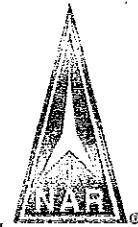




# ***Team Pittsburgh***

*Newsletter of the Pittsburgh Space Command NAR #473*



**Volume 15, Issue 1**

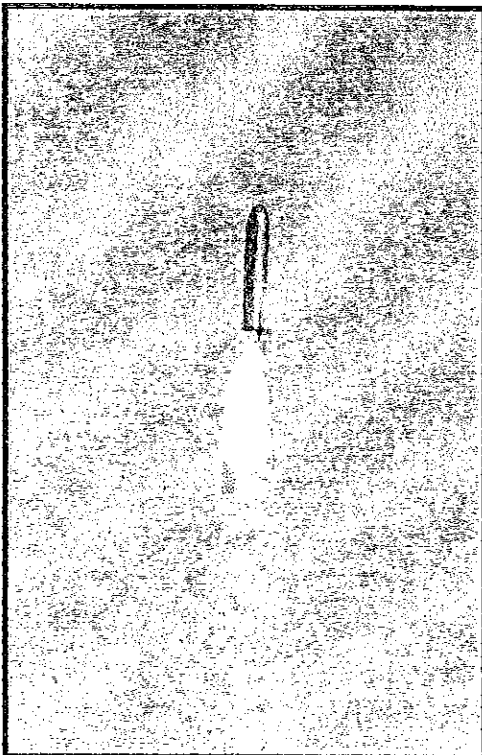
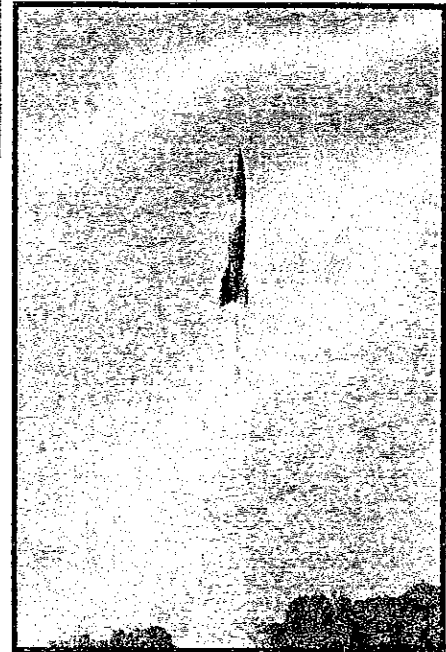
**#106**

**Jan/Feb 2003**

## **PSC in 2003!**

It's hard for me to believe that another year has passed! It seems that every year is better than the previous one, and if the information inside all comes true, 2003 will be a year to remember.

The pictures on this page help to announce a new season of Dragon's Fire High Power Launches. At DF 28, Ernie's V-2 takes to the air on a J-315, and below, Woody's upscale mosquito fires on a K-550 and 2 I-284s airstarted.



Also, in this issue is Mort's column, a "tidbits" column by Steve Foster, Prez Notes by Rod Schafer, MADROC schedule, contest rocketry schedule, and sport rocketry schedule as well as a semi-scale "scud" missile plan by Joe Peklicz.

It's going to be a great year! See you at the launches!



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by the  
Pittsburgh Space Command  
NAR Section #473

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RD 1, Box 2722  
Leechburg, PA 15656  
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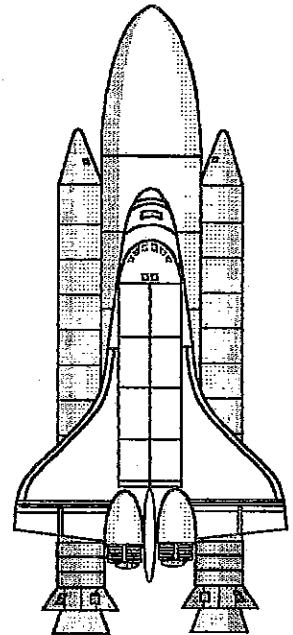
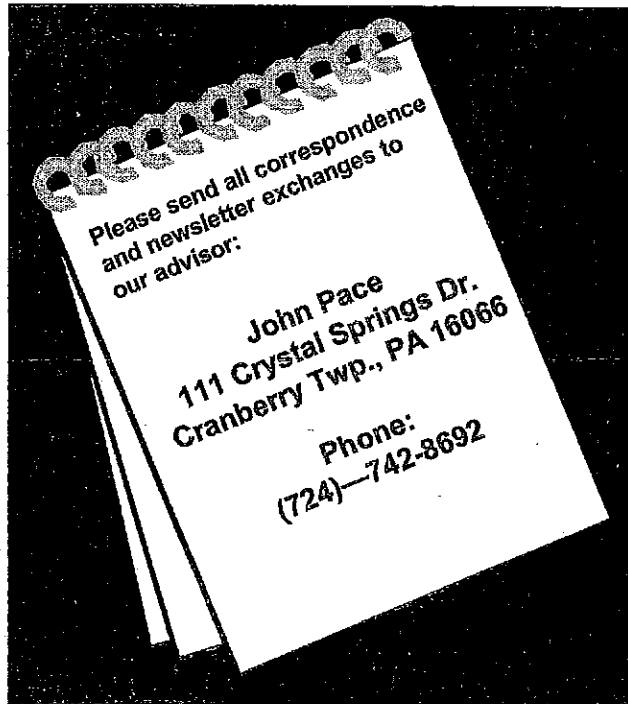
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NAR #24586 L1  
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**Vice President:** Mark Cassata  
**Treasurer:** Steve Foster  
**Advisor:** John Pace

**Newsletter Publisher:** Richard Freed  
**Webmaster:** Christine Rial

**PSC Web site:**  
<http://www.psc473.org>



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**2003:**

Welcome to 2003. 2003 promises to be a great year for Pittsburgh based rocketry and The Pittsburgh Space Command club. I look forward to fun launches and great comradeship in 2003!



**THANKS:**

This month's thanks go to various contributors to our newsletter, "Team Pittsburgh" (TP). Thanks to JOSEPH PEKLI CZ for TWO fine articles, his rocket finishing tips and his information on a new source for affordable rocket recovery poles. Thanks JOSEPH!

Also thanks to RICHARD FREED for his superb editorship. Every year NAR gives an award for the best club newsletter. No, our newsletter did not get the award for 2002. TP however was mentioned as one of the top 6 newsletters for 2002. Way to go club & way to go RICHARD. Also way to go to our newsletter's publisher, LAURIE FOSTER. When you see them be sure to congratulate them on their fine achievement. They work hard and a little notice and kudos won't hurt!

My wish for next year is that our newsletter earns first place. It should, its a fine newsletter. I think its the best! I have simple wishes.

I'm not sure what it takes for our newsletter to achieve first place, but more articles from our members would not hurt. At the very least these articles will make our newsletter more interesting. Please do submit articles, pictures, plans, etc.!

While on the subject of thanks, our officers work hard to keep our club going. The club works so well that their work is nearly invisible, often going unnoticed.

Well, I do notice! President ROD SCHAFER sets up & tears down the launch equipment for each launch. ROD also transports, maintains, and stores the equipment.

Treasurer STEVE FOSTER maintains our treasury, pays the bills, processes new members and renewals. STEVE's wife LAURIE publishes the newsletter. STEVE & LAURIE mail them too.

Section advisor JOHN PACE keeps in touch with other sections, maintains our club's membership with national NAR, & obtains our necessary insurance certificates. These certificates allow us to use our field.

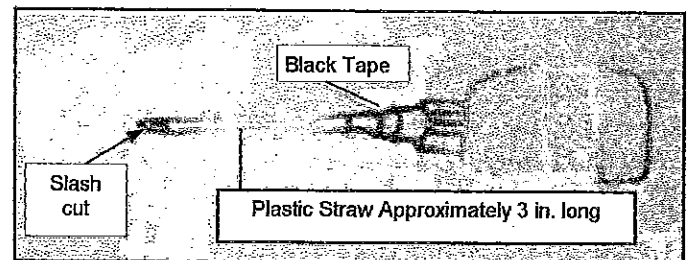
DICK FREED timely edits our newsletter and also does the contest calculations.

CHRISTINE RIAL maintains our web site. CHRISTINE also used her vast electrical expertise to make our latest launch. Did you know the PA system was donated to our club by CHRISTINE?

Thanks guys & gals!

**FEEDBACK:**

My last article described a home made glue applicator. Clever & resourceful JOSEPH PEKLI CZ submitted a clever glue applicator for Elmer's wood glue. His applicator uses a throw away soda straw applicator. I suspect his concept could also be used with other glues. See JOSEPH's idea below.



**PROFESSOR FRANCIS GRAHAM'S INNOVATIVE EXPERIMENTATION USING THE ALKA-SELTZER™ TO RELEASE A ROCKET:**

It is a well known fact that rockets are attracted to trees. Trees just suck a rocket out of the air.

Trees also learn from their experiences. Trees quickly learn the length of your retrieval poles. It is best to delay this learning process by hiding your poles in your car until needed. Once the trees figure out the pole length, they snatch the rocket one foot higher than the pole can reach.

In all seriousness, many rockets get caught in trees. Many but not all are retrieved. The most common retrieval method is a long pole. Poles are effective and perhaps the safest.

Other methods have been used including a fishing pole or climbing the tree. At one of SAM GORDON's Oil City launch the local fire department successfully retrieved my camera rocket from a VERY high tree using an innovative three step approach. The rocket was knocked from the tree top using the fire engine pumper's high pressure water hose. The force of the pumper's water stream dropped the rocket about 1/3

and now within "shooting" range.

Next the fire department shot the branch with a shot gun. Their aim was good! They did however shoot out my audible locator. The shot gun dropped the rocket even further to within ladder & pole range (I said the rocket was up high!).

Final retrieval was accomplished using a pole WHILE perched atop the fire truck's ladder. Couldn't have done it with out these guys!

I've even seen modeler's renting a cherry picker truck for \$150 to retrieve a high tech \$1,000 sail plane. Tripoli paid considerable dollars to have the power company retrieve a high power rocket from a power line. NEVER ATTEMPT TO RETRIEVE A ROCKET FROM A POWER LINE, THE RISK ISN'T WORTH IT.

Many years ago I came up with a way out retrieval method using an Alka - Seltzer™ tablet. I never actually tried the idea. The concept is simple but successful implementation difficult due to the fragileness of the tablet.

My concept was to drill a hole in the tablet so that it looked like a life saver. Two threads would loop through the hole, one to the rocket body, one to the nose cone/chute assembly. This tablet is simply inserted as a coupling. See my drawing entitled, "Alka Seltzer™ Release Mechanism". Squirtting the tablet with a water pistol or longer range water rifle quickly dissolves the tablet releasing the rocket.

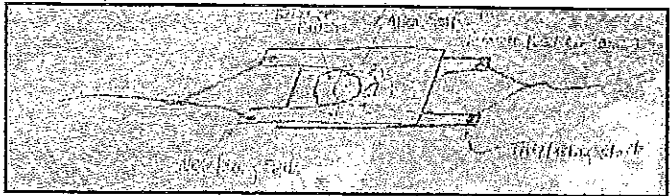
As mentioned, I did not actually try this concept, but it is conceptually workable. This ideas main weakness of the strength of the tablet. An Alka-Seltzer™ is structurally weak then further weakened by the drilled hole. Except for perhaps the very smallest of rockets the tablet is likely to fracture from the stress of chute ejection and deployment.

FRANCIS improved my initial concept by eliminating the hole plus constructing a clever stress reversing saddle. FRANCIS' saddle reverses the pulling forces (where the tablet is inherently the weakest) on the tablet into compression forces. Very clever! See my simplified drawing entitled, "FRANCIS' improved release mechanism". Also see FRANCIS's photographs plus sketch. These provide details of his actual concept and working model.

FRANCIS wrote me on Nov 25, 2001, "Your long-

standing idea about Alka-Seltzer™ being used as a quick release for model rockets, caught on trees and power lines, which you again voiced Nov. 11, led to some experimentation. Alka-Seltzers™ too easily fail in shear but I reasoned, what of compression?

On Nov. 16 I constructed a device (which I have called a saddle) which is shown below . The material was cardboard. It could be laminated. Then I placed this in a 3 inch diameter rocket donated by JOSEPH PEKLICZ for tests.



It works fine. When the Alka-Seltzer™ is in place the unit holds together for a weight of up to 1 lb. at least. When the Alka- Seltzer™ dissolves, both halves simply fall away.

I tested this device at the Nov. 18 business meeting (Tripoli) at the Palace. After the meeting, I suspended the rocket body over a waste can and poured a pitcher of meeting ice water over the device. The Alka-Seltzer™ dissolved and the unit promptly released as designed.

I wondered what to call this device. Since the Alka-Seltzer™ is in a retaining bin, and the U-shaped arms resemble the medieval and Puritan - colonial stocks, I've decided to call the mechanism a Stock-Bin. I hope you agree with this etymological choice!

Although this device is probably suitable only for light weight model rockets, it's hoped that showing it at the meeting inspired others to come up with High Power rocket solutions along different lines, from electronic to chemical. It seemed only fair to pass the inspiration you've given me onward. The problem is a serious one and seri-



**Rocket with  
"Stock-Bin"  
Device  
Installed**

**Mort's Column  
(Continued)**



Close-up View of the  
"Stock-Bin" Device

*ous thought must be given to solutions."*

FRANCIS wrote to me a second follow up letter dated Dec, 2, 2001. He wrote, "I'm following up on my letter about the "STOCK-BIN" device which uses an Alka-Seltzer™ in compression to hold a rocket body to a nose cone and parachute with photos of the device as constructed, demonstrated - tested at the Nov. 18th annual Tripoli Business

*Meeting. Your idea was the inspiration for it; hence the oblique acknowledgement in selecting the name, "stock - bin for it."*

Thank you FRANCIS for your research efforts and for sharing your results. I would like to receive feed back from readers of this column providing other methods and/or experimentation concerning the development of a practical device to release a trapped rocket from a tree.

**NEXT MONTH:**

I plan to publish next month information on some new and exciting batteries now on the market. Also how these batteries can be efficiently and quickly charged. The batteries covered will include rechargeable alkaline, nickel cadmium (nicad), nickel metal hydride (nmh) plus some recent technology, Lithium Ion & Lithium Polymer. All of these batteries can be used in advance rockets to power on board altimeters, separation devices, trackers; plus film, digital & TV cameras.

Here is to a great new year, to flying in 2003! As always, I look forward to flying with you at our next launch and throughout 2003. See you then!

Mort Binstock NAR 27182

**TREASURY NOTES  
From Steve Foster**

It's that time of year again, remember to pay your dues for 2003, so you won't miss a single issue of Team Pittsburgh. Remember there are new rates starting this year. See page 2 for the rates and my address or see me at one of the winter launches. (weather permitting). Here's my annual brief summary of the clubs finances for 2002, this report includes all the dues for 2002 and excludes the dues that have been paid for 2003 already.

<b>INCOME</b>	
Dues	\$ 301.00
Contest fees	\$ 476.50
HP flyers fees	\$ 106.00
Raffle	\$ 253.00
Donations	\$ 227.00

Total Income \$ 1363.50

<b>EXPENSES</b>	
Postage	\$ 274.69
NAR payments	\$ 85.00
Supplies	\$ 964.07
HP Expenses	\$ 225.00

Total Expenses \$ 1548.76

Treasury Balance \$ 1013.96

The major purchases this year included adding a wireless microphone for the PA system, this greatly improves the ability for the LCO to announce the flights and have hands free to launch the models. Also we have done a major restocking of rocketry items to be used for door and raffle prizes, we have enough that should last the club for about 3 years.

**New Address or Phone Number?**

Please inform Mort Binstock of any address or phone number change or let him know at one of our monthly launches. Mort will then update the PSC database that he maintains for mailing labels for the newsletter.

**Mort's Address and Phone Number:**

**Mort Binstock  
1150 Windermere Drive  
Pittsburgh, PA 15218-1144**

**(412) 244-1332**

## Competition Corner

### PSC Competition Meets For 2003

#### Reach For The Sky XV

Regional  
May 3-4, 2003

*1/4A Boost Glider Duration (MR)*  
*A Helicopter Duration*  
*B Parachute Duration*  
*C Egg Lofting Duration*  
*Random Duration*  
*Open Spot Landing*

#### Steel City Smoke Trail 3

Regional  
Oct. 11-12, 2003

*1/8A Streamer Duration\**  
*1/4A Parachute Duration (MR)*  
*1/2A Cluster Altitude*  
*B Boost Glider Duration*  
*E Super-Roc Duration*  
*Random Duration*

*\*Providing RCP 2003-01 passes; otherwise this event will be changed to 1/4A SD*



The first (of 3) launches is complete! The MADROC series has begun. The first leg of this series was flown in October in Pittsburgh. (SCST—II) Here are the locations, dates and events for the other two:

#### ECRM-30 (NARHAMS)

May 17-18, 2003  
Middletown, MD

*1/4A BG*  
*A HD*  
*Peanut SPSC*  
*RDA*  
*STA (150m)*  
*OSL*

#### MARS-29 (NOVAAR)

June 21-22, 2003  
The Plains, VA

*1/4A BG*  
*1/4A PD (MR)*  
*A Alt.*  
*C ELA*  
*D HD*

## Tidbits & Tips

By Steve Foster

While surfing the Internet in the last couple months I've come across several interesting items, so I thought I might pass some of them along especially since there is so much on the net that not everyone would have come across the same items. I know Mort does not have regular access to the net so this column might be a good compliment to his. I will TRY and have something for this column in most issues of Team Pittsburgh, especially the months I know Richard won't have pages filled up with contest results.

### FIRST TIDBIT

Thanks to Mort Binstock for his column in EVERY issue of Team Pittsburgh

### NAR "MODEL" IN OUTER SPACE

While researching information on the Aries 1 sounding rocket for The Flying I-Beam Kids peanut scale model I sent Bob Kaplow an e-mail about a few pictures we had, there were a couple numbers on the base of the rocket (T-13, and 6883) Bob had gathered the information on this rocket and had used it in a NAR scale competition before, here is the information he gave me

about the numbers:

Jim Barrowman is NAR #6883 and his team was T013. So what you are looking at is the very first Aries round, and pre-dates the NRL round. Barrowman was involved in the project, and the flight.

So as a NAR member working on a government project, Jim decided to paint his NAR numbers on a rocket that went in to outer space. By the way this sounding rocket was built from parts from other rockets, so it really is like a model that went into space.

### PAINTING QUESTION ON CONTESTROC:

*Is there a better alternative to masking tape to help prevent bleed thru under the edges?*

*Peter Alway wrote;* I prefer Scotch Magic tape, carefully pressed down at the edges.

*Wolfram Von Kiparski wrote;* I like Scotch Magic tape too, but prefer that green plastic masking tape that one can buy from automotive body shop supply stores. I can add another suggestion to Peter's, which is to make sure that the surface to *Continued on page 8.*

# "PSEUDO SCUD"

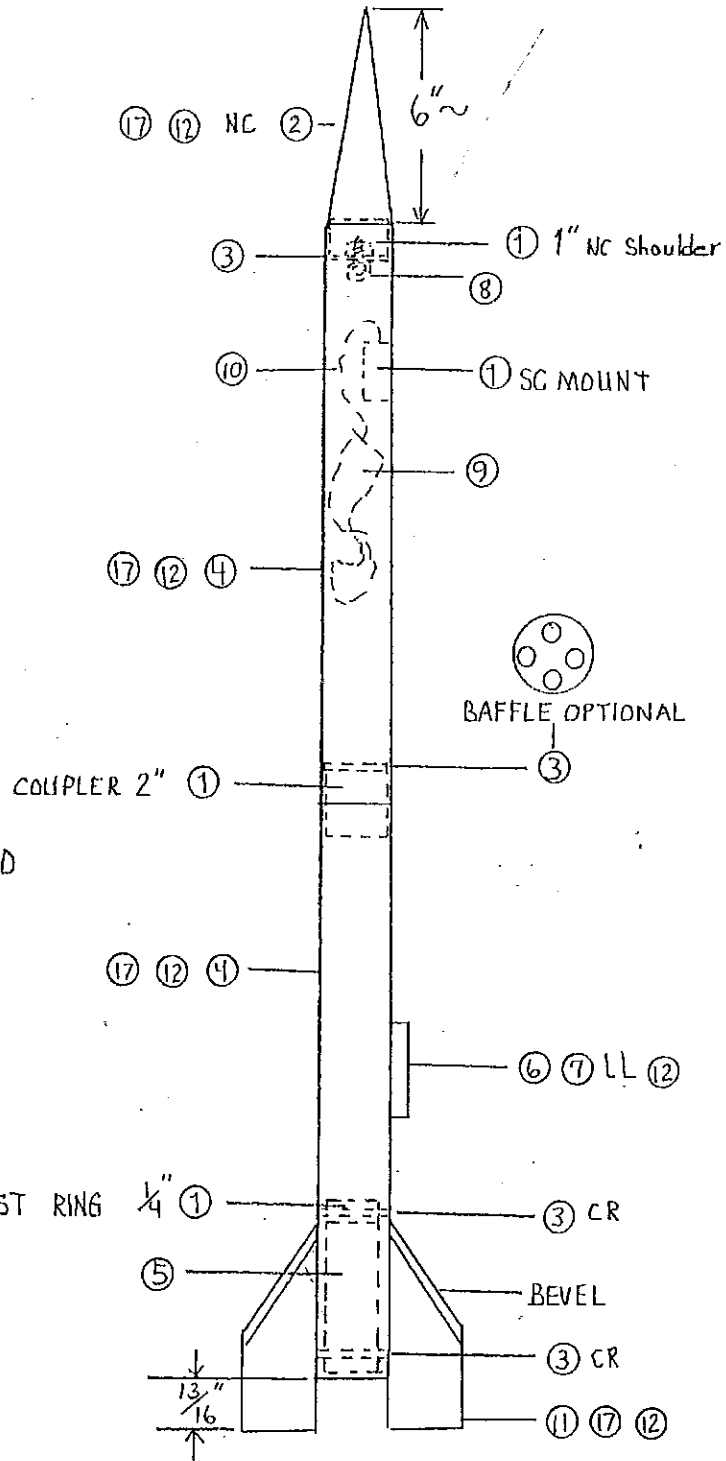
## RECYCLED PARTS MISSILE

DESIGN & DRAWN BY:

Joseph Peklicz  
635 S Zane Hwy  
Martins Ferry, OH 43935-1236  
12.13/02

PARTS LIST:

- ① CARDSTOCK
- ② PAPER
- ③ PIZZA BOX LID (CORRUGATED CARDBOARD)
- ④ PAPER TOWEL TUBES (2)
- ⑤ BT-50 3<sup>3</sup>/<sub>4</sub>"
- ⑥ STRAW 2" X 3<sup>1</sup>/<sub>16</sub>"
- ⑦ STICKY LABELS (1)
- ⑧ SCREW EYE (1)
- ⑨ CREPE PAPER STREAMER 3'
- ⑩ KEVLAR OR DENTAL FLOSS 3'
- ⑪ Balsa wood 1/2"
- ⑫ FLAT WHITE LATEX WALL PAINT
- ⑬ SPONGE BRUSH 1"
- ⑭ ESTES E9-6 ENGINE
- ⑮ SPRAY PAINT/OLIVE DRAB OR CAMOUFLAGE (FINISH COAT)
- ⑯ 220 GRIT SANDPAPER  
USE TO SAND SPACKLING & LATEX PRIOR TO SPRAY PAINTING
- ⑰ SPACKLING PASTE  
USE TO FILL IN Balsa GRAIN & TUBE SPIRALS
- ⑱ KRYLON FLAT WHITE PRIMER COAT AFTER SANDING LATEX PAINT



FULL SIZE FIN PATTERN

1/2" Balsa ⑪  
MAKE 4

**Notes From the Prez  
by Rod Schafer  
President, PSC**

Folks! It's that time of the year once again! Following is my annual PSC Year in Review highlights from 2002.

1. We completed our 16th year as a chartered section of the NAR.
2. Our membership continues to hold steady at 50+ members, we even picked up a couple family memberships over the course of the year.
3. Our January & February winter activities continued with a video night held at the home of John Pace in Jan. The presentation in Feb. on Building A Class Rocket Gliders in Feb. was conducted by Steve Foster.
4. PSC's newsletter "Team Pittsburgh" was published 6 times in 2002. The Jan.-Feb. issue mark the 100th issue produced! This issue featured the 1st part of series on "The History of PSC" by the newsletter's 1st editor, Art Nestor.
5. During the course of 2002, PSC helped co-host with Tripoli Pittsburgh, 5 "Dragon's Fire" high power launches at Tripoli Pittsburgh's launch site near Charleroi, PA.
6. In April, PSC participated in the Carnegie Science Center's, Science and Technology Festival in Pittsburgh. We set up and manned an exhibit that featured many types of Model Rockets on display. We passed out informational handouts about our club and invited folks to attend our launches. The exhibit went so well that we were invited back by the organizer for 2003.
7. In June, Steve and Rod traveled to Center Valley, PA to represent PSC at RAMTEC-10. This would be the last RAMTEC competition meet to be flown at the DeSales University campus. The college broke ground for a new building on very spot the RAMTEC launch range was set-up on.
8. June also saw PSC hold it's longest running name competition meet, Reach For The Sky XIV at Lutherlyn. We were joined by 1 out of state family for the weekend meet, they were the Bittle's from Maryland and the NARHAMS section.
9. As the page on the 2002 calendar turn to August, Steve and Rod (and his family) packed their bags & Rocket gear and headed for the huge state of Texas! Once in TX, we would represent PSC at NARAM-44 in McGregor.
10. August once again saw PSC hold their highly successful annual "Rockets & Relaxation" picnic for the 8th time at Lutherlyn. A fun time was had by all who attended, there was plenty of food and many, many Rocket flights!
11. In September, at PSC's yearly meeting for officer

elections for the New Year. We saw Mark Cassata elected as new V. President for 2003.

12. For the 2nd year in a row now, October saw Pittsburgh Rocketry's biggest event of 2002 take place. This was the regional meet, "Steel City Smoke Trail 2" and high power launch "Dragon's Fire 28". Rocketeers from these states: MI, NJ, OH, WV, VA, MD and PA traveled to Western PA for the launch. It was a great weekend of flying Rockets!!

Until Next Time...  
Fly'em High,  
Rod

**Tips...(continued  
from p. 6)**

be painted has been finely sanded smooth so that the masking tape can lay down flat.

*Kevin Wickart wrote;* Some of the NARScale folks recommend Parafilm M masking film. This stuff is better for complex curves and surfaces (like on noses and over weld lines and such) but is quite difficult to work with. It's also expensive unless you work in a biology lab of some sort. There is a learning curve to using it that one does not have with Scotch tape.

**NEED A PLAN/KIT FOR 1/4A BG**

In the few months PSC members will be competing in at least two regionals and at NARAM-45 with 1/4A Boost Glide on the event card. Here's a few places to start if you would like to build a model for one or more of these events;

[www.nar.org](http://www.nar.org) and follow the links to the competition plans, there are 3 plans there including the one that is the current C division record holder.

**QCR (Qualified Competition Rockets)** [cybertravelog.com/qcr/](http://cybertravelog.com/qcr/) Has very reasonably priced kits, their motor is; "Remember - You can't fly the packaging or the illustrations.

Edmonds Aerospace; [www.members.aol.com/RobEdmonds/Edmonds.html](http://www.members.aol.com/RobEdmonds/Edmonds.html) Probably has the easiest glider kits to build and fly. He has the Delite which has a motor recommendation of 1/2A-A motors, but I think it would be a good qualifier on a 1/4A motor, if not it could be scaled down a little. Has anyone flown a Delite with a 1/4A?

**NEW LOOONG DISTANCE MEMBERS**

I'd like to welcome Steve, Michael and Katherine Humphrey to PSC, they just recently joined our club. Steve and his family live in Warren NJ. Which got me thinking we have several members that live a long way from our launch site a Lutherlyn, Richard Freed and Joseph Peklicz each live well over 2 hours driving time away. I measured the distance (on the computer) that Mark Halinaty and family (New

Continued on Page 10.



# Dragon's Fire Launch Windows

## 2003 Dragon's Fire HP Schedule

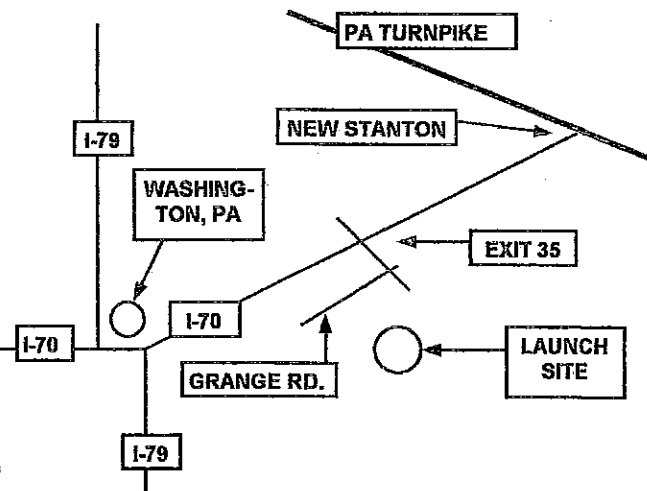
**Apr. 26 — DF 29**  
**May 31 — DF 30**  
**Aug. 16 — DF 31**  
**Sept. 20 — DF 32**  
**Oct. 11-12 — DF 33**

## PSC Launch Windows 2003

Jan. 19  
 Feb. 16  
 Mar. 17  
 Apr. 27  
 May 3 & 4 Reach For The Sky XV  
 June 8  
 July 20  
 Aug. 24 Rockets & Relaxation 9  
 Sept. 21  
 Oct. 11-12 Steel City Smoke Trail 3  
 Nov. 16  
 Dec. 14

**ALL SPORT LAUNCHES AT LUTHERLYN  
 BEGIN AT 12 NOON.**

### Map to Dragon's Fire Launches At Jonestown Site

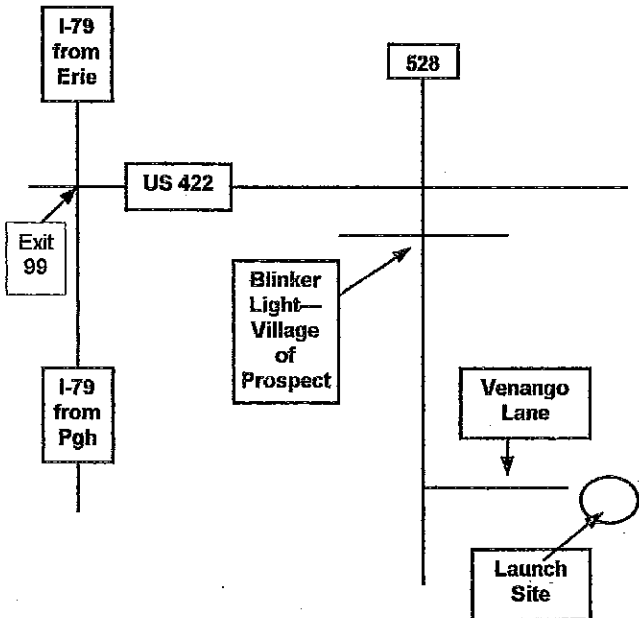


**FROM I-79:** Take I-79 south to Washington, PA. Take exit for I-70 East (Toward New Stanton). Continue for approximately 20 miles to exit 35 (old exit 13).

**FROM PA TURNPIKE:** Get off at Exit 8, New Stanton, and follow I-70 West for approximately 23 miles to Exit 35 (old exit 13).

**AT EXIT 35:** Follow route 481 for 0.2 miles to Grange Road. At this point, look for signs that will direct you to the launch area that will be used for the day.

### Map to Camp Lutherlyn PSC Launch Site



#### FROM 422 —

Get off at Prospect exit (528) and head south. Continue to blinker light about 0.3 miles from exit. Go straight through this intersection. Continue south on 528 for approximately 3 miles — look for a sign on the east (left) side of the road which says "Lutherlyn Rustic Retreat Center". Turn left onto dirt road and continue approx 1/4 mi to the launch site.

**Tidbits...**  
continued from p.8

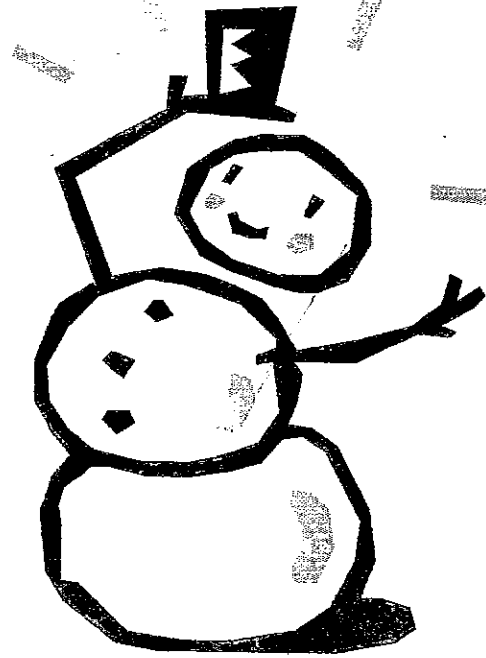
Market, Canada) would need to drive (there is a lake named Erie in the way) and it came out to 318 miles. But the Humphrey's are the new long distance champs at 365 miles away.

**ORIGIN OF THE "BEST MIDWEST QUALIFIED FLIGHT" AWARD, GIVEN AT EACH NARAM**

*Story from Tom Lyon (an old time rocketeer)*

Many... many... about 30 years ago. At a NARAM, there was an on field discussion (protest) concerning a flight that was DQ'd. The contestant argued that where he came from, that was a qualified flight. I can't remember the year, or place... or who it was. But others had also said that that kind of flight was acceptable from their home area (and yes it turned out to be that they all were from the MIDWEST). Their general rule of thumb was as long as it didn't hit anyone, or structure... it was a good flight (Alabama rules just say as long as it didn't hurt "HURT" anyone).

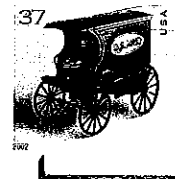
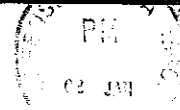
Sooooo..... any bungled flight that is deemed the most amusing (confusing, disillusioning... whatever) at a NARAM is voted on by the meet's RSO's... and yes Bob Kaplow (from Chicago IL, a MIDWESTERNER) is the so called leader of all this. The winners trophy is comprised of all, or as many retrievable, parts, remains, shreds, etc of the DQ'd rockets flown during NARAM week. AND you get mentioned in Sport Rocketry for all to see.



**Happy Holidays!**

**Team Pittsburgh**  
*Pittsburgh Space Command*  
*Richard Freed, Editor*

*Send returns to:*  
**Mort Binstock**  
*1150 Windermere Drive*  
*Pittsburgh, PA 15218-1144*



**Are your dues current? If not,  
this may be your last issue of  
Team Pittsburgh!**

