



# THOR.

**March/April 2002**

**VOLUME 9 NUMBER 2**

## Spring Meeting Schedule :

Tuesday March 5<sup>th</sup>, Tuesday April 2<sup>nd</sup>, and Tuesday May 7<sup>th</sup>. 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<sup>th</sup>, 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 Skibal!©

**Event:** Low Power Launch.

**When:** Sunday the 10<sup>th</sup>, 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<sup>rd</sup>, 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<sup>th</sup> through Sunday the 7<sup>th</sup>.

**Where:** Austin, TX.

**Description:** NAR's annual convention.

**For More Information:** Go to [www.narcon2002.org](http://www.narcon2002.org).

**Event:** Fire on the Farm V.

**When:** Experimental day on Friday the 12<sup>th</sup>. High power flying from Saturday the 13<sup>th</sup> through Sunday the 14<sup>th</sup>, 9:00 AM to 5:00 PM each day.

**Where:** Carroll, IA.

**Ceiling:** TBA.

**Fee:** TBA.

**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).

**For More Information:** Go to the calendar at [www.tripoli.org](http://www.tripoli.org). More details of the launch will be hammered out in the next two months.

**Event:** Low Power Launch.

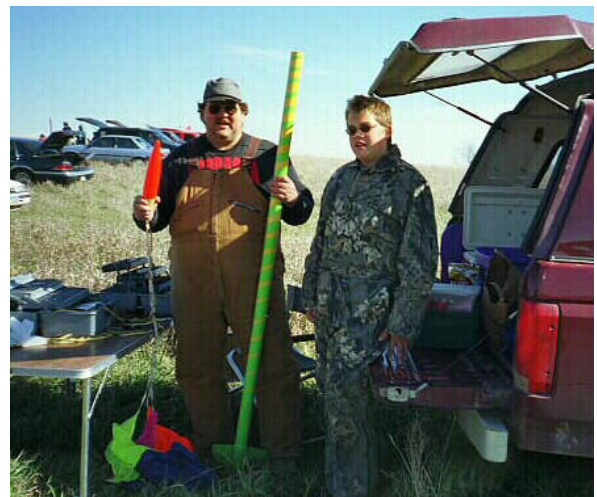
**When:** Sunday the 28<sup>th</sup>, Noon to ?

**Where:** La Vista Sports Complex.

**Fee:** Free. \$1 contest fee for members.

**Description:** Spot Landing contest and low power sport flying.

**For More Information:**



*With winter coming close to an end, we're all looking forward to another season of flying.*

## Rocketman Central

By Richard Burney, Secretary and Newsletter Editor  
THOR# 8, NAR# 69543, TRA# 6140

## AeroTech Announces Motor Production List

(courtesy of Rocketry Online – [www.rocketryonline.com](http://www.rocketryonline.com))

### 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 brand spanking 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-Plus™ configuration as they are certified (April/May). All 54mm reload kits will be released in long RDK-Plus™ delays.

Note 2: Delays for 29mm, 38mm and 54mm will now be sold in packs of three RMS-Plus™ 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](mailto:mmartens@aerotech-rocketry.com).

## 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.

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 Luanch 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 1/70<sup>th</sup> 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.



**Kevin Trojanowski shows some of the work he has finished on his Apogee Saturn V.**

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).



**Arley mixes the two-part PML expanding foam as part of his demonstration.**

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!**

## THOR 2002 Events Calendar

Compiled by Richard Burney, Secretary

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 5<sup>th</sup>, 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 10<sup>th</sup>, 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<sup>rd</sup>, 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<sup>th</sup> through Sunday the 7<sup>th</sup>.

**Where:** Austin, TX.

**Description:** NAR's annual convention.

**For More Information:** Go to [www.narcon2002.org](http://www.narcon2002.org).

**Event:** Fire on the Farm V.

**When:** Experimental day on Friday the 12<sup>th</sup>. High power flying from Saturday the 13<sup>th</sup> through Sunday the 14<sup>th</sup>, 9:00 AM to 5:00 PM each day.

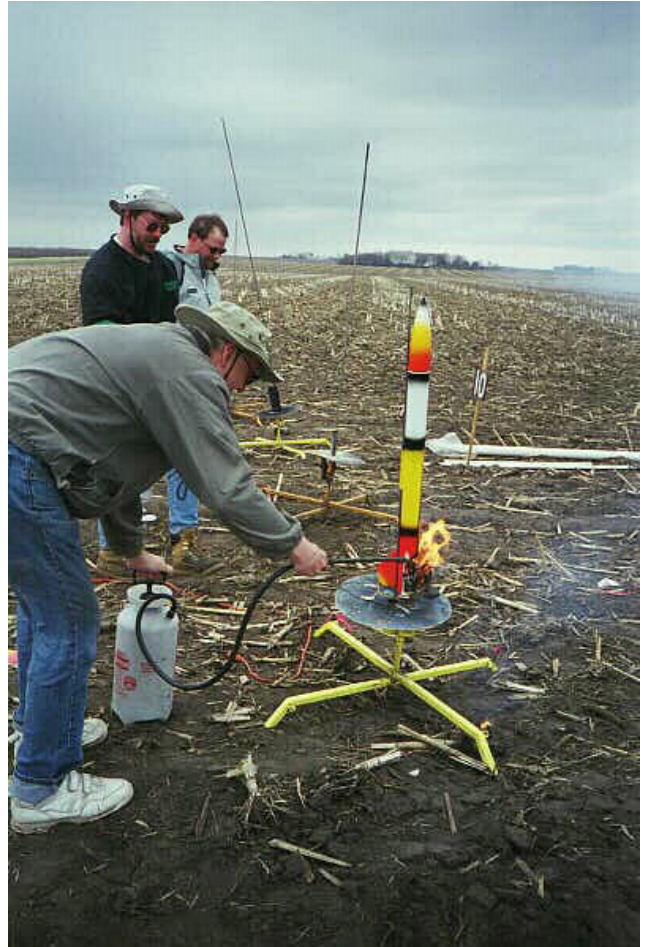
**Where:** Carroll, IA.

**Ceiling:** TBA.

**Fee:** TBA.

**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).

**For More Information:** Go to the calendar at [www.tripoli.org](http://www.tripoli.org). More details of the launch will be hammered out in the next two months.



**Fire on the Farm... literally! The first launch of FOTF IV ended with a cato and then a fire.**

**Event:** Low Power Launch.

**When:** Sunday the 28<sup>th</sup>, Noon to ?

**Where:** La Vista Sports Complex.

**Fee:** Free. \$1 contest fee for members.

**Description:** Spot Landing contest and low power sport flying.

**For More Information:**

### May

**Event:** High Power Launch.

**When:** Saturday the 11<sup>th</sup>, 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.

**Event:** Low Power Launch.

**When:** Sunday the 19<sup>th</sup>, Noon to ?

**Where:** La Vista Sports Complex.

**Fee:** Free.

**Description:** Low power sport flying.

**For More Information:**

**Event:** National Sport Launch.

**When:** Saturday the 25<sup>th</sup> through Monday the 27<sup>th</sup>.

**Where:** Rainbow Valley, AZ.

**Description:** NAR's annual sport launch.

**For more information:** Go to [www.sssrocketry.org/nsl2002.htm](http://www.sssrocketry.org/nsl2002.htm).

### June

**Event:** Low Power Launch.

**When:** Sunday the 9<sup>th</sup>, Noon to ?

**Where:** La Vista Sports Complex.

**Fee:** Free.

**Description:** Low power sport flying.

**For More Information:**

**Event:** High Power Launch.

**When:** Saturday the 29<sup>th</sup>, 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:** 4<sup>th</sup> of July Party.

**When:** Thursday the 4<sup>th</sup> (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 4<sup>th</sup> of July party.

**For More Information:** Final details will be determined before the party.

**Event:** Low Power Launch.

**When:** Sunday the 7<sup>th</sup>, 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 11<sup>th</sup> through Sunday the 14<sup>th</sup>. Experimental flying from Monday the 15<sup>th</sup> through Tuesday the 16<sup>th</sup>.

**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.

**For More Information:** Go to [www.ldrs21.org](http://www.ldrs21.org).

### August

**Event:** Nebraska Heat V.

**When:** Friday the 2<sup>nd</sup> through Sunday the 4<sup>th</sup>, 9:00 AM to 5:00 PM each day. (**Final dates are pending**).

**Where:** Pickrell, NE.

**Ceiling:** TBA.

**Fee:** TBA.

**Description:** THOR's big annual high power rocketry get together!

**For More Information:** Go to the calendar at [www.tripol.org](http://www.tripol.org). More details of the launch will be hammered out in the next two months.



*The pads are loaded up at last year's Nebraska Heat.*



*Richard Burney with his scratch built Macross Plus. My first K1100 flight!*



**The banquet at last year's Nebraska Heat.**

**Event:** NARAM 44.  
**When:** Sunday the 4<sup>th</sup> through Friday the 9<sup>th</sup>.  
**Where:** McGregor, TX.  
**Description:** NAR's week of model rocketry competition. Typically there is a lot of sport and some high power flying, too.  
**For More Information:** Go to [www.naram2002.org](http://www.naram2002.org).

**Event:** Low Power Launch.  
**When:** Sunday the 18<sup>th</sup>, 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 30<sup>th</sup> through Sunday September the 1<sup>st</sup>. Experimental day on Monday September 2<sup>nd</sup>.  
**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](http://www.kloudbusters.org/airfest.html).

### September

**Event:** Low Power Launch.  
**When:** Sunday the 8<sup>th</sup>, 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:** To be determined.

**Event:** High Power Launch.  
**When:** Saturday the 14<sup>th</sup>, 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.

**Event:** Balls 2002.  
**When:** Saturday the 28<sup>th</sup> through Sunday the 29<sup>th</sup>.  
**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](http://www.tripolivegas.com/launchschedule.html).

### October

**Event:** Low Power Launch.  
**When:** Sunday the 13<sup>th</sup>, Noon to ?  
**Where:** La Vista Sports Complex.  
**Fee:** Free.  
**Description:** Low power sport flying.  
**For More Information:**

**Event:** High Power Launch.  
**When:** Saturday the 26<sup>th</sup>, 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 10<sup>th</sup>, Noon to ?  
**Where:** La Vista Sports Complex.  
**Fee:** Free.  
**Description:** Low power sport flying.  
**For More Information:**

**Event:** High Power Launch.  
**When:** Saturday the 16<sup>th</sup>, 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 7<sup>th</sup>.  
**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.

## CLUB OFFICERS

### PRESIDENT - Bruce Lee

Phone Number: (402) 691-8420

E-mail: [bruce.lee@tripoli.org](mailto:bruce.lee@tripoli.org)

### VICE PRESIDENT - Arley Davis

Phone Number: (402) 346-7566

E-mail: [arleydavis@uswest.net](mailto:arleydavis@uswest.net)

### TREASURER - Larry Drake

Phone Number: (402) 895-1583

E-mail: [LarryDrake@tconl.com](mailto:LarryDrake@tconl.com)

### SECRETARY - Richard Burney

Phone Number: (402) 269-3716

E-mail: [rcburney1@yahoo.com](mailto:rcburney1@yahoo.com)

### TRIPOLI NEBRASKA PREFECT - Kevin Trojanowski

Phone Number: (402) 292-4101

E-mail: [troj@home.com](mailto:troj@home.com)

### NAR SECTION #562 Leader - Arley Davis

### NEWSLETTER EDITOR - Richard Burney

## THOR on the Super Information Highway!

### TRIPOLI NEBRASKA WEB PAGE

[www.tripoli.org/tra\\_ne/nebraska.htm](http://www.tripoli.org/tra_ne/nebraska.htm)

### THOR WEB PAGE

[www.tripoli.org/tra\\_ne/THOR/thor.html](http://www.tripoli.org/tra_ne/THOR/thor.html)

### What is THOR?

The Heartland Organization of Rocketry (THOR) is both an officially sanctioned prefecture of the Tripoli Rocketry Association (Tripoli Nebraska #46) and is an officially sanctioned Section (#562) of the National Association of Rocketry. THOR conducts low through high power model rocket activities through out the year. THOR strictly adheres to the safety guidelines that have been established by the NAR and Tripoli.

### When and where does THOR meet?

Meetings are usually held the first Tuesday of the month at 7:00 PM (different days or times will be announced in advance) at the **La Vista Community Center at 8116 Parkview St., La Vista, NE** (turn east at the Sinclair Gas Station on 84<sup>th</sup> St.). Visitors are welcome to attend.

### For additional information...

For club launch times, launch locations, or for those with additional questions call THOR at (402) 896-2069 (there is a voice mail option at the end of the message). Interested parties may also write their inquiries to the address to the right and are also welcome to contact any of THOR's officers.

## 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 141<sup>st</sup> St.  
Omaha, NE 68137**

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