March/April 2002

Spring Meeting Schedule:
Tuesday March 5th, Tuesday April 2nd, and Tuesday May 7th. Each meeting will start at 7:00 PM at the La Vista Community Center.

March/April 2002 Events Calendar

**March**

**Event:** Annual THOR Auction.
**When:** Tuesday the 5\textsuperscript{th}, 7:00 to 10:00 PM.
**Where:** La Vista Community Center.
**Description:** THOR’s annual auction where members can auction off and bid on rocketry related goods… it’s eBay the old fashion way! 10\% of the money made from each member’s auction, unless arranged differently, will go to the club. The auctioneer will be the Big Scary Guy himself, Rob Skiba!☺

**Event:** Low Power Launch.
**When:** Sunday the 10\textsuperscript{th}, Noon to ?
**Where:** La Vista Sports Complex.
**Fee:** Free.
**Description:** Low power sport flying.
**For More Information:**

**Event:** High Power Launch.
**When:** Saturday the 23\textsuperscript{rd}, 9:00 AM to 5:00 PM.
**Where:** Pickrell, NE.
**Ceiling:** TBA.
**Fee:** $5.
**Description:** Mainly a high power event, but regular model rockets are flown, too.
**For More Information:** Check the rocketry hotline (402-896-2069) for any delays or cancellations if weather looks questionable.

**April**

**Event:** NARCON.
**When:** Friday the 5\textsuperscript{th} through Sunday the 7\textsuperscript{th}.


---

*With winter coming close to an end, we’re all looking forward to another season of flying.*
Rich Burney bids $5! – AKA The THOR Annual Auction…

Another year, another auction! Though it’s a non-flying event, THOR’s auction always seems to be one of the most enjoyable!

I didn’t get a big list from people ahead of time like I did last year, but Kevin Rich has at least one item for sale and I have a few kits that I want to clear out of my inventory. Below is the list of items we’re selling and the prices we’re wanting to start initial bidding at.

Kevin Rich
NCR Interceptor G - $40

Richard Burney
NCR Corporal - $25
Estes Star Wars Ep.1 Sith Infiltrator - $5
Estes Star Wars Ep.1 Naboo Royal Starship - $5
Estes Star Wars Ep.1 Trade Federation Droid Fighter Set - $10
Estes Star Wars Star Destroyer - $5
Estes Strike Fighter - $3

Estes 2002 Catalog!…

I had stopped in at HobbyTown about a week ago (mid February) and I was surprised to find on the shelves a brand new Estes catalog… not one of those simple flyers as they have done over the last three years, but a brandspanking new catalog! On top of that, the 2002 catalog is completely free!

From someone who has always looked forward to the new Estes catalog each year, when they stopped making the traditional catalog after 1998, I was let down. A definite thanks goes out to Estes for bringing back this tradition!

***Wanted – Newsletter Articles and Materials***…

It seems like I have to bring this up a few times a year, but I would like to encourage my fellow THOR members to help contribute articles and pictures to this newsletter. You are welcome to write about your own projects, THOR or other launches, and/or send (preferably in jpg format) pictures from said launches.

This is THOR’s newsletter… NOT Richard Burney’s newsletter alone!☺

AeroTech is pleased to announce that, due to hard work on the part of it’s staff and assistance from the town of Cedar City Utah, manufacturing arrangements are coming together that will make a wide range of motors available for the 2002 flying season. Although not all motors will be made immediately, the following 47 were chosen for our first manufacturing run based on production efficiency and market demands. More will be released as production at our new facility in Utah builds to expected capability.

Hobby Motors
- 24mm: F21W Econojet 2 Paks
- 29mm: F20W and G35 Econojet 2 Paks
- 29mm: F50T and G80T Single Use
- 29mm: F52T, F40W and G64W RMS
Note 1: Copperhead and First Fire Igniters will be available as soon as Hobby Motor production resumes.

Easy Access™ (by case size)
29mm
- 29/180: H128W, H238T and H165R
- 29/240: H180W, H210R
- 29/360: I200W and H268R

38mm
- 38/240: H123W, H242T and H148R
- 38/360: I161W, I357T and I218R
- 38/480: I211W, I300T and I285R
- 38/600: I284W and I435T
- 38/720: J350W and J420R
- 38/1080: J570W

Restricted Access (by case size)
54mm*
- 54/852: J275W and J315R
- 54/1280: J415W and J540R
- 54/1706: K185W, K550W, K1100T and K695R
- 54/2560: K700W
* 54mm initial production will be in Redline. The remainder of the 54 mm reload kits will be released in the RMS-PlusTM configuration as they are certified (April/May). All 54mm reload kits will be released in long RDK-PlusTM delays.

Note 2: Delays for 29mm, 38mm and 54mm will now be sold in packs of three RMS-PlusTM delays each.

75mm
- 75/2560: K560W
- 75/3840: L850W
- 75/5120: L1120W
- 75/6400: M1315W
98mm
- 98/7680: M1419W, M2400T and M1600R
- 98/10240: M1939W and M2000

Shipment of Hobby motors is estimated to begin in March, Easy Access motors in March/April and Restricted Access motors in late April/early May.

AeroTech dealers have been supplied with this initial production information and are prepared to begin taking orders for any of the listed motors. Dealers will also take requests for those motors not included on the initial list. AeroTech will then evaluate those requests and, should the quantities justify, restart additional product lines.

At this time no final schedule has been set for the reintroduction of the remaining AeroTech rocket motors. As production rises to pre-fire levels AeroTech will work closely with it's customers and dealers in making these decisions.

Any questions about this press release may be directed to Mike Martens at mmartens@aerotech-rocketry.com.

Rumor has it that the BATF is leading the charge once again of classifying ALL H+ size motors, whether they are “Easy Access” or not, as Low Explosives.

The producers of Battlebots are going to make a demo tape of their proposed rocket show based on footage Ky Michaelson is sending them.

Items for the raffle latter on in the meeting are a Launch Pad Pseus model rocket and the newest issue of Extreme Rocketry.

Larry talks about the costs of sending his son to college (Milford).

Jon Damme shows how one can make a motor spacer for D12’s if sticking them into a motor mount designed for E9’s.

Mike Slater passes around pictures taken from Nebraska Heat IV last June.

Kevin Trojanowski shows part of his semi-complete 1/70th scale Apogee Saturn V. Kevin spent most of his week long vacation to build it. Many hours of sanding and painting left to go! Kevin also has a few battery powered glow in the dark strips.

THOR Meeting Minutes
January/February 2002
Compiled by Richard Burney, Secretary and Bruce Lee, President

THOR Meeting Minutes 1/8/02

Attendance: Richard Burney, Jeff Moon, Arley Davis, Candy Davis, Jacob Davis, Shaun Landgraf, Greg Rothman, Kevin Trojanowski, Denis Gilbert, Mike Slater, Larry Drake, Dave Pares, Allyson Pares, Kathy McGinnis, Jon Damme.

Meeting starts at 19:15.

Bruce Kelly is STILL behind on getting out a new issue of High Power Rocketry magazine. The most recent issue came out last summer (over six months ago).

Dave Pares has finished the back seven feet of the semi-scale Bluebird. Unfortunately, while welding part of the front assembly behind where the cockpit (where the cockpit of the full scale version would reside), some of the 0.032 thick aluminum began to melt. Otherwise the project has gone well.

Junkyard Wars has contacted Bruce about doing another episode! Possibly a two hour “Megawar”, it may involve an American team against a Russian team. Aspects of this episode might include multi-staging, M power, spot landing, and onboard TV cameras.

AeroTech has a new building.

Greg Rothman has created some very inexpensive ejection canisters using Christmas tree lights. Greg used them on his Level 2 project back in October.

Dave Pares’ son Alex is doing another ion based science experiment. This time Alex is creating an ionized field for the purpose of acting as a heat shield on a reentry vehicle.

Candy says that her brother Adam says hi from Northwest University in Missouri.

Rich Burney offers to e-mail the newsletter to members who would like to print their own copies in color. This would also save postage costs for the club.
The raffle is held and the winners are Mile Slater (Perseus) and Greg Rothman (Extreme Rocketry). (Editor's note: What? Bruce didn't win anything!?;)).

Arley passes around examples of fillets made from wood glue, 5 minute epoxy, 15 minute epoxy, and 20 minute finish cure epoxy. The fillets created with 20 minute finish cure are the best looking and are easiest to sand. Arley shows the repair job in progress on his PML Pterodactyl. After putting the new body tube on the back end and with the fins back in place, Arley used PML's expanding foam to fill in the space between each fin. Arley shows how the expanding foam works in this application. Arley shows his collection of Dremel tools, many of which would be good in small spaces and curved surfaces (ie. Fillets and leading/trailing edges).

Jeff Moon is about to order some supplies from Giant Leap Rocketry and offers everyone else to join in on the order in order for people to save on shipping costs.

Prototype for the 2002 calendar is laid out. Some dates, like FOTF V, are tentative. Contests will be finalized at the next meeting.

Most members' membership dues are up for renewal.

Meeting adjourned at 21:40.

**THOR Meeting Minutes 2/5/02**

2/5/02 – meeting notes starts at 1915

Attendance: Candy Davis, Jacob Davis, Arley Davis, Shaun Landgraf, Jon Damme, Greg Rothman, Larry Drake, Kevin Trojanowski, Kevin Rich, Devin Rich, Mrs. Rich, Mike Slater and David Pares.

Visitor Scott Pearson

Bruce Lee: discussed general rocketry info
Kevin Trojanowski: showed new K hybrid project

Dave Pares: Blue Bird update – teaching college on Wednesday nights and cannot attend any more mtgs
Arley Davis: showed ancient Centuri kit he is working on
Candy Davis: pregnant again due in September
Kevin Rich: Ky superbowl party photos

Discussed availability to receive newsletter via email in PDF format

Launch dates: had to move FOTF to 4/14/02 at request of landowner
Move low power to 4/28/02

Contests: discussed new possibility hard ball (baseball) loft and DUDE duration
Parachute duration
Streamer duration
Spot landing (April 28, 2002)
Egg lofting
Base ball duration
Drag races

Watched Ky's new BALLS and Space shot tape

Meeting ends 2145

---

*Rich Burney’s Level 3 Update*

Here's a quick update pic of virtually all the parts that will be going into my Level 3 project. Since it will have a SDF Macross theme to it, I threw in some of my Macross VF-1 Valkyrie toys to help stand guard! ☺ Now I just have to build it!
Below is the calendar for the THOR 2002 flying season as of 2/24/02. Some events, namely contests, have yet to be fully defined (the final choice of contests and dates will be determined by April). As the year progresses, I will continue to update the calendar to reflect all changes, additions, and/or subtractions. If you have any questions, contact either Bruce or myself.

March

**Event:** Annual THOR Auction.
**When:** Tuesday the 5th, 7:00 to 10:00 PM.
**Where:** La Vista Community Center.
**Description:** THOR’s annual auction where members can auction off and bid on rocketry related goods… it’s eBay the old fashion way! 10% of the money made from each member’s auction, unless arranged differently, will go to the club. Since the Big Scary Guy will be MIA, Bruce Lee will be the head auctioneer!

**Event:** Low Power Launch.
**When:** Sunday the 10th, Noon to ?
**Where:** La Vista Sports Complex.
**Fee:** Free.
**Description:** Low power sport flying.

**Event:** High Power Launch.
**When:** Saturday the 23rd, 9:00 AM to 5:00 PM.
**Where:** Pickrell, NE.
**Ceiling:** TBA.
**Fee:** $5.
**Description:** Mainly a high power event, but regular model rockets are flown, too.

**For More Information:** Check the rocketry hotline (402-896-2069) for any delays or cancellations if weather looks questionable.

April

**Event:** NARCON.
**When:** Friday the 5th through Sunday the 7th.
**Where:** Austin, TX.
**Description:** NAR’s annual convention.

**For More Information:** Go to www.narcon2002.org.

**Event:** Fire on the Farm V.
**When:** Experimental day on Friday the 12th. High power flying from Saturday the 13th through Sunday the 14th, 9:00 AM to 5:00 PM each day.
**Where:** Carroll, IA.
**Ceiling:** TBA.
**Fee:** $5.
**Description:** This is the big annual high power launch that we have conducted in the past with the Iowa Society Of Amateur Rocketeers (I-SOAR).

May

**Event:** Low Power Launch.
**When:** Sunday the 19th, Noon to ?
**Where:** La Vista Sports Complex.

**For More Information:** Go to the calendar at www.tripoli.org. More details of the launch will be hammered out in the next two months.
Fee: Free.
Description: Low power sport flying.
For More Information:

Event: National Sport Launch.
When: Saturday the 25th through Monday the 27th.
Where: Rainbow Valley, AZ.
Description: NAR’s annual sport launch.
For more information: Go to www.sssrocketry.org/nsl2002.htm.

June

Event: Low Power Launch.
When: Sunday the 9th, Noon to ?
Where: La Vista Sports Complex.
Fee: Free.
Description: Low power sport flying.
For More Information:

Event: High Power Launch.
When: Saturday the 29th, 9:00 AM to 5:00 PM.
Where: Pickrell, NE.
Ceiling: TBA.
Fee: $5.
Description: Mainly a high power event, but regular model rockets are flown, too.
For More Information: Check the rocketry hotline (402-896-2069) for any delays or cancellations if weather looks questionable.

July

Event: 4th of July Party.
When: Thursday the 4th (duh…), exact time to be determined.
Where: Bruce Lee’s house.
Fee: Free… but bring your own food such as meat and chips!
Description: The club’s annual 4th of July party.
For More Information: Final details will be determined before the party.

Event: Low Power Launch.
When: Sunday the 7th, Noon to ?
Where: La Vista Sports Complex.
Fee: Free.
Description: Low power sport flying.
For More Information:

Event: LDRS XXI.
When: High power flying from Thursday the 11th through Sunday the 14th. Experimental flying from Monday the 15th through Tuesday the 16th.
Where: Lucerne Dry Lake, CA.
Description: Large and Dangerous Rocket Ships number 20! This is TRA’s big national high power launch of the year.

August

Event: Nebraska Heat V.
The banquet at last year’s Nebraska Heat.

**Event:** NAR’s week of model rocketry competition.
**When:** Sunday the 4th through Friday the 9th.
**Where:** McGregor, TX.
**Description:** Typically there is a lot of sport and some high power flying, too.

**For More Information:** Go to www.naram2002.org.

**Event:** Low Power Launch.
**When:** Sunday the 18th, Noon to ?
**Where:** La Vista Sports Complex.
**Fee:** Free.
**Description:** Low power sport flying.

**For More Information:**

**Event:** AIRFest VIII.
**When:** High power flying from Friday the 30th through Sunday September the 1st. Experimental day on Monday September 2nd.
**Where:** Argonia, KS.
**Description:** This is the awesome high power get together thrown together each year by the Tripoli Kansas Prefecture. The Kloudbusters have a very excellent field to fly from and this site has been used for several LDRS’s. Many members from THOR have attended the AIRFest launch in the past.

**For More Information:** Go to www.kloudbusters.org/airfest.html.

**September**

**Event:** Low Power Launch.
**When:** Sunday the 8th, Noon to ?
**Where:** La Vista Sports Complex.
**Fee:** Free.
**Description:** Low power sport flying. This may also be the date for John Carroll’s Field of Wing’s event.

**For More Information:**

**Event:** High Power Launch.
**When:** Saturday the 14th, 9:00 AM to 5:00 PM.
**Where:** Carroll, IA(?).
**Ceiling:** TBA.
**Fee:** $5.
**Description:** Mainly a high power event, but regular model rockets are flown, too.

**For More Information:** Check the rocketry hotline (402-896-2069) for any delays or cancellations if weather looks questionable.

**October**

**Event:** Balls 2002.
**When:** Saturday the 28th through Sunday the 29th.
**Where:** Blackrock, NV.
**Description:** The big national experimental high power rocket launch of the year!

**For More Information:** Go to www.tripolivegas.com/launchschedule.html.

**Event:** Low Power Launch.
**When:** Sunday the 13th, Noon to ?
**Where:** La Vista Sports Complex.
**Fee:** Free.
**Description:** Low power sport flying.

**For More Information:**

**Event:** High Power Launch.
**When:** Saturday the 26th, 9:00 AM to 5:00 PM.
**Where:** Pickrell, NE.
**Ceiling:** TBA.
**Fee:** $5.
**Description:** Mainly a high power event, but regular model rockets are flown, too.

**For More Information:** Check the rocketry hotline (402-896-2069) for any delays or cancellations if weather looks questionable.

**November**

**Event:** Low Power Launch.
**When:** Sunday the 10th, Noon to ?
**Where:** La Vista Sports Complex.
**Fee:** Free.
**Description:** Low power sport flying.

**For More Information:**

**Event:** High Power Launch.
**When:** Saturday the 16th, 9:00 AM to 5:00 PM.
**Where:** Carroll, IA(?).
**Ceiling:** TBA.
**Fee:** $5.
**Description:** Mainly a high power event, but regular model rockets are flown, too.

**For More Information:** Check the rocketry hotline (402-896-2069) for any delays or cancellations if weather looks questionable.

**December**

**Event:** Christmas Party.
**When:** Friday the 7th.
**Where:** Denis Gilbert’s house.
**Fee:** Free... but make sure to bring food and drinks.
**Description:** THOR’s annual Christmas party!

**For More Information:** Final details for the party will be determined ahead of time. A map for directions to Denis’ house is posted on the THOR web site.
THOR Membership Application

Personal Information

Name: ____________________________________________________________
Address: _________________________________________________________
City: _____________________________________________________________
State: ___________ Zip Code: ________________________________
Phone Number: ___________________________________________________
E-mail: __________________________________________________________

Hobby Information

How long have you been in model rocketry: ____________

Do you belong to a national rocketry organization (enter your number to the applicable organization):
NAR# _______ TRA# _______ NERO# ________

Are you certified for high power rocketry (check mark your applicable TRA or NAR Certification Level):
Level 1 _____ Level 2 _____ Level 3 _____

Membership Rates

½ year memberships will divide by 2 and add $1. Write your check payable to “The Heartland Organization of Rocketry” or “THOR”. Mail it to the below address or pay at the next meeting.

Family Membership - $36
Senior Membership– 18 and over - $24
Junior Membership – Under 18 - $12
Correspondence Membership - $10
(Members over 50 miles from Omaha)
Newsletter Only (6 issues a year) - $6

I agree to comply with THOR’s policies as pertains to the safety guidelines set forth by the NAR and Tripoli. Failure to do so is grounds for expulsion.

Signature: ________________________________________________________
Dated: ____________________________

The Heartland Organization of Rocketry
6211 South 141st St.
Omaha, NE 68137

Membership in the Heartland Organization of Rocketry is open to all interested parties.