

## AERONAUT

The Newsletter for the Association of Experimental Rocketry of the Pacific Tripoli Rocketry Association, Inc.

Prefecture No. 23

June 1997 Volume 9 Number 3

## First Commish's Corner, June 1997

by Pius Morozumi, AERO-PAC First Commissioner

#### MudRoc 4.0

29 hard-core AERO-PAC members braved the rainy weather at MudRoc 4.0 on June 14 and 15. We were rewarded by spectacularly beautiful vistas of the Black Rock Desert after the fresh rainfall, and had opportunities to launch our rockets between breaks in the cloud cover. You can read all about the launch happenings in William Walby's article in this issue of the Aeronaut.

## No-BALLS, July 19-20

The next AERO-PAC high power sports launch at Black Rock will be NoBalls on July 19 and 20. Remember to ask for a \$5 discount off the registration fee when you send in your pre-registration. The registration form is in this newletter, or you can get it off the AERO-PAC website at www.aeropac.org/aeropac/. Now you can also use the website to sign up for launch duty online with the new interactive page created by Launch Director Mike Penner. Assistant LCO and RSO positions are available for those who want some on the job training. Volunteer for a position at the launch regardless of your experience level. By doing a launch duty position, you earn a Gold Card which entitles you to go to the head of the check in line when it, s your turn to launch your rockets. We are planning to hold a night launch on Saturday evening. All rockets flown after twilight must have on board visual beacons such as strobes or bright lights. Maximum altitude is 4000 ft AGL. We,ll need launch duty volunteers for the night launch, too. Also, because we are expecting a large crowd for NoBalls and BALLS, we will need to recruit extra volunteers to haul more Porta-Potties. The Board has voted to reimburse \$25 for the extra gas used to help with the hauling. If you are able to help out with this vitally needed duty, please contact anyone on the Board. Those of you in need of HP motors might want to call Karl Baumann at Mojave High Desert (805) 943-7176, or Ken Finwall at California High Power Model Rockets (805) 739-0410 to make sure you will be able to get motors at the launch.

### BALLS 007, July 20-22

BALLS 007 is the experimental launch that will follow No-Balls, starting on Monday morning. Only experimental, non-certified motors and commercial motors with a minimum impulse of K power (1280 Ns) are permitted on Monday and Tuesday. Contact me or one of the Board if you've got an experimental rocket that will need to go out to 1000 feet or more to make special arrangements. We will be using "Away Cells" beyond 1000'.

#### Board of Directors News

There have been a couple of changes to this year's AERO-PAC Board of Directors. As announced at the last Members Meeting, Jerry Vaughn has had to step down as Second Commissioner because of family commitments. Randy Mitchell has graciously agreed to move from Treasurer to Second Commissioner. William Walby will stay on in his role of Treasurer again this year. Randy will cross cover for William in August when William is out of the country. I want to take this opportunity to express my personal thanks to Jerry for the years of service and help he has generously given to AERO-PAC. He has worked very hard to give you the opportunity to launch high power rockets at one of the finest launch sites in the country. Please join me and the rest of the Board in thanking Jerry. Let him know that you appreciate all that he's done for you the next time you see him.

#### **Next Members Meeting on July 12**

The next Members Meeting will be held on July 12 from 1-3 PM at Portal in Santa Clara. The Board of Directors will meet from 12-1 PM at the Good Earth Restaurant in front of Portal. Come early and join us for lunch. Directions to Portal are as follows: Take Freeway 280 to the DeAnza Blvd. exit in Cupertino. If going southbound on 280, turn right. If northbound on 280, turn left. At the 3rd or 4th light, turn right onto Stevens Creek

Blvd. Travel about 3 blocks on Stevens Creek Blvd. and you will see a Good Earth Restaurant on the right hand side. Immediately past the restaurant turn right into the business park. We are in the first row of buildings on the left side past the ACI building. The meeting will be in suite 100. Please find the open door and sign welcoming you into the building. If you are having any trouble or need help, call the conference room phone (408) 343-4486. The main address is: The Portal Information Network, 20863 Stevens Creek Blvd.

#### 1997 AERO-PAC Meeting and Launch Schedule

July 12 Members Meeting
July 19, 20 No-BALLS (sports launch-Black Rock)
July 21, 22 BALLS 007 (experimental launch-Black Rock)
August 2 Members Meeting
(LDRS XVI in Colorado- August 7, 8, 9, 10)
August 22, 23, 24 Black Rock IX Launch

What's Wrong With This Picture

# MUDROC LIVES UP TO ITS NAME ONCE AGAIN!

William F. Walby, AERO-PAC Treasurer

Yes, folks, the playa was wet for the MudRoc launch again this year. But that didn't stop the adventuresome rocketeers who braved the less than ideal weather conditions 2 weeks ago. Friday was wet and rainy when we pulled into Bruno's for our pre-setup lunch. We all (about 20 or so) decided to drive out Trego Road to see for ourselves the condition of the playa before calling off the launch. We re-grouped at Trego Springs and a couple of people with 4WD ventured out onto the playa to check it out. Meanwhile our intrepid Sue McMurray decided to drive out the main road to the 11 mile entrance and come across the playa to meet us.

The report from our "scouts" was that the playa was very wet in spots, but would probably be OK as long as we didn't get any more rain. We felt that the weather was too unstable to chance getting stuck on the playa so we decided to set up a small range head in the scrub between the playa and Trego Road. This was actually a much nicer place to camp than the playa. We would be much less likely to get stuck if it should rain some more. We set up 5 H-J pads and 3 K-L pads, some tables, and viola! we were ready to launch.

The weather improved somewhat, but we still had a stiff breeze coming off the lakebed heading for the scrub and Elephant's Back. But being the rabid rocketeers we are, we started launching anyway. I can't give you a total accounting of who launched what, but Richard Amstadter did get very brave and launched a J-powered flight which ended up drifting OVER Elephant's Back! I was part way up the hillside looking for my own rocket when Rich's rocket took off. I got a very good bearing on where it went over the hill and took off after it. It took about 35 min to get to the top of the hill, and I searched the top and part way down the other side of the hill for another 35 min before heading back down. I never did find the rocket, but was rewarded with the most AWESOME view of the Black Rock Desert I have ever had!

It rained a bunch more that night, but stopped raining by 6 am on Saturday. The weather was still very unsettled, but we started launching away in between the showers. We had a number of Level 1 cert flights. The ones I recall were Bud Billings, and Chris Colt,s. Welcome to High Power, fellas!! Other notable Saturday flights included Tom Johnson's Level 3 attempt. We took one of the rails out onto the playa for his attempt in deteriorating weather. Launch on an M1939 was perfect, but from what we can piece together there was insufficient gas generated by the ejection charges to deploy the recovery system. The rocket was recovered in many pieces in and on the playa. We know how much work (and \$) went into this attempt and offer Tom our condolences. The JP Aerospace group also were in attendance with a test of a new airframe and launch box. I believe their rocket was powered by a Urinsco (APS) M motor flown as a manufacturers demonstration. Launch was under perfect skies in the late afternoon. Unfortunately, the motor was a bit too energetic for the airframe (which is designed to be launched from a balloon at 100K feet and it shredded about 2 seconds into the burn. It is always saddening to see all this work come apart like that. Better luck next time! The weather continued to improve with less frequent showers and another gorgeous sunset.

We also had a couple of night launches. We saw the first ever night certification flight. Bill Inman did a successful Cert Level 1 flight on an H238 (I think) in a strobe equipped rocket. It was a perfect flight and recovery. Welcome to High Power! Dave Potter flew his dual strobe equipped scratch-built on a K1100. Blue Thunder is awesome at night!! He recovered the rocket intact; nice flight, Dave.

We had another little sprinkle during the night, but the weather for Sunday looked very promising. Becky Green planned to do her Cert Level 3 flight as soon as we took the rail out onto the playa and she finished prepping her rocket, "Wildest Dreams". I have one of Ken Wada's new flight computers (MACS97) which I planned to fly in my 54mm scratch built prior to Becky's flight. My rocket is really set up as a betatest bed for all the currently available flight computers with the Pratt ECS as backup. This flight was picture perfect on a Kosdon I 300 with the MACS97 providing deployment at apogee. This was the gentlest deployment I have ever had on any of my flights. Apogee altitude was 4370 ft with about 23 G's peak acceleration. Strong work, Ken!

Becky was finally ready with her flight attempt. We were having some problems with the VeriFire launch controller making good connection with the line running to the relay. The first 10 sec countdown resulted in a misfire and we had to recycle. The second attempt had us fiddling with the connection when the launch button was accidentally depressed and the rocket launched at about T minus 3 sec for a real surprise lift-off! This flight was incredible. Apogee was slightly under 17K feet and the BlackSky ALTAAC deployed the drogue right on schedule. Becky had her rocket configured for main deployment at 750 ft, but for some as yet unknown reason the main came out way early and the rocket drifted off the playa and into the scrub between the playa edge and Trego Road. The rocket was equipped with a Walston Retrieval transmitter to insure that it would be recovered. We watched it touch down about 3-4 miles away and the crew took off to get it. Her rocket was recovered in perfect condition and Becky is now the ONLY Level 3 woman in Tripoli (that we know of) and the 3rd Aero-Pac member to achieve this level. Congratulations Becky, well done!!!!

The rest of the late morning and afternoon saw numerous other flights until the waiver expired at 2 PM. We (the Aero-Pac BOD) want to thank ALL of you who stuck around and helped with tear down (as well as those who helped set-up). I know that everyone was anxious to get on the road for home, but your staying the extra hour kept the Launch Director and everyone else from getting burned out. Overall, MudRoc was a really fun launch and given the conditions, quite successful. One reminder, PLEASE haul out your own trash! One thoughtless person left his large bag of garbage sitting at his campsite for someone else to haul away. This behavior is inexcusable. We are not your mother and should not have to pick up after you. Don't leave it at Bruno's either: take it home.

I know that there were many more noteworthy flights and am sorry that I cannot include them all in this report. If you have another perspective on the launch write it up and send it to the editor. Well that's it for my ramblings. See you all at Balls!

MudRoc 4.0 Range Head

#### How to contact the Board members

Pius Morozumi, First Commissioner	(408) 779-6204	pius@aeropac.org
Randy Mitchell, Second Commissioner	(707) 480-6512	ranny@aeropac.org
Mike Penner, Launch Director	(408) 738-0953	penner@aeropac.org
William Walby, Treasurer	(916) 739-0404	wfwalby@aeropac.org
Mike Vaughn, Newsletter Editor	(805) 569-0919	mvaughn@aeropac.org
Walt Rosenberg, Secretary	(408) 258-4895	waltr@aeropac.org