

THE COUNTDOWN

VOL 1, ISSUE 3

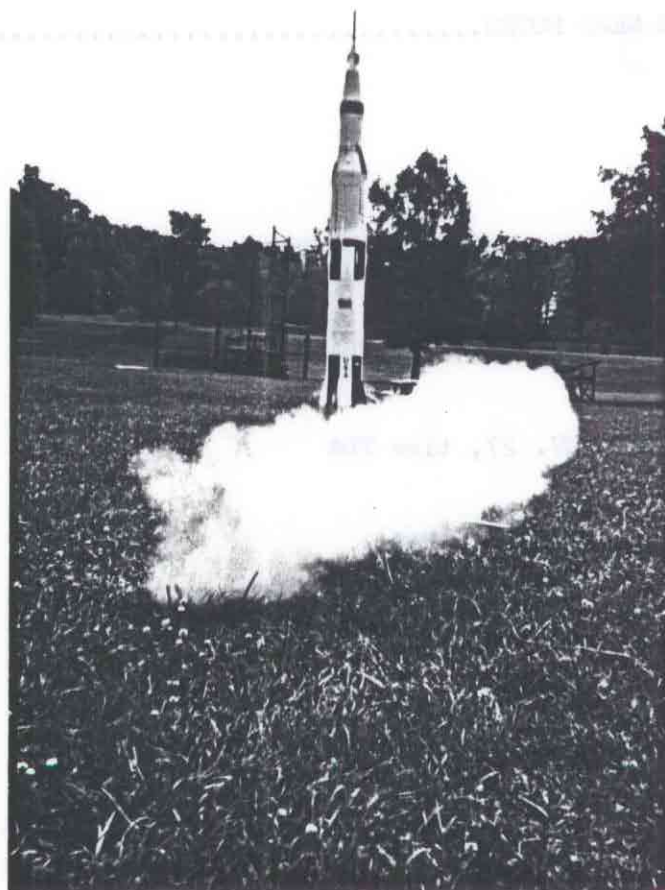
AUGUST, 1988

IN THIS ISSUE:

MONTHLY
LAUNCH
RESULTS

MEETING
MINUTES

UPDATED
ROSTER



ARE YOU
READY FOR U.N.C.L.E.?

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LAUNCH DATES, OCT.-DEC. 1988

SUNDAY, OCT. 23, time TBA

SUNDAY, NOV. 27, time TBA

LAUNCH FOR DEC., TBA*

* this launch would fall
on Sun. , 25 Dec, X-mas

MEETING DATES, OCT.-DEC. 1988

MONDAY, OCT. 10, at 7PM
Lancaster Library

MONDAY, NOV. 21, at 7PM
Lancaster Library

MONDAY, DEC. 19, at 7PM
Lancaster Library

MEETING MINUTES

DATE: 11 August, 1988

PLACE: BOARD ROOM, LANCASTER LIBRARY

PRESENT: John Yost, Daniel Weinhold, Bill Rhoat, Tim Singles, Jess Wenrich, Dave Wenrich, Glenn Feveryear, Rita Feveryear, Dick Rhoat, Rick Hackman, George Beaver. (11)

Meeting began at 7:40PM.

Agendas were passed to all those who were present.

John Yost introduced the newest member, Glenn Feveryear, from Delta, PA, and his wife Rita.

Daniel Weinhold was introduced to the members, as he had not been able to participate in any prior events.

A discussion was held concerning the club name. "L.A.R.C." seems to be inadequate. A "'Name' the club" contest will be held, in which all members will submit their ideas to John Yost, who will pick the winner. An Estes "Phaser" kit will be awarded to the member who submits the winning entry.

A discussion was held concerning the scheduling of future meetings. While it appears that no one day of the week will suit everyone, future meetings will be held on the third Monday of every month, at 7:00 PM, hopefully at the Lancaster Library.

The upcoming launch to be held on Sunday, 14 August was discussed. It was agreed to begin at 2 PM, with no set closing time. The sight to be Comet Field.

The need for a Launch Control Officer was agreed to, and Rick Hackman volunteered to fill that position for 14 August.

Ideas were brought forth to improve future launches, including using a "Satalite" Launching System, thereby increasing the number of pads; having everyone take turns carrying out various duties to enable to launch to go smoothly.

Rick Hackman stated he would let the club use his 12 volt battery for club use on 14 August.

The club decided to hold its first contest on Sunday, 25 September. Events to be flown are " $\frac{1}{2}$ A" Parachute Duration, "A" Streamer Duration, and "C" Eggloft Duration. The NAR point system will be used, and each contestant will be allowed two flights per person per contest. The best flight times will be used to determine points.

Prizes will be awarded for overall first, second, and third place finishers. NAR age divisions will not be used due to the small number of members. A full set of Rules and a description of each event will be included in the next newsletter.

Dues were collected for the calender year 1988, and receipts given.

John Yost brought up the idea of building a club Launch System with a central firing position controlled only by the L.C.O. He stated this might be a good winter project, if the membership agrees with the idea.

George Beever proposed to write up a set of club By-Laws, to present to the membership at the September meeting. These By-Laws will take effect 1 January, 1989, and govern the operations of the club.

John Yost proposed a club library, consisting of materials donated by the membership for mutual use. This will be discussed further at the September meeting.

George Beever stated that since the membership indicated that they feel the club should become an NAR section, he will contact the NAR to find out the procedures to accomplish this.

Tim Singles had a question on the election of officers for 1989, and further discussion was held concerning that aspect of the By-Laws.

The meeting was then opened up for general discussion:

Several ideas for increasing club membership were proposed. Rita Feveryear suggested placing adds in school newspapers. Dave Wenrich, (Cocalico) and Bill Rhoat, (Ephrata) were requested to contact the staffs of their respective school papers about this.

John asked if anyone knew if the Rocket Manufacturers still became involved in demonstration launches.

Glenn stated that he might contact the owner of Yorktown Hobbies in Cockeysville, MD, concerning assistance to the club. It should be noted that club member Mark Snyder (not present) frequently haunts the Rocket Aisle at Yorktown Hobbies. George Beever proposed placing flyers in area Hobby Shops describing the club and its activities.

Glenn Feveryear proposed an information table/display to be set up for publicity at area shopping malls.

John Yost proposed contacting area Hobby shops in regard to possible financial assistance by way of sponsorship.

It was recalled that at the last Launch, Tim Singles was video taping the activities. However, Tim stated the the results were poor, because it was difficult to follow the flight path of the smaller rockets.

John Yost proposed making a club video as part of publicizing the club's activities to increase membership.

Rick passed around the photographs he took at the last two club Launches. George B. asked for ideas for a name for the club newsletter. John Y. suggested "The Final Countdown". Send any and all suggestions to George Beever. John wanted to let everyone know about the USA/USSR Model Rocket competition, to be held at Wallops Island, VA, 30 September/ 3 October. In addition, NOVAAR in Virginia, submitted a bid to hold NARAM-31 in 1989. If their bid is not successful, they will probably be awarded NARAM-32 in 1990. John Yost stated he will allow the club to use his 2½ gallon pressurized water fire extinguisher. John brought up the idea of creating a Book of Plans, containing the members favorite designs. The pressing need for an established Launch Field was discussed. It appears imperative that a regular-use field and permission to fly from whatever authority controls the field, be obtained. Suggestions were: the old airport next to the Hersheypark parking lot, the Lebanon Valley Fairgrounds, the Lebanon Fair Fairgrounds. Rick suggested producing an annual club yearbook. Meeting adjourned at 9:00PM.

CLUB NEWS

Even though the club membership agreed to hold all future meetings on the third Monday of each month, the September meeting will be held on TUESDAY, September 20th, at 7:00PM, at the Lancaster Library. A scheduling conflict required the change. All future meetings will be on the third Monday off the month. Check elsewhere in this newsletter for a complete meeting and launch schedule for the rest of this year.

John Yost requests that everyone start saving paper towel tubes for a project he hopes to get started on soon. John plans to build a wind tunnel using the old Estes plans.

John also advises that as of Saturday, August 20th, he hasn't recieved any entries in the "Name the Club" contest. Remember, the deadline is August 31.

Anyone who has any materiels for the newsletter are encouraged to send them in. Articles, cartoons, plans, product reviews, editorials, etc, are needed!

MONTHLY LAUNCH RESULTS

The third monthly club launch was held on Sunday, 14 August, at Comet Field, in Lancaster. The largest number of people to date, 16, participated, and they made the largest number of flights to date, 60. Regular members Dan Weinhold, Bill Rhoat, Dave & Jesse Wenrich, Rick Hackman, Tim Singles, John Yost and George Beever were there, as well as new members Glenn Feveryear and Ed Miller. In addition, prospective members Kirk Palm, Dave Bender, Kevin Reichert and John Schuler participated.

After moving the launch site once, and deciding how we wanted to set up the launchers, things got underway at 2:34 with the launch of Dan Weinhold's SATURN V. Unfortunately, the flight was a 3.9 second prang when the big SATURN went unstable. Anyone who has spent a lot of hours building a budget-breaking rocket like this had to know how Dan felt. Bill Rhoat got a nice flight with an Estes CLIPPER, and Kirk Palm flew the top stage of an Estes COMANCHE-3, which after a high altitude flight, came down almost in the pad area. Newcomer Ed Miller turned in an interesting flight with an Estes UFO, which landed upright, just as advertised!

Launch Control Officer Rick Hackman had an unfortunate prang with his "XR-12" when the recovery system failed to deploy, damaging the rocket. Ed Miller flew an Estes "HELIO COPTER" with a B6-4 - the first one of those seen in these parts. Tim Singles flew an Estes SR-71 BLACKBIRD, which turned in a beautiful flight, but unfortunately drifted onto Route 741, causing a bit of a traffic problem, but everything turned out OK, with no damage to car or rocket.

John Yost flew an "A" boost/glide design, the "GNAT", with a $\frac{1}{2}$ A motor, and it just kept on soaring, turning in the longest B/G time of the day, 48.5 seconds. The second best B/G time was Glenn Feveryear's VULTURE, with a $\frac{1}{2}$ A motor, at 32.7 seconds. Do you think these guys know something about this Glider-business that the rest of us don't?

Dave Bender flew a real nice Estes RAMJET on flight #10, but the shock cord broke, and the main airframe landed without a 'chute. Fortunately, the damage appeared to be slight.

Anyone who got a good look at Ed Miller's rockets and equipment had to be impressed. The finish on his Estes PHOENIX has to be seen to be believed. Hopefully, we can expect an article from Ed on his finishing methods in the near future.

The model that probably got the most attention, and rightfully so, was Glenn's "GRUMPY DOG". This 2-stage rocket stands somewhere around 7-feet tall, and for this flight, was powered by a D12-0 coupled to a D12-3 in the upper stage, which is recovered by a 36" nylon 'chute. The "GRUMPY DOG" turned in a perfect flight, complete with all of the fire and smoke that Glenn promised.

The day ended with the last flight at 5:10, of John Yost's good ol' MAXI-ALPHA, which was also the last flight at the last launch on 3 July.

Special thanks go out to Dick Rhoat and the rest of his faithful Recovery Crew; Erin Singles for timing a large number of flights; Dan Weinhold for dashing around doing a little bit of everything; Rick Hackman for his job as LCO; the Wenrich brothers for showing us how to "travel light" (got a brown paper bag handy?) and to Teresa Beever for keeping track, once again, of all the flight statistics ("what motor ya have in there? What's it called? And just WHO are you anyway??").

Hopefully, a good time was had by all.

Break down of flights by person: (16)

Dan Weinhold	8	Dave Bender	5
Dana Weinhold	1	John Yost	3
Bill Rhoat	5	John Schuler	1
Kirk Palm	3	Kevin Reichert	2
Ed Miller	6	Tim Singles	5
Wenrich Bros	5	Derek Yost	2
George Beever	5	Daniel Yost	2
Rick Hackman	3	Glenn Feveryear	4

TOTAL 60

Break down of motors fired, by type:

$\frac{1}{2}$ A3-2T	4	B6-4	13
$\frac{1}{2}$ A6-2	2	B8-5	2
A3-4T	1	C6-0	2
A6-5	1	C6-3	4
A8-3	6	C6-5	8

A10-3T	3	C5-3	3
B4-2	1	D12-0	1
B4-4	2	D12-3	4
B6-2	2	D12-7	4

TOTAL 65

Average flight duration: 21.36 seconds (for 54 timed flights)

Average turn-around time between flights: 2 minutes, 36 seconds.

Longest flight: Flight #57 Glenn Feveryear, Grumpy Dog - 57.25 seconds

Number of successful flights: 51

Prangs or other unsuccessful flights: 9

Rockets lost: 1

Number of motor failures: 0

(Disclaimer: in the following list of flights is a "comments" column. "GF" stands for "good Flight". If nothing appears in this column, it simply means that the writer wasn't present for that particular flight, or just down right can't remember. Old age creeping in).

<u>Flight #</u>	<u>Time</u>	<u>Name</u>	<u>Rocket</u>	<u>Motor</u>	<u>Duration</u>	<u>Comments</u>
1	14:34	Dan Weinhold	Saturn V	D12-3	3.9seconds	prang
2	14:39	Bill	Clipper	A8-3	27.62	GF
3	14:40	Kirk	Comanche-3	C6-3	29.43	top stage only
4	14:45	Ed	UFO	C6-0	8.09	GF
5	14:45	Kirk	Clipper	C6-3	47.95	
6	14:46	Wenrich bros	Laser	B6-4	30.6	
7	14:48	George	Saturn V	D12-3	not timed	GF
8	14:50	Rick	XR-12	A8-3	10.07	prang
9	14:53	Dan	DER V3	D12-7	27.27	GF
10	14:55	Dave B	Ramjet	A8-3	7.44	DQ
11	15:00	Bill	Alpha	C6-5	not timed	GF
12	15:04	John Y	Photon Disruptor	B6-2	27.09	
13	15:09	Wenrich bros	Alpha III	C6-3	33.94	
14	15:14	John S	Skinny Mini	A10-3T	16.22	
15	15:15	Dan	GEOSAT LV	B4-4	5.0	prang
16	15:19	Ed	Orion	C5-3	17.02	GF
17	15:22	Kevin	Arrow	B6-4	11.74	
18	15:24	Tim	Silver Streak	B6-4	13.48	
19	15:28	Dave B	Excalibur	B6-4	17.39	
20	15:29	Derek	Ninja	1/2A3-2T	13.66	

21	15:34	Glenn	Vulture	$\frac{1}{2}$ A3-2T	23.88	B/G
22	15:36	Bill	Nova Payloader	B4-2	23.70	GF
23	15:37	Tim	Sea Dart	B6-4	20.88	
24	15:40	George	Saturn 1B	(2) C5-3	44.62	GF
25	15:42	Rick	Honest John	D12-7	16.0	
26	15:43	Kevin	Yankee	B6-4	not timed	lost
27	15:45	Wenrich bros	Skinny Mini	A10-3T	13.85	
28	15:46	Ed	Helio Copter	B6-4	14.83	GF
29	15:48	Dave B	Longshot	C6-5	not timed	
30	15:49	Tim	X-16	C6-5	28.30	GF
31	15:50	Dana W	Wizard	$\frac{1}{2}$ A6-2	7.60	GF
32	15:53	Glenn	Vulture	$\frac{1}{2}$ A6-2	32.79	
33	15:57	Bill	Clipper	A8-3	7.05	prang
34	16:03	Ed	Phoenix	D12-3	20.75	GF
35	16:04	Daniel Y	Big Bertha/BG	B6-2	12.90	glider failed to deploy
36	16:05	Tim	X-16	C6-5	42.55	
37	16:06	Kirk	Clipper	C6-0/B6-4	13.87	second stg failed to ignite
38	16:07	Dan	Eggspress	B8-5	11.47	no egg
39	16:10	Tim	SR-71 Blackbird	C6-5	31.40	GF
40	16:12	Bill	Alpha	C6-5	not timed	
41	16:14	George	X-15	A10-3T	11.50	GF
42	16:18	Dan	Der V3	C6-5	16.50	GF
43	16:19	Glenn	Yellow Pencil	B4-4	44.94	SD model
44	16:22	Dan	Astro-Cam 110	B8-5	8.37	cheese!
45	16:23	Wenrich bros	Mr. Blue	B6-4	18.52	
46	16:27	Dave B	Big Bertha	C6-5	38.28	
47	16:28	George	Space Shuttle	C6-3	17.17	GF
48	16:33	John Y	Gnat	$\frac{1}{2}$ A3-2T	48.50	GF
49	16:34	Dan	Mini Mars Lander	A3-4T	10.66	GF
50	16:35	Rick	XR-16	B6-4	not timed	
51	16:37	Ed	Nike Smoke	B6-4	17.28	GF
52	16:40	Daniel Y	TransStar Carrier	B6-4	19.71	
53	16:43	Dan	Alpha III	A8-3	18.93	Streamer
54	16:44	Wenrich bros	Der V3	D12-7	28.78	
55	16:46	Derek	Ninja	$\frac{1}{2}$ A3-2T	10.81	
56	16:51	Ed	Nike Apache	B6-4	22.29	GF

57	16:52	Glenn	Grumpy Dog	D12-0/D12-3	57.25	GF
58	16:56	Dave B	Excalibur	A8-3	9.28	GF
59	16:59	George	Mighty Moe	A6-5	40.84	GF
60	17:10	John Y	Maxi Alpha	D12-7	27.82	GF

U. N. C. L. E. - 1
(Un-named Club Launches Eggs)

On Sunday, Sept 25, we will hold U.N.C.L.E. - 1 at Cocalico Senior High in Denver, PA. Events to be flown, in order, will be "C" Eggloft duration, " $\frac{1}{2}$ A" Parachute duration, and "A" Streamer duration. The contest will be flown on the NORTH side of the school, not the South, as on July 3rd. Flight registration and launcher set up will begin at 1:30PM, with the first Eggloft duration flight at 2:30. " $\frac{1}{2}$ A" PD will begin at 3:30, and "A" SD at 4:30. Below is a brief explanation of each event, and some simple rules to follow, all of which are taken from the NAR "Pink Book".

- I "C" Eggloft Duration: The purpose of this competition is to carry an exceedingly fragile payload (1 grade A hen's egg), for as long a time as possible and to recover the payload without damage.
1. The motors used in this event can only be "C" Class motors, such as C5-3, C6-3, C6-5, etc. Only one motor per rocket, no clusters or multi-stagers.
 2. The entry may not separate into two or more unattached peices, and will be disqualified if it does so.
 3. Following the flight, the egg will be examined by the contest director(CD). If the shell is broken or cracked, it will be disqualified.
 4. Each model will be allowed to land without being caught.
 5. The eggs for this event will be provided by the club.
 6. The contestant who achieves the longest duration is the winner.
 7. For scoring purposes, "C" Eggloft duration carries a weighting factor of 6.
 8. Models flown in this event can weigh no more than 175 grams.
- II " $\frac{1}{2}$ A" Parachute Duration: The purpose of this event is to acheive the longest flight duration times, using a " $\frac{1}{2}$ A" Class motor, in a single stage rocket.

1. The entry will be disqualified if it separates into two or more pieces.
2. Models flown in this event shall weigh no more than 85 grams gross launch mass (with motor).
3. The weighting factor of 5
4. The contestant need not return his entry to be considered a qualified flight.

III. "A" Streamer Duration: The purpose of this event is to achieve the longest flight duration times, using a single stage rocket powered by an "A" motor.

1. The streamer shall be the only recovery device, made of cloth, plastic or paper.
2. The streamer shall be connected to the model at the nose cone.
3. The models flown in this event can weigh no more than 85 grams.
4. This event will have a weighting factor of 5.
5. The contestant need not return his entry to be a qualified flight.

IV. General Rules and Tips

1. Each contestant is allowed 2 flights per event if he so chooses. The higher score (longest duration) of the two will be counted.
2. The flights need only be timed by 1 timer.
3. A contestant cannot time his own flight.
4. Scoring system:
Competition points shall be awarded to each contestant on the basis of the following schedule:
 10 points per event for placing first:
 6 points per event for placing second:
 4 points per event for placing third:
 2 points per event for placing fourth:
 1 point per event for making at least one qualified, official flight.

This contest factor for this competition is 1; Each event has its own weighting factor; "C" Eggloft duration 6; " $\frac{1}{2}$ A" PD 5; "A SD" 5.

The scores will be calculated by the following equation:

Place X weighting factor x contest factor = score per event.

example: A contestant finishes the "C" Eggloft duration with the longest official flight, thereby placing first in the event.

His score is calculated as follows:

$$10 \times 6 \times 1 = 60$$

Same contestant finishes second in " $\frac{1}{2}$ A" Parachute duration:

$$6 \times 5 \times 1 = 30$$

Same contestant finishes third in "A" Streamer duration:

$$4 \times 5 \times 1 = 20$$

His score for the entire contest is:

"C" Eggloft duration	60
" $\frac{1}{2}$ A" PD	30
"A" SD	20
	110 points

5. Rules 10 and 11 of the NAR Pink Book, 1979 Edition, 1987 Revision, which deal with official flights and disqualifications, will be in effect.
6. Prizes shall be awarded for first through fourth place finishes. All and any competition points won will be carried until December 31, 1988, and will be added to any subsequent points won.
7. The same model need not be used for both official flights, if the contestant chooses to make two flights. For example, in "C" Eggloft duration, a contestant may fly a commercially available kit, such as the Estes Eggspress on his first flight, and on his second flight fly an Egglofter of his own design, provided of course, that the design is safe and proven.
8. The entries will be timed from "the instant of first motion", until the part to be scored for time of flight touches the ground or is caught in a tree power line, or is otherwise stopped. If the model disappears behind an obstacle to vision in such manner as to lead timers to believe that it touched ground very shortly thereafter, stopwatches shall be stopped when the model disappears. As for times, actual times will be given to the Records Keeper, including fractions of a second, only down to tenths. For example, a flight of 33.27 seconds will be recorded as 33.2 seconds.
9. Any entry (model) that ejects it's engine will be considered as disqualified.
10. Due to the small number of members presently in the club, it will be impossible to fly these events by age division. Therefore, to give the members of all ages an equal chance, "A" Division members (14 years old and younger) will have 20% of their final score added to that score. "B" Division members (15,16, & 17 years old) will have 15% of their final score added to their final point total. For example, member XYZ is 12 years old, and finishes all three events with a score of 50 points. 20% of 50 is 10, so 10 points would be added to his score, giving him a total of 60.
11. This competition is open to all members of this club who have paid their dues for the calender year 1988.
12. A Contest Director (CD) will be appointed at the September meeting. The CD will be a Senior member. The duties of the CD and Range Safety Officer will be combined. In addition, a Contest Jury will be appointed to deal with any protests or problems that may arrise. The CD will be one member of the jury, and two additional members will be appointed to the jury. This may sound like it's a lot of official heavy duty stuff, but it will give everyone a chance to help organize and run the contest.
13. Recovery Crews, Timers, and other duties will be assigned at the September meeting, again, to give everyone a chance to try a differant job.
14. HAVE FUN!!!!

MORE CLUB NEWS

Permission has been obtained for the club to use the field at Cocalico Sr. High on a regular basis, providing of course, that we clean up our area after each use. While this is not the ultimate answer to our flying area needs, it is a step forward. The only drawback is that there is no way to reserve use of the area, as it's still "first come, first serve". In addition, contact has been made with the Park Ranger's

Office at the Lancaster County Central Park about using the facilities there. The Chief Ranger asked that some materiel on Model Rocketry be sent to her, and she did seem to be receptive to the idea. However, flying sight acquisition remains the #1 priority of the club, besides, of course, a name.

As you can see, the name of the newsletter this month is "The Countdown". If you have any new suggestions, bring them to the September meeting.

UPDATED CLUB MEMBERSHIP ROSTER

Rick Hackman
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Lititz, Pa 17543
717-627-1598

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