

# NASA Academy Alumni Association (NAAA) Electronic Magazine

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David Kalman, editor

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## **1. President's Message**

President's Message

Mike Moreau, GSFC '94

Vice President Operations

No, I haven't taken over the office of President, however David G is on travel and asked me to write up a brief report on the NAAA's summer plans for the May Newsletter. We are starting to make plans for NAAA activities this summer, and at this point two different ideas are in the works.

First we have been talking with the NASA Academy staff to make tentative plans for some kind of a joint NASA Academy/Alumni event with each of the three programs this summer. Of course there has been a tradition of informal gatherings during summers past, for example around July 4th in Washington. The idea is to have some sort of event that could be open to the alumni in the local area, and would provide an opportunity for the new RAs to meet some of the alumni. It looks like there is a good possibility something will be planned with the GSFC Academy around the July 4th weekend in Washington, as well as another activity at a yet TBD time for the West-Coast Academies.

The second idea in the works is to plan some sort of a national event, perhaps for next fall. Similar to the NAAA Banquet at the National Academy of Sciences last summer, alumni from all over the country would be encouraged to congregate for the big event. I don't want to talk too much about details, because Diana Coleman (MSFC 97) has volunteered to chair a planning group for the 1998 "event," and she is setting up a teleconference to discuss ideas either Tuesday or Thursday of next week (May 5th or 7th). However, a couple of the ideas discussed at the last Executive Council telecon were: 1. plan an event

in September or October, to capture some of the enthusiasm of the new RAs (and to give them an opportunity to participate). 2. consider an idea suggested by Jim Brice, to include technical presentations by alumni on their research as part of an annual NAAA Reunion Event. By having students and professionals present papers or posters on their work it could provide extra incentive for students and professionals to attend, and could open up the possibility of financial support from your company or school to attend the event. There have also been lots of other ideas thrown out there in past discussion as to where and when to have the event. If you would like to have some say in the matter, look for the announcement of the teleconference, which should be coming out within the next few days.

I will be pushing for this year's gathering place to be Boulder, CO! I know I am not the only person who knows how great it is here, because NASA Academy alumni are coming here in droves. When I started at CU in 1995, there were three Academy alumni in the state, David Kalman, Trey McDowell, and myself. By this fall, the Colorado alumni will number 12! Don Olinger (Ames 97) just recently moved to Colorado Springs to take a job with Lockheed Martin, and Greg Holsclaw and Corinne Krauss (both GSFC 97) just decided to come to CU Boulder for grad school. Seriously I don't know where the big reunion will end up this time, but Colorado would be cool!

Now before I sign off, Spring is here, and so are the Stanley Cup Playoffs.. I leave you with a trivia question: Who is the youngest NHL player to win the Conn Smythe trophy, for MVP of the playoffs? Since there probably aren't a lot of die-hard hockey fanatics out there, I'll give you a pretty big hint: he currently plays for my Colorado Avalanche. If you want the answer, email me at [moreau@colorado.edu](mailto:moreau@colorado.edu).

## **2. Vice President of Operations' Message**

The New and Improved NAAA Electronic Phonebook/Contact Database and your Membership in the NAAA  
by Mike Moreau (GSFC 1994)

Brian Roberts and I were happy to see a lot of positive comments from everyone who submitted their NAAA webpage questionnaires last week.. However, one area that received a lot of complaints was the NAAA Electronic Phonebook. Well GOOD NEWS! After months of anticipation, the new and improved NAAA Electronic Phonebook and Contact Database came on line this week. Visit [www.nasa-academy.org](http://www.nasa-academy.org) and select "electronic phonebook" to check it out!

It has literally taken months to pull together all of this information from the membership forms submitted last fall, the old database, and numerous other sources. But now, for the first time since the incorporation of the NAAA, we have an exhaustive database that includes the alumni from ALL of the NASA Academy programs and that is accessible to the members. Now if you are trying to remember the current mailing address, phone number, or email for

one of your friends from the Academy, you can visit the NAAA website. Using the Electronic Phonebook you can type in the person's name and it will bring up their record. Or, for example, you could type in "GSFC" and "1995" to bring up all 23 records for the alumni who attended that Academy, or you could enter "1997" under academy year and it would bring up the records for all of the alumni that attended the four NASA Academy Programs in '97. You probably get the picture...

Maintaining the contact information for all of the alumni and making it available to the NAAA members is probably one of the most important roles served by the NAAA. Not only does it provide a resource for you, it allows us (the NAAA officers) to keep you informed of activities and new services, it allows us to track the active membership for the purpose of elections and other member-only benefits, and it allows us to keep the email lists, which are the primary conduit of information between the alumni, up to date. A new service that we plan to introduce in the near future is permanent email aliases. Soon, all NAAA members will have an email alias set up as "firstname.lastname@nasa-academy.org." For example, if I wanted to email Gene Fujii, but I don't have his address handy, I could just send a message to gene\_fujii@nasa-academy.org and the message would be directed to the current email address listed in the database for him. Of course, for this service to work, we need to have everyone's current information in the database.

With this in mind, within the next two weeks, the NAAA will be kicking off its first annual membership drive. Don't worry, this isn't like a pledge drive on NPR, although there are some similarities (we also rely on "guilt factor" alone to get you to make contributions...). The NAAA constitution states that in order to be considered an active member, you must re-register once per year. If you are not an active member, you can't vote, run for office, or take advantage of other members-only benefits. Requiring that everyone re-register once per year is also the way that we keep the NAAA contact database up to date. This annual membership renewal process is just as for any professional organization such as IEEE or AIAA, except that currently the NAAA has no formal dues structure, so membership fees are submitted on a voluntary basis. The good news is that renewing your membership will be as easy as visiting the NAAA website and submitting an updated copy of the membership form.

You can expect to receive instructions for renewing your membership in the next two weeks. Additionally, as part of the membership drive we will be trying to track down some of the alumni who we have lost contact with over the past months. Meanwhile, don't forget to check out the new and improved electronic phonebook, and look for more information regarding the email aliases and other new services in the near future.

A special thanks goes out to Chris Lewicki, Jane Thorpe, and Brian Roberts, who all invested countless hours compiling and organizing all of the information and setting up the database long before I got involved with it.

### **3. Houston "Reunion" at Lunar & Planetary Science Conference**

Pre-Reunion in Houston  
by Jacob Yates (GSFC '96)

A gathering of some of the alumni occurred during the week of March 16-20th for the annual Lunar & Planetary Science Conference (LPSC) in Houston, Texas. The principals, consisted of Mike Lisano (GSFC '93), Michelle Minitti (GSFC '94), Jeff Nettles (GSFC '97), Holly Ridings (GSFC '96), Andrea Rogers (GSFC '98), and Jacob Yates (GSFC '96). This year's conference, hosted by the Lunar and Planetary Institute, was dedicated to the late Eugene Shoemaker.

Reportedly, this year's LPSC had the largest attendance record ever. A number of people observed that many more universities outside the "mainstream" planetary community were participating. A sign that more data is being made available to the scientific community than ever before. The key talks that people focused on involved the results back from Mars Pathfinder, Mars Global Surveyor, the Galileo mission, and the SNC meteorites (mainly ALH84001).

During the conference, the alumni always seemed to be running into each at the different sessions. Which spilled over into lunch sessions at popular hangouts like the "Outpost." However, the main social gatherings were during the evening poster sessions at Space Center Houston. While at mid-week, we also all met up for the traditional Bar-B-Que & Chili Cook-Off. At our table we had a few "Friends of the Academy" join us. They included Carl Pilcher (NASA-HQ), Julius Dasche (Space Grant Director), his wife Pat Dasche (National Space Society), and Leonard David (Space News correspondent). On Friday, a few of us were taken on a tour of the new mission control center for the International Space Station (ISS). During the tour, we watched the flight controllers run through their first integrated simulation with the mission control center for the Space Shuttle.

Granted most of the incoming alumni to Houston would be arriving the following week for the "Vomit Comet" Experience. However, the mini-reunion, that we had at the LPSC was a fun time to get caught up with old friends and colleagues. I already, can't wait for next year's conference to enjoy it all over again.

### **4. Event Report - The SEDS Space Forum**

Astronauts or Astrobots? Dr. Robert Zubrin and Dr. Louis Friedman  
by Laura Burns (MSFC 96) and John Cmar (my fiancé as of December)

My name is Laura Burns, MSFC 1996, and I live in the Greater Cincinnati Area. On March 25, my fiancé, John Cmar, and I took a road trip to Purdue University to attend the Purdue SEDS Space Forum. John and I both agree that this event was one of the most interesting that we have ever attended. (And John is a medical student!) Both Dr. Zubrin and Dr. Friedman were both

informative and witty. During the question and answer session, if we wanted to pose our questions, we would have had to fight off the hoard of eager attendees. Afterwards, both presenters interacted with the remaining crowd and Dr. Zubrin signed copies of his book. Overall, the event was a great success. I only wish that more students from the Cincinnati area could have attended.

## The Purdue SEDS Space Forum by Matthew Lowry, SAI Alumnus

On March 25th of this year, an unprecedented event took place at Purdue University. The Purdue University SEDS held the first annual Purdue SEDS Space Forum in an ongoing effort to inform and educate anyone with an interest in the exploration and development of outer space. This article will first outline my philosophy behind the idea of the Forum, and I will then give a summary of the discussion that took place in March.

I have Dr. Soffen and his idea of the NASA Academy to thank for the inspiration behind my idea of the Space Forum. As a teacher and NASA Academy alumnus, I began to think a few years ago about the direction that humanity's exploration of the heavens would take within my lifetime. For many of our young people, who are at heart naturally curious explorers, the topic of what wonders lie beyond our atmosphere is very intriguing. No doubt this is one reason why NASA spends much time and effort on public relations and outreach; let's face it, space is cool, and many people are willing to learn more about it! However, the difficulty in informing the public lies in this fundamental fact: there is much politicking in the effort to explore space on the parts of many institutions... NASA, independent space organizations, private aerospace industries, etc. I wanted to provide some small way to allow at least some people to have a chance to see more than one side of the story that is the exploration of space; however, there had to be an opportunity for those people to scrutinize the information that is given to them. Thus, I proposed the idea of a series of open-forum discussions geared towards informing those in attendance about various issues of space & space exploration.

This concept of the open-forum discussion would be accomplished by providing the general public direct access to leaders in the space community; two prominent members in this community would debate a pre-arranged topic, and they would then be scrutinized and questioned by a panel of university professors. This panel of professors would be comprised of various disciplines spanning the university. The purpose of the panel is to act as a catalyst so that audience members will become more involved in the discussion. After some preliminary questions from the panel, the floor would be opened to any of those in attendance who wished to make a statement or question the speakers. In this manner, those present would have the benefit of receiving immediate feedback from the experts on the questions that concern them.

These discussions are not meant to prove anyone right or wrong, rather their purpose is to educate and inform any interested individual about some of the topics of space and the exploration of space. It is my sincere hope that this idea catches on and spreads, as I believe it is such informative interaction with the public that will help us to carry on the message of space exploration to the next generation of explorers.

The first annual Purdue SEDS Space Forum took place on March 25th, 1998 at Purdue University's LOEB Playhouse. The topic of discussion was "Astronauts or Astrobots: What is the Future of Space Exploration?" Our honorary speakers were Dr. Louis Friedman, Executive Director of The Planetary Society, and Dr. Robert Zubrin, originator of the Mars Direct plan to explore the Red Planet; Dr. Friedman defended the viewpoint of robotic exploration while Dr. Zubrin supported the human aspect of space exploration. The panel consisted of four Purdue University professors, one from history, life sciences, economics, and engineering with an additional history professor serving as the moderator for the discussion. There were approximately 400-500 people in attendance from various backgrounds: university students, high school students, and members of the general public.

Though the topic was intended to deal with general space exploration, much of the discussion focused upon the exploration of Mars. This was because both speakers felt that Mars is the next logical step for the expanding sphere of humanity's influence in outer space. Both Dr. Friedman and Dr. Zubrin started out the evening with their views on the topic. Dr. Zubrin stated that he thought that the Space Program of the United States was "anemic" and suffering from a lack of real vision. It was Dr. Zubrin's opinion that this necessary vision can only come from the pioneering spirit that filled the country during the days of the Apollo Moon missions and Skylab; Zubrin contends that humanity must use robots to explore, but that the true vision and grandeur of space exploration cannot be realized without sending humans to be on the front lines of exploration. In addition, he states that only by having the potential of humans on the edge of the space frontier can the public of this nation be inspired to the dream of expansion outward into space. Finally, Dr. Zubrin said that people must create the necessary conditions to explore space with human hands. Dr. Friedman had the opinion that America's Space Program is thriving and accomplishing great things consistently at present. He also contended that a great deal of useful exploration could be accomplished through the use of robotic probes and that humanity might be really satisfied as a species of "couch potatoes" that explored space remotely. He additionally said that in order for a thriving human program to be successful, then there must exist the correct political and social conditions. It should also be noted that Dr. Friedman was by no means opposed to any form of human exploration.

The panelists then began scrutinizing and questioning the speakers. Very soon afterwards, numerous individuals from the audience began to line up at the microphones provided for the audience/speaker interaction. As a matter of fact, interest was so high that even though the event was scheduled for an hour and a half, there were still audience members with questions when

we stopped after two hours and 45 minutes! The evening was a great success and enormously inspiring to boot!

The first annual Purdue SEDS Space Forum was made possible by a grant from the Indiana Space Grant Consortium. In fact, there has been a proposal written to the ISGC and unofficially accepted for next year's event! If any of you are interested in knowing more about this event and the philosophy behind it, then please contact me at lowrymp@physics.purdue.edu. In addition, the Purdue SEDS had the entire thing videotaped, and if you are interested then notify me, and we can send you a copy of the tape for a \$10 fee.

Carry on the dream!  
Ad Astra! -- Matt Lowry

## **5. Event Report - National Space Symposium**

**DISCLAIMER:** these are my personal views and not the official views of NAAA. But hey, I am the editor, and to quote: "It's good to be the king." :) Also, this is not a full event report, but rather is more focused on just Dan Goldin's speech, since NASA is our common denominator. So the following is half event report, half editorial.

I attended the United States Space Foundation's 1998 National Space Symposium this month in Colorado Springs. It was attended mostly by company presidents and US Space Command officers (Space, the next battlefield ... I think I will join the Klingons :), and was focused on policy rather than hard engineering or technical issues. Once again, I heard Dan Goldin speak; it was not as good as last year's speech, but had a few interesting points. There were two major points that he made that I would like to briefly talk about.

The first was a quote that he made (I will paraphrase), saying that while it is NASA's role to further the development of cutting edge technologies to develop "revolutionary" new launch systems, it is not NASA's role to fund the complete development of such systems. Furthermore, all of the current systems (Rotary Rockets, Kistler Aerospace, etc.) are only "evolutionary" and therefore do not deserve NASA's help.

While I agree that NASA should avoid trying to develop and maintain operational systems (and thereby favor one company over another), I disagree with some of the implications his broad statement. I think NASA's role should be to help all of the new players in the launch business cut through the massive red-tape to allow for faster development and easier testing. I also think NASA should procure "unproven" systems by signing contracts promising future purchase of services (within a given time period) on the condition of XXX number of successful launches have occurred first. These steps would provide immediate benefits to lowering the cost of access to space by both ensuring a viable market once the vehicle is proven and by prompting the venture capital needed to fund these enterprises.

As for the nature of evolutionary vs. revolutionary, I disagree with Dan Goldin's definition. I feel that many of these newer launch vehicles are revolutionary, in much the same way that Pegasus was revolutionary. Yes, they may still be expendables, but some have unique propulsion methods (Rotary Rockets), some are partially reusable, all fit niche markets that are currently untapped, and all will offer significant reductions in the \$/kg for launches. A vehicle does not have to be fully reusable to be revolutionary. In fact, my opinion is that NASA's handling of the whole DC-XA, X-34, Venturestar, and other SSTO vehicles programs was to both slow down the development process and to add in unnecessary bureaucracy. Again, my answer is to promise to buy launch services, but maybe making an open statement: promise to buy 5 launches from Company A, 2 from B, and 1 from C, assuming proof of successful flight, within a given time period. And of course, taking from the X-Prize, company A is the first company to perform the demonstration to the NASA requirements (set down well ahead of time in writing by NASA). This would be cool, but it is of course totally against the Federal Acquisition Reform (FAR) laws; however, I feel that it would be a great way to get real improvements in access to space.

The second quote (again paraphrasing) is that NASA should totally get out of the operations business and become only a technical R&D house. This comment was made mostly in response to questions and comments regarding the Space Station, but refer to (in my opinion) NASA's poor track record at operations. I personally whole heartedly agree that NASA should return to a pure R&D status, almost like Bell Labs used to be. I think they should get out of many of their activities (Mission to Planet Earth) and instead commercially procure data from commercial vendors. I think they should sell the Shuttles to US Alliance and disband the astronaut program, and just buy services and flights for payloads, and hire the US Alliance astronauts on an as-needed basis (would this mean that the astronauts would be classified as temporary workers, instead of professionals?) Most of all, NASA should get out of the business of flying satellite, and concentrate on improving technologies that will benefit all American aerospace firms, not just the particular slimy subcontractor that is supporting that individual laboratory / project.

Anyways, those are my thoughts on these two points. I hope they will spark some debate on the email groups.

## **6. Special Report - Ames Launch Reunion**

Ames Academy Reunites for STS 90/Neurolab Launch  
by Don Olinger ARC '97

Due to budget constraints and being located on the west coast, the participants of the 1997 Ames Astrobiology Academy were unable to watch a shuttle launch this past summer. A few weeks ago, though, six of the eleven students made up for that fact by traveling to Florida to see the April 17 launch of Columbia and STS 90/Neurolab.

Those making the trip were Eric Bean (University of Virginia), Andrea Fori (New Jersey, Lockheed Martin Missiles and Space), Kevin Hand (Dartmouth) and his brother, Pat McKenna (JSC Co-op), Don Olinger (Colorado Springs, Lockheed Martin Astronautics), Jeff Wills (New York City, Andersen Consulting), and Dr. Doug O'Handley (director of Ames academy).

The STS 90/Neurolab mission, whose primary goal is to learn new things about the nervous system, is not all that unfamiliar to the '97 Ames academy. For our group project this past summer, we attempted to append a dream survey to the Neurolab Sleep Questionnaire and were only stopped by one big shot in DC on a minor technicality. During one night of the academy, we met the crew and hung out at a bar with them. Knowing the crew made seeing everybody's first launch all the more special. It also made for great seats because the crew arranged for us to sit in the VIP section, only three miles away from Pad 39B.

Late Wednesday (Apr 15) night, the majority of the group met at Orlando International Airport where some delayed flights made for one long night. Some then headed to Titusville where they were able to snag a room while the rest of us headed for Melbourne.

On Thursday morning, the originally scheduled date of the launch, we awoke to news that the launch had been postponed a day because of a faulty Network Signal Processor (NSP). We also learned that delaying launch past Friday would mean a 3-4 day delay in order to replace all the animals onboard Neurolab. Due to the delay, we spent most of Thursday touring the very crowded KSC visitor center and relaxing on the beach. That night, the group traveled to Melbourne to have dinner at the Chart House, a tasty, high class restaurant selected by Doug.

The launch delay did claim two casualties. Doug had to fly out Friday morning to attend a wedding in Phoenix while Eric had to run in Friday and Saturday's ACC track meet in Orlando. Both were unable to attend the launch. All of us others had flexible enough schedules that we were still able to watch Columbia lift off Pad 39B at 2:19 PM on time without any technical difficulty or delay. Some quotes from the group after launch included: "incredible", "totally awesome", "unbelievable", and "you really need to experience it in person to appreciate the true beauty of it".

After the launch the group went their separate ways. Jeff headed to St Augustine to attend a friend's graduation and then later picked up Eric on his way to West Palm Beach to visit another friend. Kevin and his brother started the long drive back to Vermont, stopping in North Carolina to visit their sister on the way. After hitting the beach one last time, Pat and his JSC co-ops started driving back to Texas, stopping in New Orleans to party along the way. Andrea and Don hung out together and hit the beaches, did Epcot, and managed to finally take the KSC bus tour on Sunday afternoon.

Despite having to pay for the trip out of own pockets, everybody, including those who couldn't see the launch, agreed that the trip was well worth the money. Besides seeing the launch, everyone was happy to see each other again. This trip served as a great climax/sequel to this summer. In the future

the '97 Ames Academy plans to get our dream study to fly on some other shuttle mission and get together in late 1999 to watch one of the X33 landings in Great Falls, MT where Don's parents live.

## 7. Editor's Ramblings

by David Kalman, NAAA newsletter editor

First off, I would like to thank all of the various members who have contributed articles this month. This is great., keep the articles coming. Next, many will notice that I have been trying to rename some of the sections to give better descriptions of the articles (event reports, gatherings, editor's ramblings, etc.). Please let me know what you think of these headings, or of any other ways that I can improve the newsletter.

Now, a few misc. ramblings from/for the sleep deprived:

1. What should we call it when a bunch of NAAA members get together at a conference or a barbeque? It really isn't a reunion since many of the people have never met before, but it isn't a formal meeting. Any ideas? Do we call them gatherings, or this sound like a bunch of wild animals herding together? :)
2. How is it that no one mentions or tries to arrange these "reunion" type events on the mail list, yet the alumni are still able to find each other? Was I left out of the group mind meld?
3. I volunteered at the state Science Olympiad this month (the event was Practical Data Gathering). One of the problems for the junior high schoolers was: given a CD jewel case, a ruler, and a scale. Calculate the density of the plastic. Assume uniform density. Hint:  $\text{density} = \text{mass} / \text{volume}$ . Over half of the junior high schoolers could not even start the problem, and didn't even perform a single measurement (no dimensions, no weight, nothing). Am I asking too much, or is it just the continuing decline of the American educational system?
4. Also from Science Olympiad, I had 3 out of 5 teams enter for one test period without any writing utensils. I told them to go back out and get something to write with. One of the eighth graders (a girl) comments that she only has eye liner. Now I know that looks play an important part in getting ahead in US business, but this is Science Olympiad. I just shook my head at her. Maybe she has learned somewhere that good looks will get you farther in this world than brains; I guess we will wait and see. (I have said that there is nothing sexier than flight hardware, which may explain why I am still single. :) Incidentally, her team was one of the teams that failed to even start the jewel case problem.
5. I think we should change this publication's name from a newsletter to a magazine. I think of a newsletter as more like 4-8 pages, and this tends to consistently be over 10. Besides, we could sell advertising (raise money for Brian?) or add in artwork, or simply publish more articles, since we are getting plenty of entries (I have been avoiding doing repostings, and have not offered

up an editorial area like in the insert for Space News). I think calling it a monthly magazine would be a slick sales idea, on the par with the NSS's Space Views electronic magazine that is available on-line.

6. If we call it a magazine, and we are leaving it to the editor's discretion as to what article to print, then if you write an article on a technical project, will this count as being published (for those PhD students who are trying to get tenure?)

## **8. Where are they now?**

For future issues, I suggest the following format for the submissions:

Name:

email:

Home contact info:

Work company:

Work title:

Work contact info:

Major work project(s):

Discussion (2-3 paragraphs, can be either or both personal and work related)

So here they are, MSFC Academy 1 (1994), in their own words:

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Project: Working towards Ph.D. in atomic physics

Discussion: Immediately following my summer at the NASA Academy in Huntsville I entered graduate school here at the University of Virginia to study atomic physics. I am a research assistant in the Ultra-fast Laser and Atomic Physics Lab under the direction of Dr. Robert Jones. Using short pulses of

intense laser light (130 femtosec., 0.25 TWatt peak power), we are able to excite and monitor evolving atomic systems. A goal of the research is to learn the atomic (and molecular) response to intense electro-magnetic fields and to use this knowledge to gain coherent control of atomic and molecular processes.

When I'm not in the lab I've enjoyed playing lots of basketball and hiking around the Blue Ridge mountains. I live in a small cottage on a horse farm about 15 miles north of Charlottesville. If all goes well, I plan to graduate in May of 1999. I've been keeping my eye open for interesting post-docs, but nothing is set for after I leave UVa.

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Major work project(s): AXAF-1 and SPARCLE

Discussion (2-3 paragraphs, can be either or both personal and work related)

I enrolled in the Doctoral Program at Alabama A & M University in Huntsville, AL, Fall 1997 where I am studying Physics/Optics. I received my Master's Degree in July 1997 in Physics/Materials Science from Alabama A & M University. My thesis topic was ' The Characterization of Structural Defects in Zinc Selenide Grown by Physical Vapor Transport.'

I have done several co-ops with Marshall during my Master's program in the Space Sciences Laboratory. I worked with Dr. Alex Lehockzy, Dr. Donald Gillies and Dr. Ching-Hua Su on characterizing II-VI Semiconductors.

I just passed my qualifier exam in February so I am officially a PhD candidate now. My advisor is Dr. Jai-Ching Wang but I work directly with Dr. Nickoli Kukhtarev on Photorefractive crystals.

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Melanie Matherne

I am a Summer '94 alumni. Right after my work at NASA that summer I began working as a Co-op Facilities Engineer for Mobil Oil Company (Offshore-Gulf of Mexico). I alternated work and school for 6 semesters and am now finally graduating on May 22, 1998 with my Bachelor's Degree in Mechanical Engineering from Louisiana State University. I am starting a full-time job with Shell Chemical Company near Baton Rouge in July. I will go through a two year rotation program where I will work as a Mechanical Equipment Engineer for 8 months, a pressure equipment engineer for 8 months and a project engineer for 8 months.

Lagniappe:

I took a European Vacation for a month in summer '96. I saw Josh Cassada for Mardi Gras in New Orleans in Feb '96, and in Chicago for July 4, 1996. I also saw Heather Stephens last summer while she worked in New Orleans temporarily.

This is a brief summary of my "roller coaster" life since summer '94. If you have any specific questions, feel free to write back.

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Oil & Gas Software design and development

Right this second, I am in England and headed to Paris tomorrow morning. I'm finding it very difficult to write about my life in the States, as you can imagine! :)

I've been working for an oil and gas software company for the two years I've lived in Denver, after a long stint working in satellite and environmental research at Los Alamos National Laboratory. My company just put me in

charge of any Internet software development we will do, and I'm looking to get into some GIS work there, as well.

My long term goal is to head back to school to study anything and everything! And I'm finding that I'd like to spend a year or two traveling and working in other countries.

For now, that's about it...other than Bath is incredibly fascinating! I hope I can come back and spend more time here.

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Name: Eric Vaughan, E.I.T., C.E.M.; Marshall '94; "High Power Array of Phase Locked Laser Diodes" Project - Edward "Sandy" Montgomery principal investigator, with Ken Herren

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Work company: Honeywell Inc  
Work title: Electrical Engineer, Measurement and Verification  
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205-945-3569

Major work project(s): Tracking of over 40 Performance Contracts, totaling over \$1.5 million in annual guarantees over the past three years, covering Alabama, Mississippi, Louisiana, and Florida. Also, ~\$10 million in new projects.

Discussion (2-3 paragraphs, can be either or both personal and work related)

I grew up in Baton Rouge, LA, and attended Louisiana Tech University. I have a mother, and younger brother, who is a 3rd Class Petty Officer in the Navy, stationed on the USS Enterprise out of Norfolk, VA. I enjoy golf, racquetball, mountain biking, softball, and most of all, SCUBA diving.

I graduated from Louisiana Tech in Fall of 1994, immediately following my internship at Marshall, and have been with Honeywell since then. Most of my experience over the past three years has been in the Performance Contracting business. Most of our projects involve doing energy saving retrofits and controls upgrades for small to large school systems, colleges, commercial buildings, and industrial sites. My job responsibilities include: calculating predicted energy savings from mechanical and electrical retrofits involving chillers, boilers, air handlers, lighting, and electrical system improvements; supervising job progress; job estimating; preparing energy audits, analysis, presentations, and adjustments; selecting appropriate auditing methodologies per Federal IPMVP guidelines; preparing contract language; working with subcontractors (electrical, mechanical, and controls); and working with various utility companies. I can't say that this is what I thought I would be doing, but it has been an incredible

learning experience, especially in the construction and project management areas. I became a registered Engineer in Training (E.I.T.) prior to graduation, and have since then been registered as a Certified Energy Manager (C.E.M.). During the next year or so I plan to become fully registered as a Professional Engineer (P.E.). Long term goals include pursuing a Masters degree, perhaps in Optics, and becoming an astronaut.

I still maintain a close relationship with a few from my Marshall group, and they are some of the best friends I have. Albeit through email, but it's better than nothing. The time I spent at Marshall definitely goes down in my history books, and has made me a better person, and engineer.

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## **9. Next Issue**

Issue deadline: 25 May 5 PM MDT (MST??)

Planned articles:

- Officers messages

- Article on flight experiments from Houston

- Update on jobs page

- Update on summer reunion plans

- Update on Mike's hardcopy newsletter

- Suggestions on future potential gatherings (i.e. upcoming conference that people will be attending)

- Congratulatory list of people who graduated in May, and where they plan to go (now that their celebration hangovers are gone)

- Where are they now - GSFC Academy 3 (1995) (I am trying to go in date order)

## **10. Contact Information**

The following are way to contact the officers of the NAAA:

THE NASA ACADEMY ALUMNI ASSOCIATION

[www.nasa-acdemy.org](http://www.nasa-acdemy.org)

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