing systems, Bob Booker and Kevin for models and help, Russell Sheets for recovery, Robert Edmonds for lots of gliders and also Kevin of Countdown Hobbies for getting motors that no one else could. Be proud of this one!

Nippy November Nights

By NARHAMSter Paul Miller, NAR 51615

Never forget the fundamental astro-axiom for our latitude: "The colder the nights, the better the skies." This November will certainly fit the mold, and it definitely won't disappoint. All eyes will focus on Taurus, the Bull, this month. Charging into late autumn skies, his red giant alpha star, Aldebaran, is the focal point for many nippy nights in November.

Most northern planispheres (a.k.a. star wheels) are designed for 40 N latitude, which is just to our north, roughly near York, PA. Actually, Millersville, PA rests right on that imaginary line. And, of course, my favorite starwheel is the "Miller Planisphere." You merely set the time and date with the wheel and the stars in the "window" match the sky. Since the Earth precesses completely in 26,000 years, my star wheel will be good for a lifetime. Featured in the star wheel this month are Pegasus overhead and Taurus on the ecliptic.

Jupiter and Saturn will dominate the southeastern skies with unprecedented brightness this month. Both reach opposition during November. These gaseous giants are currently wandering through Taurus. What a show!

November also brings two meteor showers, which have dazzled skywatchers in the past. It was November 13, 1833 when North America witnessed the most spectacular meteor shower in recorded history. It was the "night that heaven rained stars." Claims were as high as 20,000 per hour streaking from Leo. November 1966 was great if you lived in Texas. This month probably won't be special, but the sky is always full of surprises.

The first shower carried the "Taurid" label since the streaks seem to come from Taurus, the Bull. They will begin at the end of October and continue until mid-November. Rarely more than 5 per hour, some are exceptional - big, bright and yellow fireballs.

The second and more dominant November shower, the Leonids, will peak around the 17th and 18th. With Leo as the radiant, you must keep a sharp eye to spot them due to a last quarter Moon. Astronomy magazine promises a better show next November.

Mercury is the high school bus special this month, rising in the east-southeast with best observing about an hour before sunrise. Reaching its greatest western elongation on the 15th, it will continue to brighten for several more morning.

Venus makes a majestic presentation in the southwest just after sunset on the 29th. Framed by a waxing crescent Moon above, and the "teapot" constellation Sagittarius below.

Astronomy magazine featured three hits in the November issue. First and foremost is Anne Finkbeiner's article regarding women getting a fair shake in astronomy. Interviewed are a dozen female astronomers highlighting their careers and their quest to fit into a mostly male community. Amazingly, I've met three of them and worked one summer with one of them at STScI. These are good people!

One of my greatest pleasures during my teaching career was my eight-year tenure with high school astronomy. Astrophysicist and rocketeer Stan Hunter donated his thirty-five year collection of Sky and Telescope to my high school. The following Monday my astro students skeptically eyeballed those generous stacks of magazines. We spent the next few days surveying the growth and progress of a first-class publication. We started piles of magazines based on major topics, i.e. telescopes, the Moon, etc. Several young ladies decided to search for women who contributed to astronomy. Frankly, they didn't find much. There were two admirable articles in the '90's that saved the day. I mentioned this to Anne Kinney at STScI a few years ago. In this current article she cites, "The goal is to do good work…" "redefining (the community of astronomers) is not so hard where people so love the field."

The November Astronomy also presents in Kids' Corner: "Inside Reflectors." One lucky NARHAMS family (the Bittles) recently received a 4 ½ " reflector from a generous relative. Welcome to the wonderful sky. Glenn Chaple's article is the perfect primer on your first reflecting telescope.

Lastly, Astronomy touts its new (reworked) website: "The definitive website for astronomy." Check it out at Astronomy.com. It is well-constructed.

Until December, keep a lookout for the elusive flying Z cloud, and get ready for the Christmas Eclipse!

REAL WORLD SPACE NEWS

Compiled By: Jennifer Ash-Poole

INTERNATIONAL SPACE STATION STATUS REPORT #00-44

October 31, 2000 - Noon CST Mission Control Center, Houston, Texas

The Expedition 1 crew, secure in its Soyuz spacecraft,continues on course for a rendezvous and docking with the International Space Station, inaugurating a new era in human space flight.

Following their launch from the Baikonur Cosmodrome at 1:53 a.m. CST today, Soyuz Commander Yuri Gidzenko, Expedition 1 Commander Bill Shepherd and Flight Engineer Sergei Krikalev successfully deployed docking probes on the Soyuz and checked out the spacecraft's motion control systems. On two consecutive orbits, daily orbits 3 and 4, phasing burns were completed to keep the Soyuz on course for its rendezvous with the International Space Station. A third rendezvous burn is scheduled just before 3 a.m. tomorrow to slightly raise the Soyuz orbit and slow the rate at which it is approaching the space station.

During communications passes over Russian ground stations this morning, the crew talked with flight controllers, providing updated information on the performance of the Soyuz spacecraft and the crew's activities. During their final communications pass of the day, the trio confirmed a successful test of the external camera that provides cues during rendezvous and docking, and reported all crew members were feeling well. Shepherd, Gidzenko and Krikalev went to sleep about 9 a.m. CST today and will awaken about 6:30 p.m. CST to begin the second day of what's planned to be a four-month stay in space.

Flight control teams in Houston have activated life support systems and air purification units on board the space station, readying the outpost for the arrival of its first residents early Thursday morning. In addition, the flight controllers will support tonight's undocking of the Progress resupply vehicle, currently docked to the same port on the Zvezda module of the station to which the Expedition 1 crew will dock Thursday. The Progress will undock at 10:02 p.m. CST today, and shortly after 1 a.m.Wednesday will be commanded into a trajectory that will cause it to burn up in the Earth's atmosphere.

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NEAR Shoemaker Spacecraft Makes Historic Low Fly-Over of Eros

Yesterday, after more than eight months in orbit around asteroid Eros, the NEAR Shoemaker spacecraft swooped down towithin three miles of its surface, taking images and collecting data from a distance closer than any spacecraft has ever come to an asteroid. It is now at a125-mile orbit where it will stay for the next month. In December, the spacecraft will begin descending to lower and lower orbits as it completes its science objectives. Themission is scheduled to end in February 2001--one yearafter NEAR Shoemaker began orbiting the asteroid.

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A look at the world's space stations through the decades:
By The Associated Press

Salyut 1: World's first space station. Launched in 1971 by the Soviet Union.

Skylab: America's first space station. Launched in 1973by NASA. Home to three, three-man crews in 1973 and1974. Plunged through atmosphere and burned up in1979.

Salyut 2-7: Soviet space stations. Launched from 1973through 1982. The last, the Salyut-7, fell to Earth in 1991.

Mir: Launched in 1986 by the Soviet Union. Inhabitedalmost continuously until August 1999. Occupied by twocosmonauts from April 2000 through June 2000.Uninhabited since then.

International space station: First module launched in November 1998 Russia followed by a U.S. module

Discovery Streaks Toward California
October 25, 2000

By MATTHEW FORDAHL AP Science Writer

EDWARDS AIR FORCE BASE, Calif. (AP) via NewsEdge Corporation -

Space shuttle Discovery and its seven astronauts streaked toward a landing in California's Mojave Desert on Tuesday after dangerously high wind prevented a touchdown in Florida for the third day in a row.

The shuttle was scheduled to touch down on the runway at Edwards Air Force Base in the afternoon, after a13-day flight during which the astronauts got the international space station ready for the arrival of its firstfull-time residents next week.

It was the 100th space shuttle flight for NASA and the first time in 4 years that a shuttle was detoured to California. The final flight plan had the shuttle zooming across the Pacific and right over Los Angeles, then northward into Edwards.

Gusts of close to 30 mph forced NASA to pass up a landing attempt at Cape Canaveral, Fla., earlier in the day. The wind also kept the shuttle from landing in Florida on Sunday and Monday, while rain clouds at Edwards on Monday scuttled landing plans there.

To the astronauts' relief, the weather was ideal at Edwards on Tuesday. ``After a rough couple days of weather, Edwards is giving you the best it has to offer," Mission Control said. ``Sounds beautiful to us," replied commander Brian Duffy.

During their flight, Duffy and his crew installed two new segments on the outside of the space station and also spruced up the inside for the three men who will be moving in for four months. They conducted four spacewalks on four consecutive days, an exceptional and exhausting amount of work. The astronauts toiled from morning to night, from the time they rocketed into orbit on Oct. 11 until their departure from the space station on Friday. A broken antenna and a short circuit made their work even more difficult.

A Rogue Rocket: Crossfire II

Paul Miller, NAR 51615

It was Friday night at NARAM 41, and Rod Schafer called on one person from each banquet table to collect a cardboard box of door prizes. My number matched a unique kit from Rogue Aerospace Corporation. The instructions identified it as the Crossfire II, a "two stage rocket that's fun to build and fun to fly." One feature immediately caught my eye, a booster fin ring. The kit was carefully packed with some sport rockets flown at the national meet and was stored in (shudder) my basement (a.k.a. land of the lost.)

Suddenly, his September, that overwhelming urge came over me - the URGE TO BUILD ROCKETS. First, I finished an Honest John that Andrew started five years ago. Second, I fashioned a "Blue's Clues" rocket from a Phoenix nose cone and "gift" items from a large box Doug Pratt brought to our Auction Meeting. Next was the first of four reissued V-2 kits from Estes. Where were those little V-2s I bought last year in Pittsburgh?

It was time to battle those blasted basement boxes. The first day I found a box Aerotech reloadable hardware I bought from Aerotech four years ago! The next evening I recovered the NARAM 41 box. It was all there: 3 V-2 kits, Tango Papa decals, two of our vintage Estes rockets and the Crossfire.

The Crossfire II model included an impressive set of instructions, probably the most complete my eyes have seen. The first page gave three "Rules to Live By." The third rule gave NAR words of wisdom and words of warning: "If you don't follow the Code, you could jeopardize the future of model rocketry …and make every other model rocketeer in the world angry."

The Crossfire is a skill level 2 model. Thanks to detailed instructions and excellent diagrams it went together fast. For the most part, the materials were well-made and matched the instructions precisely. They included laser-cut fins; a Kevlar tether; a 9" nylon parachute; well-fitting rings, tubes, and coupler; and a sheet of "Perma-Wadding." The reusable Perma-Wadding eliminates the need for recovery wadding. The 8" elastic shock cord supplied was accidentally heat pressed in the plastic bag and when removed immediately unraveled - it was easily replaced from a spare parts box.

The most visible characteristic of the Crossfire is the ring configuration of the booster. Although I carefully adhered to the instructions, I still had to build up one of the fins to achieve a circular outline.

Following priming and painting, I applied the decals. I put on all of the decals except the "Crossfire II" for the body tube. I took my grandson to pre-school and when I returned the decal "disappeared." Instead I placed some strips of Monocoat below the nosecone. Well, there goes my quest to build a perfect model rocket again. It looks great.

Actually, I'm quite satisfied with my Crossfire II. If it flies as good as it looks, I'll really be SATISFIED. Incidentally, the Rogue Aerospace Corporation put a lot of thought into this kit, especially the instructions. Located in Lexington Park, MD, the email address is:

http://www.RogueAerospace.com
aero@RogueAerospace.com

Adios, cohetedores!!

IVEE 2G

By: Kevin Johnson

Brief:

Competition class boost glider with pop pod retrieved by a streamer.

Construction:

The Ivee 2G kit consists of a 13mm body tube, eleven (11) laser cut balsa pieces, a balsa nose cone, a kevlar external shock cord, and a piece of tape.

The IVEE 2G is a joint venture kit between Edmonds Aerospace and Apogee. I ordered this kit from Apogee (through their catalog, it is not on their website) and it came in a bag with all parts and no breakage.

The instruction booklet was great, with lots of good illustrations and a lot of text explains the steps. Unlike every other kit I've gotten from Edmonds, you are instructed to sand an airfoil into the wings. There were templates for getting a good airfoil section included. You should have a sanding block with medium and fine grade sandpaper as well as yellow or white glue. This is a competition-geared kit, and Rob Edmonds has taken the time to write directions that will walk you through some of the steps to make a winning model. There was a very detailed section on trimming and test flying in the directions.

This kit also differs from many of the other Edmonds offerings in that there is no jigsaw like construction, and there are some exacting measurements you have to follow to get the CG and wing/tail dihedral.

Other than that, construction is pretty straight forward for a boost glider type rocket: sand the wings and tail, glue them onto the boom and attach the side plates to act as a hook to engage the booster. The power pod goes together with equal ease: glue together the parts for its hook and attach to the body tube (the directions offer the suggestion to wrap a piece of sandpaper around the tube and sand a curve into the hook before gluing to get a smoother fit and better seams--- this is a competition kit after all). Glue the shock cord to the outside of tube along the BT hook joint, attach the top of the shock cord to the front of the BT by using the included tape. The nosecone is secured to the shock cord by using a small bead threaded onto the cord, then glued into a small hole in the cone. The streamer attaches to the cord with a bit of the supplied tape. Motor retention is by tape wrapped around the end of the BT after the motor is installed.

Finishing:

You probably want to save weight by not adding anything to this kit to finish it, the bare balsa is light and looks sweet all

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on its own. To aid tracking I did add some color with magic marker.

Construction Rating: 5 out of 5

Flight:

I didn't get a chance to flight test the IVEE before using it in a contest, so I was a little nervous on the first flight. I loaded an A3-4T, checked in and waited for the launch. A good straight boost with a little weathercocking into the wind. Separation was good and the glider took off downwind. A great flight of 63 seconds before the timers lost sight of the small glider. I found it a 1/4 to 1/2 mile downrange.

On the second flight I tried to beat the wind a little with an A10-3T and cocked the launch rod upwind to try and keep the glide over the launch area. The launch was up and into the wind, another good separation and a nice circling glide that again went quickly downrange. This flight was tracked to 96 seconds, but landed in a wheatfield and was quietly sacrificed to the agriculture gods.

Recovery: The shock cord is kevlar, and mounted externally. You should probably add one square of wadding rolled up in a ball to protect the paper streamer.

Flight Rating: 5 out of 5

Summary: The IVEE 2G is a great competition kit. The instructions are clear and give lots of information that you can use when working with other gliders.

LAUNCH COVERAGE

Coverage of the NARHAMS sport launch and section meet will appear in an upcoming edition of ZOG-43. THE Contest Director Alan Holmes has had some health issues we are told are now found to be OK. We all wish Alan well, and look forward to seeing him soon. In the mean time, your editor managed to scrape up some photos of the event for your enjoyment.

Scott Branch practicing his growling.

Lets all fly Boostgliders !

Grandpa! ... I can reach it myself... Let me do it !