

# TEAM PITTSBURGH



NATIONAL ASSOCIATION OF ROCKETRY  
NEWSLETTER OF THE PITTSBURGH SPACE COMMAND SECTION VOL. 1 NO. 4

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## OCTOBER SECTION MEETING AND LAUNCH

Section members in attendance were Mort Binstock, Mike Kalmar, Stan Klepacz, Art Nestor and Rod Schafer. Tom Blazain was not present because he spent the day before representing our Section at Combria Heights High School in Patton, PA at the request of Bob Konior. In view of this, Tom will be given October attendance flight points.

The meeting was delayed as Mort launched his disc camera rocket first thing, and a half hour search followed. Mort displayed his disc camera aerial photos that were taken at the previous launch. After some talk, he then passed around the Model Missiles engine he was donating, to be given to the first 600 M.P.H. club winner. By the way, there were no challengers to the 600 M.P.H. club this month.

Art then mentioned the fact that Joe Mary, Section V.P., has not been coming since June. It was decided that Joe should be contacted and if he will not be coming again, we will elect a new V.P. in November.

Next, Art discussed the subject of Section and NAR national flight points. All section competition so far has not counted nationally due to the fact that it has not been sanctioned competition as outlined in the pink book. Art asked for opinions on our Section exploring the possibilities of having our events recognized as sanctioned competition. It would require a tightening of the rules as compared to how we have been flying. The benefits would be some national recognition gained for both the Section and the individuals involved. It would also sharpen our competition skills. A vote will be taken at the November meeting whether or not to pursue this matter further. The meeting closed with a review of the rules of the events to follow.

The launch weather was beautiful and blue skies prevailed. C Spot Landing was flown first. Mike easily took first place. Mort was second, Art third, Stan fourth and Rod fifth. Everyone seemed to enjoy this event and had a lot of fun.

C Streamer Duration winners were identical to Spot Landing. Mike claimed first place with 123 seconds, Mort second with 116 seconds, Art third with 108 seconds, Stan fourth with 102 seconds and Rod with 101 seconds finished fifth.

In addition to the competition, a lot of sport flying took place. Stan flew his Nike Ram with a 3-E cluster. It was a beautiful flight and recovered safely. Mike flew a unique mini engine powered cluster model. Mort's disc camera rocket unfortunately experienced shock cord failure and he lost his camera in the weeds while the booster plunged into the local pond. We retrieved the booster.

Thanks, *Art*

FLIGHT POINT STANDINGS

REVISED 11/1/86

Mort Binstock	39
Mike Kalmar	31
Art Nestor	24
Tom Blazanin	20
Rod Schafer	18
Bill Kust	17
Stan Klepacz	13
Jim Galasso	10
Bill Fryer	6
Joe Mary	5
Jed Blazanin	5
Joe Yanni	3

Note: Erik Schall has been dropped from membership

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PITTSBURGH PROFILES

THOMAS J. BLAZANIN, NAR #30977, age 45, married with two children. Interested in rocketry and related subjects since grade school, sometime in 1956. Served in the USAF at Edwards AFB Test Flight Center. Worked on many experiemental projects from the X-15 to the Lunar Flying Bed Test Vehicle.

Re-entered rocketry in the mid-sixties. Got really serious about the hobby in 1974. Was a member of the Old South Pittsburgh Area Rocketry Klub (S.P.A.R.K. NAR Section #399). Joined several other attempts to form a Pittsburgh NAR section after SPARK demised.

Joined the Tripoli Rocket Club in East Pittsburgh in 1984. Helped to re-organize it into the Tripoli Rocket Society, and then worked it into the Tripoli Rocketry Association, the National Organization of Advanced Non-Professional Rocketry. Currently is the National President of that organization.

Main interests are High Power Model and Advanced Rocketry dealing in design and payloads of any kind. He has created several original computer programs dealing with various aspects of rocketry. Hates teaching rocketry to little brats whose mothers don't have husbands!

By Tom

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## COMPUTER FLIGHT SEMINAR

December's meet will feature a computer seminar and contest. Handouts will be provided of the computer's menu's, and stored engine data.

There will be two contests; one for the fastest rocket, one for the highest apogee. Bring your completed rocket and engine. The rocket will be inspected prior to "flight" by the RSO. However, all flights will be done with the computer.

In addition to the contest, we will have hands on access to the computer. Bring other rockets and use the computer to learn about or optimize their flight characteristics. Improve next seasons contest skills using this information plus the sharing of our mutual skills.

Two programs will, at a minimum be available. The first provided time and speed at burnout, maximum altitude plus optimum engine delay. The second program provides in addition a tenth second flight profile including acceleration forces in G's. Printouts to take home and study WILL be available. We can also group analyze and critique the results to improve all our skills. Other programs such as drag coefficients and glider performance may be available by December.

BE THERE -----Mort Binstock.

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## EGG LOFT CONTEST

September 14's launch weather was perfect for a rocket meet. The temperature was comfortable with little wind.

The two rockets with the highest duration times were twin Scrambler II entered by Mort Binstock and Bill Kust. They were so close in performance that their modified single parachute design remained intact for only one flight, separating at ejection from the weight of the egg on their second flights.

The computer predicted based on a measured 5 ounce flying weight a maximum speed of 189 MPH with an apogee of 836'. That's high! The computer also indicated that lighter was better, as proven by these light weight streamlined entrees.

All eggs were returned unscathed. Even the yolk was intact, eaten for supper the next day by my dog Rascal; a fitting end for astroyolk.

-----Mort Binstock

FRONTAL DIAMETER (IN): 1.63  
 DRAG COEFFICIENT : 0.75  
 BURNOUT ALTITUDE (FT) = 254  
 BURNOUT VEL. (MI/HR) = 189  
 COAST TIME (SEC) = 5.37  
 TOTAL FLT. TIME (SEC) = 7.07  
 MAX. ALTITUDE (FT) = 838  
 OPTIMUM DELAY TIME: 5

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 PROGRAM ROCKET 1  
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ROCKET NAME: SCRAMBLER II W/EGG  
 LAUNCH SITE ALTITUDE (FT): 977  
 LAUNCH SITE TEMP. (DEG F): 75  
 ENGINE TYPE: D12 (ESTES)  
 THRUST DURATION (SEC): 1.7

600 MPH CHALLENGE. . . THE \$1000 Ante

To qualify you must be the first to donate \$1000 to our section or be the first to meet the 600 MPH CHALLENGE. The rules for the challenge are:

- 1). The rocket and engine must be inspected, measured and weighed by the officials prior to the flight.
  - 2). The recovery device must deploy.
  - 3). The rocket must be recovered intact complete with all its parts. Minor loose parts or landing damage is acceptable.
  - 4). The rocket must be recovered prior to the close of the sanctioned meet.
  - 5). Speed must be confirmed by the final judge; the authorized computer program.
- All prizes will be awarded at the following meet; after computer confirmation.

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ROCKET PERFORMANCE 09/14/86  
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1. OWNER: ART NESTOR
2. NAR : 29823
3. ROCKET: CHALLENGER/600 MPH
4. LAUNCH SITE ALTITUDE (FT): 977
5. LAUNCH SITE TEMP. (DEG F): 75
6. ENGINE TYPE: F100
7. THRUST DURATION (SEC): 0.5
8. TOTAL IMPULSE (NEWTON-SEC): 50
9. ROCKET MASS (OZ) : 5.12
10. ENGINE MASS (GR) : 110
11. TOTAL INITIAL MASS (OZ): 9.00
12. PROPELLANT MASS (GR): 50
13. FRONTAL DIAMETER (IN): 1.14
14. DRAG COEFFICIENT : 0.7

BURNOUT ALTITUDE (FT) = 171  
 BURNOUT VEL. (MI/HR) = 459  
 COAST TIME (SEC) = 10.35  
 TOTAL FLT. TIME (SEC) = 10.85  
 MAX. ALTITUDE (FT) = 2553  
 OPTIMUM DELAY TIME: 10

NOVEMBER 14  
 SECTION MEETING AT  
 Tom BLAZANIN'S  
 908 PINE Hollow RD.  
 McKEES ROCKS PA.  
 15136

CALL FOR DIRECTIONS  
 771-6411

DECEMBER'S  
 MEETING AT MORT'S  
 1150 WINDERMERE DR.  
 PITTSBURGH  
 963-4404

DATE TO BE  
 ANNOUNCED  
SEE PAGE '3 !!!  
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