



# AERONAUT

The Newsletter for the Association of  
Experimental Rocketry of the Pacific  
Tripoli Rocketry Association, Inc.  
Prefecture No. 23

April 1998 Volume 10 Number 2

## **The Commissioner's Two Cents**

Jerry Vaughn - AERO-PAC First Commissioner

Hello all,

This will be my first attempt at doing a column like Pius did with his Commish's Corner. First of all I would like to introduce myself to the members who do not know me. I have been involved with Aero-Pac for the last four or five years. In the past I have been on previous boards as the second commissioner. My past duties included dealing with and acquiring the FAA waivers, helping to run the launches, working with the launch raffles etc.

We are just getting into this 1998 season and already several tasks are in the works or have already been completed. I have acquired the Tripoli insurance for the launches and have been working with Pius and Mike Bilbo on the BLM issues. The paperwork has been submitted to the BLM and we are waiting for the permit. So far the BLM situation is looking good.

Second Commissioner, Al Frazier

Al has been doing a great job on the FAA issues. You may have heard rumors about possible problems with acquiring FAA waivers this year as opposed to previous years. This is true but Al has dealt with the new requirements and the paperwork has been submitted and again we are in a waiting situation with the FAA at this point.

Treasurer, William Walby

William is currently receiving the membership renewals. And he has been processing them in a timely manner and getting out our wonderful new badges. He has also submitted the funds to the BLM.

Launch Director, Tom Rouse

Tom is definitely ready to help out where ever he can. He

will be attending a BLM meeting in Gerlach to keep us abreast with the goings on with the BLM. Tom be patient, you are one of the most important parts of Aero-Pac. Your job title says it all.

Secretary, Randy Mitchell

Randy produced the minutes of our last meeting and has been keeping up on several fronts.

Newsletter Editor, Mike Vaughn

By reading this we know that Mike has produced our first newsletter of the season and guess what it's on time!

I would personally like to thank the above mentioned people for their excellent work.

All in all everything is coming together. I think we have a great group on the board of directors. 1998 is shaping into possibly one of our best flying seasons ever. I can't wait to get out to the playa and fly, fly, fly.

## **AeroPac Event Shedule**

May 2	Equipment Party
June 21	Member Meeting
July 10-12	MudRoc 5.0
August 30	Member Meeting
September 11-13	Black Rock X
September 14	Black Rock Experimental

## Membership

If the label on this newsletter does not say 98 in the upper right hand corner, you have not renewed your membership and this will be your last issue of the Aeronaut. That said, I'll point out why being an Aeropac member is a good thing. Besides receiving this fine publication, membership also includes your launch fees. At the last meeting it was decided to have the dues cover the range fee for the launches this year. This means that even if you only plan on attending one Aeropac launch this year you break even. If you attend both you are \$20.00 ahead.

Speaking of the Aeronaut, at the last meeting it was decided to bribe members to submit articles. Now in addition to seeing your name in print you will also receive a \$25.00 gift certificate from Magnum for each article published. Articles can be on projects, techniques, launches, or anything (as evidenced by the one to the right).

In the past we have also included a classified and photo section. If any member has something to sell or has a photo they would like to share, send it in.

## AeroPac Equipment Party

The annual equipment party will start at 0900 Saturday, May 2nd. Aeropac will provide lunch and refreshments. Contact Tom Rouse for more information, directions follow:

From 880

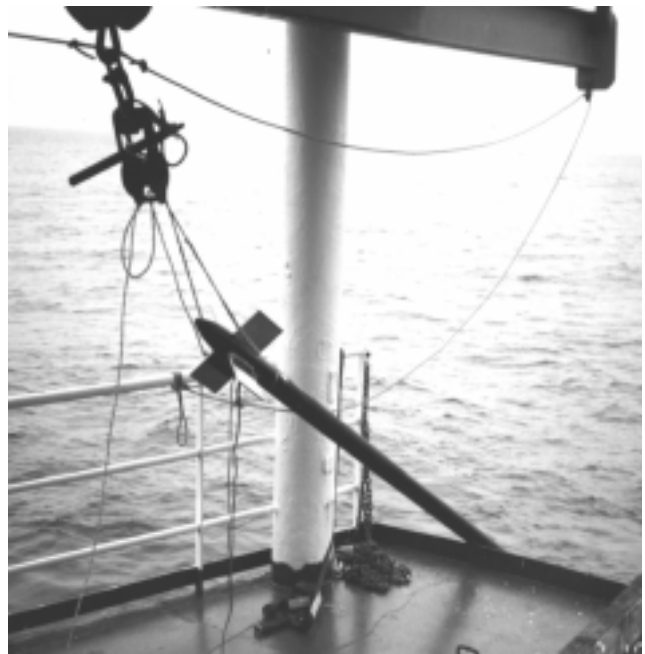
Take freeway 880 south towards Los Gatos. Exit at Camden Ave. Turn left onto Camden (you will turn left and go under the freeway). Follow approximately 6 miles. Watch for Blossom Hill. After crossing Blossom Hill count the lights. The 4th one is McAbee (a Jr High will be on the right.). Turn on the third street after McAbee which is Crystal Springs Dr. Follow till you get to 6590.

From 680

Take freeway 680 towards San Jose. 680 turns into 280 at the 101 crossing. Stay to the right and exit at 87 south. Take 87 south and exit onto Santa Teresa Blvd. Keep going straight (Oakridge Mall will be on the right). Cross Blossom Hill Rd and then turn right at Coleman Ave. Take Coleman to Almaden Expressway. Turn left on Almaden (There will be a lake/park on the left). Follow Almaden and turn right at Camden Ave. Follow Camden and turn left on Crystal Springs. It will be several streets past the park on your left. Follow to 6590

From 101 south

Go north on 101 and take the freeway 85 exit towards San Jose. Exit 85 at Almaden Expressway South. Follow Almaden Expressway south and turn right on Camden Ave. Turn left on Crystal Springs Dr. It will be several streets past the park on your left. Follow Crystal Springs to 6590



## Gravity Powered Rockets

by Mike Vaughn, #100

This could also be called 'And Now For Something Completely Different'. The rocket looking unit in the above picture is called an ADP (Acoustic Doppler Penetrometer). It's purpose is to determine the soil shear strength of the ocean bottom without having to bring a sample to the surface for analysis. It's basically a high source level fixed frequency oscillator in a heavy streamlined package. The system works by measuring the downshift in frequency caused by the unit accelerating towards the bottom. The strength of the bottom is determined by the slope of the upshift in frequency at impact and the mass of the unit.

The system was originally developed for the military and was designed for a 1 meter penetration. Pictured above is a version of the commercial system designed for up to 10 meter penetrations. Last summer I spent a week on board a Norwegian survey ship dropping these units in the North Sea (looks more like a lake in the photo, but that's 200 miles offshore). I wasn't down there to witness it, but it must have been a heck of a lawn dart as the 3 meter long units impacted the bottom at 28 meters/second and penetrated up to 8 meters.

## T-Shirt Design Contest

Let's try this again. The response last year was underwhelming. One entry dismissed by the Prefect, the other an illegible scrawl on a cocktail napkin. I know you guys want a t-shirt, right. So let's get the artists amongst us to submit something. The prize is a lifetime membership in AeroPac. The entries can be anything from quality sketches to camera ready art.

## Minutes, Aeropac Board Meeting: Feb 15, 1998

Outgoing First Commissioner Pius Morozumi thanked the Aeropac members who have expressed willingness to take on the responsibilities involved in keeping the organization running this year.

Pius, Walt Rosenberg and Michael Penner are stepping down. The new board composition, pending the afternoon vote:

First Commissioner: Jerry Vaughn  
Second Commissioner: Al Frazier  
Launch Director: Tom Rouse  
Treasurer: William Walby  
Newsletter: Mike Vaughn  
Secretary: Ranny Mitchell

Pius outlined the tasks and timelines facing the incoming board, and in the ensuing discussion, consensus was reached on the following points:

Responsibilities: the First Commissioner will set and lead meetings. He will delegate housekeeping tasks as follows:

Prefect: Jerry Vaughn (can't delegate this).

Liaison with FAA: Al Frazier

Website: Al Frazier (Renaldo Roldan will assist).

Duty Roster: Al Frazier

Immediate tasks:

Reserve with the BLM. Jerry will handle this.

BLM fees: we have a credit; William will arrange prepayment for this season.

Waivers: FAA liaison will be delegated to Al Frazier. Sufficient interest was expressed to justify a night launch on September 12th.

Insurance: Jerry will work with Bruce Kelly on this.

General preparations for launch season.

Membership Dues: Dues will be increased to \$20, and launch fees will be waived for members. Non-members will pay a fee of \$20 per launch.

Pius was voted a lifetime membership in appreciation for his outstanding services to the organization.

Set Work Party - (May 02 at 0900, in San Jose, was later approved). Tom Rouse will arrange.

Equipment purchases: again, Tom will handle:

2-3 tables  
igniter clips  
battery tester  
two way radios  
FM transmitter (broadcast station hooked to PA)  
GPS unit

Newsletter: Mike Vaughn will stay on top of this, per usual.

Publication dates are:

April 15  
June 15  
August 15  
October 15

Note: please submit articles two weeks prior to publication date.

Newsletter incentive: the board decided to offer an incentive, in the form of a \$25 gift certificate, to Aeropac members whose articles are published in the newsletter.

T-Shirt contest: the outgoing Prefect employed executive privilege to scuttle the sole submission to the recent t-shirt contest. The contest will be reopened, with a lifetime membership in Aeropac as the prize for the winning design.

Porta-Potties: A reimbursement of \$25 for each one-way trip will be paid to members willing to haul to/from the site. Sanitary facilities for handicapped members was discussed, but it seemed too expensive.

Meetings this season: will be on Sundays. The board will meet at 11:30 at the Good Earth for a working lunch. The members meeting will follow at 1:00 at Portal. Thanks to Al for arranging this comfortable meeting space. Dates & Times:

June 21st            11:30 & 1:00  
August 30th        11:30 & 1:00

Note for the record: The new board was unanimously approved by a show of hands at the subsequent members meeting; 17 members voted and two proxies were voted.

Respectfully submitted,  
Randolph Mitchell, March 5, 1998

### How To Contact The Board

First Commissioner	Jerry Vaughn	jerry@aeropac.org	(805)239-3818
Second Commissioner	Al Frazier	ajf@portal.com	(650)969-7555
Treasurer	William Walby	wfwalby@aeropac.org	(916)739-0404
Launch Director	Tom Rouse	tomr@aeropac.org	(408)997-9586
Secretary	Randolph Mitchell	ranny@aeropac.org	(707)944-8755
Newsletter Editor	Mike Vaughn	mvaughn@aeropac.org	(805)659-3409

Other AeroPac email addresses: board@aeropac.org and members@aeropac.org