

The RASCAL Register

September 2022

Issue 54

Mark Your Calendar

Thursday, December 1st

RASCAL Holiday Luncheon
Elks Lodge
940 Larkspur Drive
Livermore, CA

Cost will be \$35.00

RASCAL Summer Picnic Asbury Methodist Church Patio June 2, 2022



Ginger Common, Jane Ann Lamph,
Ken Common



Maclyn Pons, Marianne Green, Ron Pastore



Martha & Rich Campiotti



Jim & Glenda Muir, Suzanne Didlake



Sharron Norris, Glenda Muir, Bernie Marx, Carole Price, Christie O'Shea



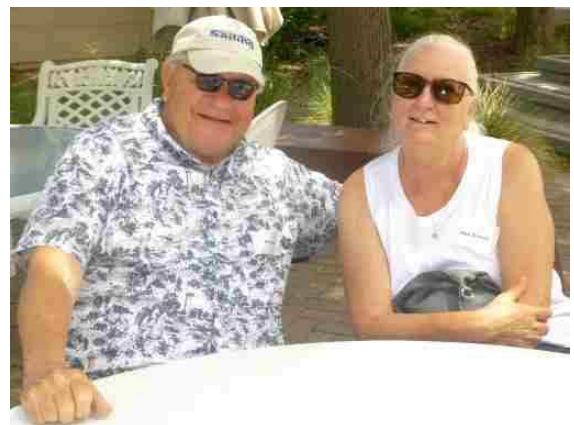
Bill Ballard, Rene Bierbaum, Rena Zurn, John Didlake



Back: Harry & Karen Davis, Marianne Green
Front: Al & Marge Mederios, Maclyn Pons



Nancy Yang, Sandra Lormand



Jim Bartel, Alice Johnson



Bernie & Ken Marx



Jolene & David Abrahams



Joe & Janet Vieira



Graham Thomas & Dick Jones



Wanda & Dick Finn



Joanne & Mark Perra



Joanne & Ray Culy

Cray Computer

By Dick Isler

This is a story of empowerment, teamwork, and diverse cross-functional teams working together under pressure of tight deadlines to accomplish a feat of significant importance to Sandia, at a time when these buzz words were not even in use, much less in high fashion.

The time was the late 1970s, and Sandia, Livermore (as it was called back then) was in need of a major upgrade in its scientific computing capability and capacity. We (Arnold Schuknect's Computing Division 8235) had just received authority to spend several million dollars for a new (not a hand-me-down as in the past) scientific computer to replace the two aging and by then underpowered CDC 6600s which had been in use since the late 1960s. We were behind by at least a generation in scientific computing machinery, and this was an opportunity to leap-frog into the forefront of scientific computerdom. Cray Research had recently delivered its first several machines to LLNL and Los Alamos, and the price for a Cray was within our budget. At the same time Control Data (CDC), Cray's competitor, was preparing to announce the availability of their new machine, based on the one-of-a-kind STAR computer that was made for LLNL several years previous. Control Data was also offering its Cyber 76, the latest version of the 7600 line of machines. The Cyber 76 was to be the last of its generation, a sort of mid-life kicker to the genre.

Arnold put together a team of people to see to the procurement of the new machine. The team consisted of Dick Isler, Tom Jefferson, Jim Lathrop, from the scientific computing divisions, and Al Derby from purchasing, along with several application programmers (Juanita Benson, Vern Gabrielson, Chuck Bisson, Pat Leary, Gordon Miller, several others) who would be resources for the team to be used as needed. Dick was the team author and project lead, Tom was the "long benchmark" developer, and Jim was the "short benchmark" developer. These titles had nothing to do with the stature of these gentlemen, rather they referred to the types of programs that were to be used to test and select the winning machine.

The job of the team was to procure the best possible scientific computer in the shortest possible time within budget. There was a definite date by which the money had to be spent or lost, which, unfortunately, represented about half the time typically required to procure one of these beasts! On top of that the DOE had decreed that the procurement was to be fully competitive. No sole-source was allowed even though the Cray was clearly in a class by itself when the raw specifications of the two delivered machines were compared. (Bear in mind that the new CDC machine was still in development and had not been delivered to any customers.) That meant that a full RFQ complete with detailed specifications, DOE required implementation plans, and documents which described the procurement process and justified the final selection all had to be prepared, approved by Sandia's management, purchasing and legal staff as well as DOE all the way through Headquarters (we're talking megabucks here!) before the order could be placed. On top of that the specifications had to be written in such a way as to allow competition between two seemingly unequal entities as the Cray 1, (think Shaquille O'Neal) and the Cyber 76 (think Spud Webb).

The upshot of this whole process was that the team delivered as required. Sandia, Livermore became the proud owner of a new Cray 1 computer, the first Cray at Sandia (either site!) and they did it in record time despite going through the equivalent of two (count 'em, two) full procurements. The first procurement was disallowed by the DOE on the basis of a question raised by CDC (not a formal protest) as to the procedures followed during the benchmarking. Even though there was no formal protest the DOE asked us to redo the procurement and change our allegedly errant ways so that there could be no doubt in the end who the winning vendor was. The journey from beginning to end was exciting, exhausting, educational and ultimately rewarding for all involved, and produced some anecdotal experiences which are still hashed over occasionally when the remaining team members happen to get together.

For instance, I am convinced that the real credit for the success of this venture should go in large part to the word processing operators Sherry Angelini and Chris Imler, and a Kodak copy machine that performed almost as heroically as the two ladies. The efforts of all the above in rapidly turning out revision after revision of document after document played a critical part in staving off the tactics of CDC to buy time while they finished development of their new machine. CDC appeared to stand a much better chance in the competition if they could benchmark the new machine rather than the Cyber 76. However, the machine was not quite ready at the time, and rather than admit this fact they kept sending questions and requests for clarifications that would normally require considerable delays or extensions in the process. The outstanding service by the

word processors and that copy machine enabled us to turn documents and vendor responses around in record time, and the delays in the process were kept to an absolute minimum. In the end CDC had to benchmark the long-in-the-tooth Cyber 76.

Despite the apparent disparity in the relative muscularity of the two contending machines, CDC came amazingly close to winning the competition. The CDC machine, having been around a long time, had compilers that could optimize the benchmark programs to squeeze the last bit of performance out, and the operating system was similarly skillful in running the benchmark set as efficiently as possible. The Cray, on the other hand, had a fairly primitive compiler and OS, and relied on raw power to get the job done. In the end the raw power won out, but it was closer than anyone expected.

The benchmark trips themselves were the stuff that folklore is made of. There were several all-night sessions, waiting around for machines to be made ready and for the series of long benchmark jobs to run. We brought along the cadre of application programmers to be on hand if there were problems running the individual programs and for checking the results to see if the right answers were produced. We also had Al Derby along to keep us all even more honest than we normally were, and we threw in a department manager or two for good measure. This was obviously back when budget was further down the list of considerations than it is nowadays.

The saddest tale of all to emerge from this escapade happened to Tom Jefferson. We were in Chippewa Falls, Wisconsin, home of Seymour Cray and the manufacturing plant for Cray Research. It was the dead of winter and we were destined to spend another late-night session waiting for the benchmarks to run. We had done the same the night before and had gotten back to the motel after everything in town had closed down. Tom was going to be better prepared this time so before we started, he stopped at the local package store and bought a six-pack of Lienenkugel Beer, the local brand of suds. We did indeed stay late that night, but Tom was in good spirits because he had something to look forward to. However, when all was done and Tom got back to his room, he found that all the beer was frozen solid, since he had left it in the trunk of the rental car in sub-zero weather all night long.

There were other incidents, but this is getting pretty long. Maybe the other people on the team can add to this story. Suffice it to say that it was an experience that will stay with the participants, and I believe it illustrates that the corporate values were in practice long before they were formally articulated.



Front: Tom Jefferson, Chuck Bisson. Seated: Gordon Miller, Vern Gabrielson, Pat Leary, George Anderson, Dick Isler, Jim Lathrop. Standing: Freddy Whitworth

Return to Sea Ranch: Remembering Len Hiles

By: Jonathan (Wen) Hsu



This is an excerpt from an essay written by Wen Hsu. It can be seen in its entirety at: [Return to Sea Ranch - Len Hiles Tribute](#)

I've been visiting Sea Ranch for nearly 20 years. The place holds a special place in my heart; I selfishly try to keep it a secret, reluctantly sharing its existence with only my closest friends. I'd not been back for four years. I was excited when the opportunity came up for a visit, but saddened by the reason for this return. Len Hiles, a friend of mine, a retired colleague from Sandia National Laboratories, and a longtime resident of Sea Ranch, had passed away and his friends were gathering to celebrate his life. As I retraced the road back to Sea Ranch, the memory of how Sea Ranch revealed itself to me slowly returned, and with it the remembrance of Len came drifting in.

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Recent Deaths:

<u>Name</u>	<u>Date</u>
Don Stoner	12-22-21
Bob Schultz	01-03-22
Jack Pons	01-04-22
Bob Bedford	01-13-22
Bill Floyd	01-22-22
Joan Madsen	02-16-22
Jimmie Bauman	04-10-22
Suzanne Follett	04-10-22
Juanita Benson	04-16-22
Don Benthusen	04-16-22
Tim Evans	05-08-22
John Keilman	05-08-22
Sylvester Grisby	05-28-22
Cecille Phillips Johnston	07-06-22
Thomas Felter	08-02-22
Judy Morice	08-06-22

RASCAL Dues

It is time to renew RASCAL dues for 2023. Send your contact information along with your \$5.00 yearly dues or \$50.00 lifetime dues to Retirees Association of Sandia/CAL, (RASCAL), P. O. Box 18, Livermore, CA 94551. If you would like to transfer funds from your SLFCU account, please contact our treasurer, Roger Everett at:
roger.everett@sbcglobal.net

***Retiree Resources***

HR Solutions - 505-284-4700
 Via Benefits: 1-888-598-7809 (TTY:711)
 Sandia Retiree Website: <https://hr.sandia.gov.sandia-retirees/>

Death Notification Procedures:
https://sandiahr.custhelp.com/app/answers/detail/a_id/8677

Thank You

We want to thank all of you who have contributed articles and photos on your vacations, hobbies, moves to new locations, and other informative subjects. We really appreciate your excellent contributions to the Newsletter. Keep them coming!

Also thanks to Jim Muir and Ken Marx for all the party photos.

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