



Team Pittsburgh

Newsletter of the Pittsburgh Space Command NAR #473



Volume 14, Issue 2

#101

Mar/Apr 2002

The History of the Pittsburgh Space Command Part 2 By Art Nestor, Founder of PSC



1987 PSC Group Photo

Standing (l-r): Drew Gray, Connie Klepacz, Mike Hardobey, Stan Klepacz, Steve Hart, Bill Kust, Mort Binstock, Cassie Klepacz, Rod Schafer, and Art Nestor. Kneeling in front: Matt Klepacz and Stan Klepacz, Jr.

FOREWORD

It was fairly easy for me to write part one of our club's history. Part two was a little more difficult and I'm sure part three will be even harder. You see, in the beginning it was purely a personal experience for me. But as time went on the PSC experience became that of many people. So consider this article only a framework for our history and not the last word. What would round out this series nicely would be the added perspectives of other PSC members such as the recollections of Mike Hardobey's in Team Pittsburgh #100. Perhaps for issue #200 we'll reprint my history of PSC but with Mike's comments and those of other contributors edited in. This isn't just my history but yours also.

So where are your contributions?

In researching material for this article, I came across some little known and largely forgotten information that surprised even me. I have tried hard to make sure it is accurate. But it will cause me to revise part 1 ever so slightly. The fact is that several PSC members did meet each other before our historic first launch on June 1st, 1986. I rediscovered this information after coming across personal correspondence and a copy of Tripoli Blitz Volume 1 # 1, January 1986. Our web site version of part 1 has already been corrected.

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rocketry.

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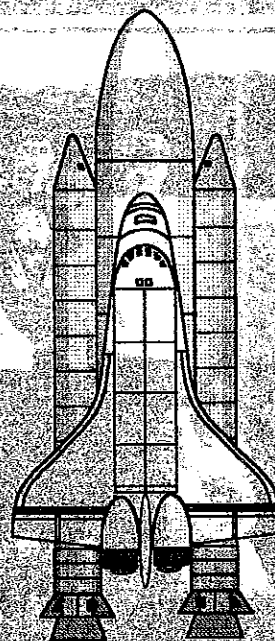
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Mort's Column
By Mort Binstock, NAR 27182

MOST IMPRESSIVE 100TH ISSUE:

Last month's 100TH issue was MOST impressive. I was most impressed with the elegance of the color photo, of reliving the club's history, and reading fresh and interesting articles from many contributors. My hat is off and a hearty thanks to that issue of PSC's history contributors STEVE FOSTER, MIKE HARDOBEY, ART NESTOR, ROD SCHAFER and of course DICK FREED for his continued dedication and excellence as editor. Also thanks to JOSEPH PEKLICZ for his continued contribution of innovative rocket construction plans.



I LOOK forward to reading ART's part 2 in the next issue. This edition's interesting articles is the result of its many contributors. Thanks guys! Lets continue to make all our issues this informative and interesting! Please CONTRIBUTE articles.

MORT'S VIEW OF PSC'S HISTORY; ITS PRESIDENTS:

PSC has, to my recollection, had three presidents. Each president contributed and played an important yet different role in forming the club and its developing its present culture.

PSC's founder and first president was ART NESTOR. ART was the visionary, the dreamer. ART envisioned and created the dream of a Pittsburgh based NAR rocket club. ART took the initiative of forming the club then guiding it through its formative years. ART was instrumental in establishing the club's name, NAR chartering Pittsburgh Space Command (PSC), and establishing the newsletter. ART envisioned and brilliantly executed PSC's formation. ART, I thank you for this gift, PSC!

Unlike government politicians and big corporation managers, rocket fliers are not ambitious to become leaders. Rocket fliers would rather fly than lead a club. After serving several terms, ART asked me if I would be willing to serve as president. ART, I think at that time, preferred to maintain the role of a visionary and not be burdened with the day to day running of the club.

I had flown rockets for a long time, mostly until the formation of PSC, by myself or with my son CLIFF. I thought of myself more as a technical person, not as a people orientated leader so almost declined ART's offer.

However, I believed that PSC at that time was fragile, not many members. I didn't want to see PSC die. I had heard of several other Pittsburgh based clubs that had not survived the test of time. So, I accepted ART's nomination and became PSC's second president.

I was not the visionary like ART, but rather the builder. During my term PSC grew into a healthy organization. PSC's current culture, a supportive place to enjoy the sport of model rocketry was established. The club was free from political infighting. I believe political infighting brought down the previous Pittsburgh based NAR club, The Steel City Section.

I put considerable energy into growing and shaping the club into a classical NAR section. Energy was spent to maintain interest through regular communications by assuring a letter or newsletter was published regularly (though not as regular as DICK is doing). To help grow the club innovative contests were dreamed up. All to help grow the club.

Group involvement was encouraged. Meetings were held at launches. During these meetings each member was asked if they had anything to contribute. Sometimes when responses were slow answers were answers by asking questions. The club slowly but surely grew and grew into a health vibrant club! I am proud of PSC today!

I suspect that the reason I put still put effort in writing this column and asking for PSC article contributions is my continued desire to maintain PSC's vibrant health and growth.

Again, as rocketeers rather fly than lead, I suspect I could have continued to be elected again & again & again. At some point, believing in democracy, I started to suggest that someone else run for president. I felt it was time to get fresh new ideas, to continue to nurture & grow the club. I think it took several elections before anyone wanted to run. Present president ROD SCHAFER ran and succeeded me.

Under ROD's leadership PSC took off & grew. ROD maintained all the good past values, friendly casual flying, paying attention to detail, assuring timely newsletter publication, maintaining launch equipment, promoting membership growth, & managing the running of the club.

PSC at that time was nationally established through many "Sport Rocketry" publications by its various

members. ROD added a new dimension, sanctioned contests including envisioning and executing one of the most successful & talked about NARAMs. PSC now plays a dominant role in national NAR contests. Way to go ROD!

ROCKET LOCATORS:

I promised last month to republish information on making rocket audible locators or beepers. I published this information in Team Pittsburgh (TP) about 10 years ago.

The characteristics of our flying fields have changed over time. The type of rockets flown, size of their motor, and the equipment required is greatly influenced by the fields.

In the past some of our flying sites were bordered by corn fields and/or by tall grasses. Corn fields and tall grass can swallow a rocket. Rockets would just disappear.

An on board audible locator allowed these lost rockets to be retrieved. Retrieval was always an eerie adventure. We would walk towards what we thought was the lost rocket's location. Eventually we would hear a faint buzz and try to determine its direction and walk in the direction. When we walked in the right direction the noise would get louder and eventually we would almost step on a suddenly appearing rocket.

Following are two articles. One for a small light weight buzzer, and one to make the locators noise pulse. I believe that both articles were also published in "Sport Rocketry".

Article 1, first the buzzer itself. The article was entitled:

"SMALL LIGHT WEIGHT ROCKET LOCATOR BUZZER"

This article covers the construction of a small light weight rocket locator buzzer constructed inside a spent Estes "D" engine. This locator is very effective in locating rockets in tall grass and weeds.

The locator is small, light weight and constructed from easy to obtain Radio Shack parts. It is easily moved from rocket to

rocket. The locator is quite loud and powered by a very miniature 12 volt alkaline battery designed to power electronic lighters and remote controls.

Radio Shack parts are:

- o 23-144 battery
- o 275-409 subminiature slide switch
- o 270-405 'N' battery holder
- o 273-065A buzzer

Miscellaneous parts are:

- o Epoxy - 5 minute
- o Nylon wrapping cord
- o Black Electrical tape
- o Solder and soldering iron

Wiring is simple! OBSERVE polarities and color coded wires [red & black]. Construction is easy. See sketch 'BuzzerD' for wiring and construction details.

Clean out inside of 'D' casing. Cut slot for switch. Epoxy switch and buzzer in place. Also use electrical tape to secure buzzer in place. Place battery in battery holder. Observe the battery's polarity! Tape battery to battery holder then 'stuff' it inside the 'D' engine case. The tape will keep the battery in the holder during rapid acceleration. Pack with paper towel to prevent rattling. Drill two holes for the cord. Fish cord through and tie as a loop [this allows the cord to be looped around a rocket's shock cord allowing easy transfer from rocket to rocket].

Have fun and don't lose any more rockets!"

Article 2 covers a simple method to get the buzzer to pulse, an article entitled:

"BEEP BEEP YOUR BEEPER"

This is a simple article that is too good to be true! More for less! This article provides a simple rocket locator beeper modification that doubles the beeper's battery life while making the rocket easier to locate. Radio Shack sells two types of solid state beepers, a low cost continuous tone and a more expensive pulsing tone. The pulsing tone 'catches' your ear better making the rocket easier to locate. This article shows how to simply convert a continuous tone beeper to a pulsing tone. The circuit provided will work with beepers that are solid state and powered by 9 volt batteries.

Radio Shack also sells a blinking Light Emitting Diode (LED). The blinking LED consumes power only during the instant of its blink. Wiring the LED

in series with the buzzer results in a buzz only during the LED's blink. All the circuitry necessary to create the blinking action is contained within the tiny LED.

The circuit is easy to construct, the LED is wired in series with the buzzer. Wire in accordance with the enclosed wiring diagram. It is important to observe all polarities! The battery and buzzers polarity are marked. The longer LED lead is positive (+)."

For details see drawing titled, "ROCKET LOCATOR BUZZER BATTERY SAVER PULSING CIRCUIT".

NEXT ISSUE: This column, because of my lengthy 100TH newsletter issue comments is longer than I anticipated. Therefore I will delay the article promised last issue to explore a "deterministic" rather than "probabilistic" replacement to shear pins. Shear pins are used to secure a rocket for two stage parachute operation. This article should provide the basis for more reliable parachute staging.

I also plan to explore my Alka-Seltzer™ treed rocket retrieval method including Professor FRANCIS GRAHAM'S most interesting recent experiments.

Until then, I look forward to flying with you at the next launch!

Mort Binstock NAR 27182

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

1. PSC to participate in a Science and Technology Festival

Member George Guzik contacted me with this info: The Carnegie Science Center is hosting the Pittsburgh International Science and Technology Festival. This event begins on April 6 and runs through April 14. The last two days of the event (Saturday April 13 and Sunday April 14) will be Astronomy Weekend. Astronomy Weekend will feature exhibits related to astronomy and space exploration.

We will set up an exhibit during the weekend. Tripoli Pittsburgh is also interested in this opportunity and will be setting up an exhibit. More details will be announced as they become available. For info about the Festival, you can check out their web page at:

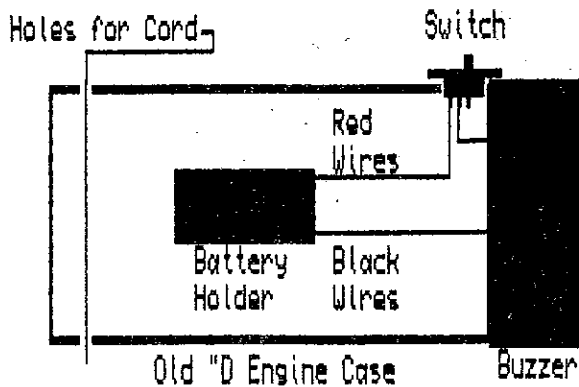
<http://www.scitechfestival.org>

2. Flying season upon us

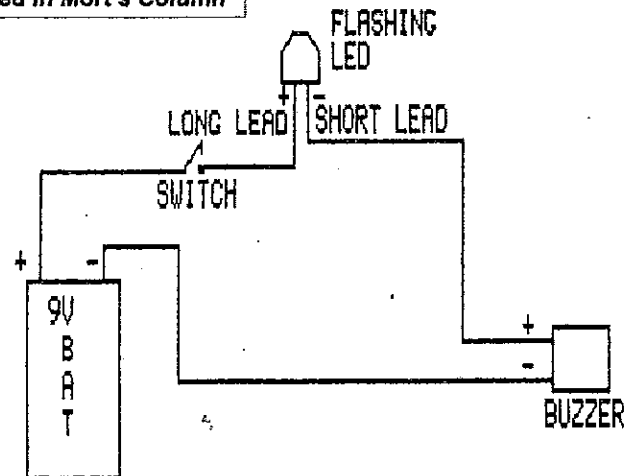
Be sure and check the Launch Window section of Team Pittsburgh for all of the upcoming launch dates for 2002. Mark your calendars and join us on the range!

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

Below are diagrams referenced in Mort's Column



LOUD SMALL LIGHT WEIGHT AUDIBLE ROCKET LOCATOR



FLASHING LED RADIO SHACK:
RED 276-036
GREEN 276-030

ROCKET LOCATOR BUZZER BATTERY SAVER PULSING CIRCUIT

HISTORY OF PSC II (Continued from page 1)

THE HISTORY OF THE PITTSBURGH SPACE COMMAND — Part two By Art Nestor

With the formation of PSC, one of my personal rocketry goals was accomplished – to return a Pittsburgh NAR Section to active status. But that doesn't mean that in the time immediately prior to our formation there was no organized rocketry activity in the Pittsburgh area. Quite the opposite, it was alive and well. It was just not the National Association of Rocketry. The Tripoli Rocketry Society up until May 5th, 1986 claimed to be the only rocketry group in the tri-state area. At the time of PSC's formation, A. J. Reed was President, Francis Graham was Secretary, Bill Kust was Treasurer and Mike Kalmar was a member. This group, later called Tripoli Pittsburgh, was the first prefecture of the Tripoli Rocketry Association. Tom Blazanin was Tripoli Rocketry Association Administrator. All five later became PSC members. Here's a real twist. Tripoli launched at Z field before PSC! Incredible as it may sound to PSC old timers, it's true. I was there. Tom Blazanin and I somehow came in contact with each other. He came up and scouted out my home (Z) field and asked if I minded if Tripoli flew there. Tripoli's earliest known launch at Z field was June 30, 1985! The Tripoli Blitz Volume 1 # 1 provides coverage of the later November 30, 1985 launch. Tom was a go-getter. Z-1, the first real high power Z field launch, was held on May 10th 1986, five days after our charter was granted, three weeks before PSC's first launch!

Club years of existence technically run from charter to charter and not on a calendar year basis. For example, May 1986 to May 1987 to May 1988 etc. So John Sarosi, even though you joined on March 27, 1987 I consider you a first year member. To the best of my knowledge and records, these members joined during year two: #20 Drew Gray, #21 Becky Nestor, #22 A.J. Reed, #23 Connie Klepacz, #24 Cassie Klepacz, #25 Stan Klepacz jr., #26 Matt Klepacz, #27 Steve Sabram, #28 Michael Hardobey, #29 Jeff Rusinko, #30 Jaya Bajpayee, 31 Dick Hart, #32 Candace Nestor and #33 Jim Imes. I know this sounds a little tedious and Biblical but bear with me because I'm near the point where I lose track and it may be of interest to senior members.

Former NAR President Pat Miller and Claud Greenlee had assisted me in the formation of PSC. In May 1987 Pat did one more thing for the formation of

PSC that had long reaching consequences affecting us even to this day. He sent me the names of two teenage NAR members in Brookville. One of them was Drew Gray. Drew joined PSC on May 20, 1987. He's a very likeable guy with lots of enthusiasm and then had an interest in competition. Drew also later became vice President and the second editor of Team Pittsburgh handling issues 18 and 19. What Drew is probably most remembered for though, is the generous hospitality of his parents in hosting the annual BROOKVILLE BASH. The Gray's rural home was set literally in the middle of a great launch field. Every August starting in 1988 we had a wonderful picnic and launch. Rockets, hot dogs, hamburgers and fresh sweet corn in a country setting! It was fantastic. The BASH was discontinued when Drew graduated high school. Our annual ROCKETS & RELAXATION event was then substituted to continue the BASH tradition.



Stan Klepacz sets up his rocket . (1987)

On July 12, 1987, PSC held it's first regional meet and first sanctioned competition. It was called Pittsburgh Space Camp '87. Tom Blazanin drove up from Pittsburgh, dropped off the launch equipment and then promptly left for a family reunion! This was

HISTORY OF PSC II
(Continued from page 6)

Drew's first PSC launch. Herb Dasind from Silver Springs, Maryland came and flew numerous Cineroc flights. Two events were held. They were 1/2A boost glider duration and D eggloft duration. A & B Division were combined. Up until now, Tom Blazanin had initiated and handled casual competition events, which club members greatly enjoyed. I handled our first sanctioned competition with help from Connie Klepacz and Peg. After Space Camp, Drew, Mike Hardobey and Rod formed a competition committee so that competition could be held on a regular basis. This took a load off my shoulders. PSC T-shirts, golf shirts and tank tops were first offered for sale at Space Camp '87. When we selected our club colors we also decided to create club shirts. The SR-71 Blackbird that I used in Team Pittsburgh was voted to be used on our shirts.

Mike Hardobey joined PSC on July 17, 1987 and made many contributions to the club. Mike's family, like Drew's, was very supportive. His father, Chuck, offered to have the newsletter printed up where he worked thus saving the club an expense. This was a big deal back then because money was pretty tight. The newsletter took on a more professional look. It was printed on gray paper with red and black ink. Club colors. Mike's mother helped out from time to time with competition paperwork. In the first two years, PSC would occasionally hold a single meeting indoors during the winter or add an indoor meeting beside the monthly launch. Usually these meetings were held at the Carnegie Library in Lawrenceville very close to Mike's home. Mike would bring a case of pop to the meeting for us.

Tom Blazanin had become nationally known in the rocketry community, as he transformed an



Cassia Klepacz displays her eggloft (1987)

obscure science turned rocket club into Tripoli Rocketry Association. In our second year he was elected Section Advisor probably making him the first Tripoli member to also hold a NAR position. Tom provided a lot of leadership to PSC. He loaned Tripoli Pittsburgh's launch rack and controller to us for each PSC meet. When Tripoli upgraded their launch system he donated that launch rack equipment to us. Because of him, then current PSC members witnessed the emergence of the high power community. All PSC members were offered low Tripoli membership numbers. Because of Tom, several PSC members went to the last Large and Dangerous Rocket Ships launch (LDRS 5) held in Medina, Ohio and he

CLUB OFFICERS

	1986-87	1987-88	1988-89	1989-90
President	Art Nestor	Art Nestor	Art Nestor	Mort Binstock
Vice President	Mort Binstock	Mort Binstock	Mort Binstock	Drew Gray
Section Advisor	Art Nestor	Tom Blazanin	Dick Hart	Dick Hart
Treasurer			Peg Nestor	Art Nestor

also got Mort and me a tour of LOC/Precision that day. Tom encouraged activities that made each launch fun. One competition event was the V-2 bombardment of London. A sort of warped spot landing event. He never had a holier than thou hi power attitude that was somewhat more common at that time but had a down to earth love for all rocketry.

Launch fields were a problem then as they are now. But in 1987 things really started to get out of hand. Z field was my home field. My employer leased the property across the road from Z field and the plant supervisor there was interested in rockets. I didn't work at this plant but I began to fly there. After a time, I crossed the road to the better Z field following my rule of thumb: fly anywhere until you're asked to leave. It was made known early on in the club that we would fly anyone's home field but since no one had one Z field became our club field. Anyhow, Tom Blazanin had asked if he could host Tripoli and high power launches on Z field. I had no problem with that. On September 26 & 27, 1987 Tripoli Pittsburgh hosted Z-4. Tom had obtained property owner permission and site insurance. It was an incredible and well run hi power meet. But the neighbors complained when rockets drifted onto their property and called out the Jackson Township police to shut it down. One neighbor became particularly belligerent and words were exchanged. One flyer reported a LOC Magnum rocket that drifted into this neighbor's yard was axed to pieces by a woman while her husband stood guard with a shotgun. That was bad enough but then the worst happened. At about 2:30 P.M. Sunday, Ron Schultz's recovery system failed to deploy and his eight foot long LOC Ultimate Max propelled by seven motors plowed into Hartman's Golf Course over a mile away. The Jackson Township police returned and shut down Z-4. It was late in the afternoon. For a full account and photos, see the Volume 2 no. 6, December 1987 issue of The Tripolitan. You'll even see me in one photo!

Later I learned that because of this incident, the Jackson Township supervisors were considering a complete ban on all rocketry activity. I decided to attend the October 1987 Planning Commission meeting for damage control to save Z field. I took the time to explain the difference between Tripoli's high power rocketry and our club's model rocket activities. The commissioners showed a lot of interest and asked questions. I assured them that large rockets would not be flown there again and that it would be unreasonable to ban model rockets. When asked why they should believe me, I replied that I was a local resident they could reach at anytime and that

several on the board knew my parents or me. The entire matter was then set aside for additional input until two planners could attend our April launch to see for themselves. Delores Washington and Hank Watson did attend our April launch and the matter was subsequently dropped. But high power never returned to Z field and it was the beginning of the end for our beautiful flying field. My appearance at the meeting was covered in the December 9th edition of The News Weekly, Volume 5 no. 28.

- Z-1 May 10, 1986
- Z-2 Oct. 11, 1986
- Z-3 May 16, 1987
- Z-4 Sept. 26-27, 1987

1988 through 1991, Team Pittsburgh went through numerous physical and editorial changes. Gray paper issues were #'s 15 through 30. After the 17th issue I passed Team Pittsburgh off to Drew Gray for #18 and #19. I again edited issues #20 through #22. Then Mike Hardobey edited #'s 24 through 30.

To Be Continued.....

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 Street
Pittsburgh, PA 15218-1144**

(412) 244-1332

Dragon's Fire Launch Windows

The dates for 2002 Dragon's Fire High Power Launches have been released:

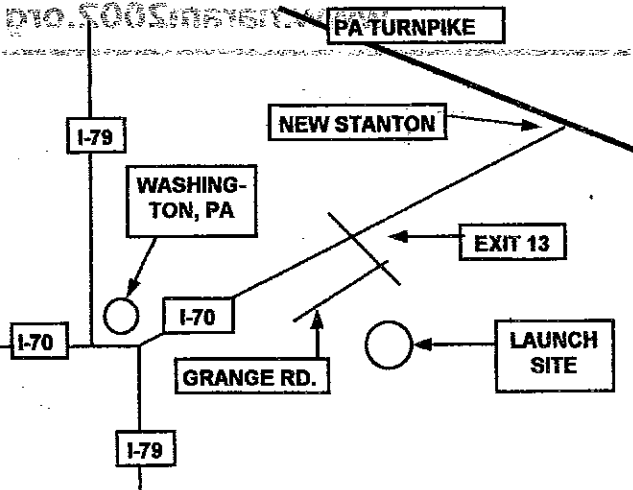
April 6
May 18
August 17
September 14
October 5 & 6

For more information, log on to PSC's web-site at www.psc473.org and follow the links to either *launch calendar* or to *Tripoli Pittsburgh web site*.

PSC Launch Windows 2002

- Mar. 17 Sport Launch
- Apr. 20 & 21 "Rocket Into Spring 8" Regional Competition
- May 26 Sport Launch
- June 8 & 9 "Reach For The Sky XIV" Regional Competition
- July 21 "Melvin 9" Sport Launch
- Aug. 25 "Rockets & Relaxation 8" Annual Picnic
- Sept. 22 Sport Launch
- Oct. 5 & 6 "Steel City Smoke Trail 2" Regional Competition
"Dragon's Fire 28" PSC & Tripoli Pittsburgh co-sponsored launch
- Nov. 17 Sport Launch
- Dec. 15 Sport Launch

Map to Dragon's Fire Launches At Jonestown Site



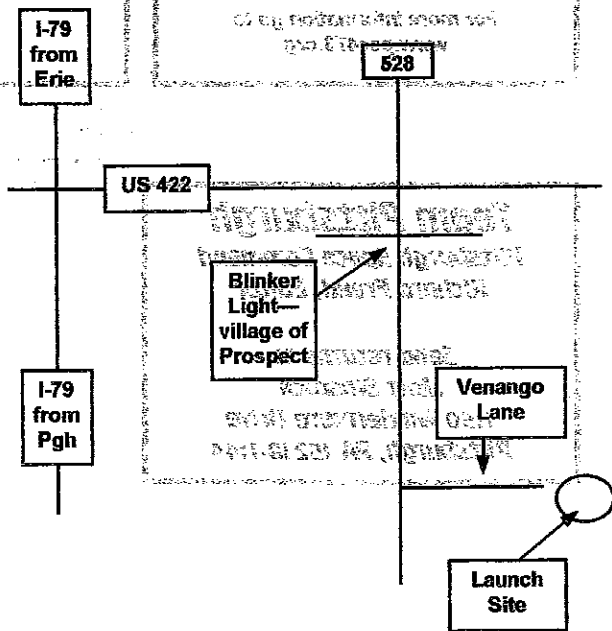
FROM I-79: Take I-79 south to Washington, PA. Take exit for I-70 East (Toward New Stanton). Continue for approximately 20 miles to (old) Exit 13.

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

AT (old) EXIT 13: 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.

Editor's note: If someone has the new exit numbers for New Stanton and Old exit 13, please email me and I will update these directions. Thanks.

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.

PSC Regional Contests for 2002

Rocket into Spring 8
April 20 & 21, 2002

- 1/4A Parachute Dur.
- 1/4A Streamer Dur. See note*
- 1/2A Super-Roc Dur.
- 1/2A Flex-Wing Dur.
- A Boost Glider Dur.
- B Eggloft Dur.

Reach For The Sky XIV
June 8 & 9, 2002

- 1/4A Parachute Dur. See note*
- 1/2A Streamer Dur. ✓
- 1/2A Parachute Dur. ✓
- 1/2A Boost Glider Dur.
- A Rocket Glider Dur.
- B Helicopter Dur.

*Note: Although it is not required, it is requested that micro max motors be used by all competitors in the indicated events.

Steel City Smoke Trail 2
October 5 & 6, 2002

- A Streamer Dur.
- A Parachute Dur.
- B Eggloft Alt.
- F Helicopter Dur.
- Sport Scale

For more information go to
www.psc473.org

Naram 44 — Macgregor, Texas!

August 4-9, 2002

Events:

- B Altitude
- E Eggloft Altitude
- 1/2 A Parachute Duration
- C Helicopter Duration
- B Eggloft Duration
- B Boost glide duration
- C rocket glide duration
- sport scale
- R & D
- Pro Sport Scale (Demo event)



www.naram2002.org

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