An Oral History Interview with

TRUE SEABORN

Los Alamitos, California

May 22, 2014

IEEE Computer Society

Abstract: Longtime IEEE Computer Society Editor (the original editor of *IEEE Computer*) and Publisher True Seaborn briefly discusses his educational background and his career as a technical editor prior to joining the IEEE Computer Society. The bulk of the interview focuses on his two decades of leadership with the IEEE Computer Society's publication office, including introducing new publications, hiring and managing an editorial staff, working with volunteer leaders, and other topics.

Yost: My name is Jeffrey Yost from the Charles Babbage Institute at the University of Minnesota, and I'm here today, this morning, at the IEEE Computer Society Publications Office in Los Alamitos, California with the former head of the Publications Office, True Seaborn. It is May 22, 2014 and this is an interview for the Computer Society History Committee's CS Leaders Oral History Project. True, can you begin just by answering a couple of biographical questions on when and where you were born?

Seaborn: I was born December, 1934 in Tecumseh, Oklahoma.

Yost: Did you grow up there as well?

Seaborn: No, we lived there until I was about three. Times were hard and work was scarce, and people did what they had to do to survive. This was in the middle of the Depression, of course, and the family moonshine still having been destroyed by the revenuers, the family had no source of income. So my father rode the rails to California and found work there. My mother and I followed about a year later, and joined him. And that's where I grew up, in a little company town on the Mojave Desert called Trona.

Yost: Can you talk about your interests in school, in the pre-college days?

Seaborn: Girls and sports were my primary interests, I suppose. I didn't star in either subject. I was an avid reader, chiefly the childhood classics and the settling of the West. If I had any talents and inclinations, they were probably more on the language side. I was a middling student, but I graduated high school two years ahead of my class. I started college in 1951 when I was 16 and attended off and on for a couple years, during which time I got married and started a family. I didn't get serious about college until 1955, two years after I was married.

Yost: And you went to UC Riverside?

Seaborn: Actually I started at Chaffey College, a junior college in Ontario, California, where a number of my classmates had enrolled. I finished my undergrad work in June 1958 at UC Riverside.

Yost: And what was your major?

Seaborn: English Lit. I was awarded a one-year fellowship to Claremont Graduate School. It was part of something called the Intercollegiate Program of Graduate Studies, funded I believe by the Ford Foundation. I attended Claremont with the intention of getting a master's degree and then going on for a Ph.D, with the eventual goal of teaching at the college level. I had worked full-time commencing in 1955. Claremont frowned on full-time grad students who worked a significant number of hours per week, but by 1958 my wife and I already had two kids, and the stipend from my fellowship didn't come close to covering my family's expenses. So keeping the job was a necessity. But after my first year I had to admit that maybe Claremont had a point about trying to attend grad school full time while working full time. That summer, with my first year of grad school behind me, I continued my job as a produce clerk while reconsidering my options for the future, when I was offered a full-time position as an associate in English at UC Riverside. The offer came out of the blue, like manna from heaven, and to this day I have no idea how it came about. I could only guess that some of my former undergrad profs had kept track of me and learned of my situation. Certainly somebody put in a good word for me. At any rate I gratefully accepted, and for the next three years I taught freshman English to freshmen and sophomores there while I continued to read for my comps. During my third year, the chairman of the English Department announced his retirement. The incoming department chairman, a new guy from the Midwest, noted the long delay in completing my comps and told me I'd better fish or cut bait. I still didn't feel prepared, so I began looking around for another honorable way to make a living. That's how I began working in the aerospace and computer industries as a report and proposal writer/editor.

Yost: Was your first job in the aerospace industry with TRW Systems Group?

Seaborn: Actually, I worked for a job shop first, a place called Coastal Publications in Fullerton.

We produced handbooks and manuals for aerospace contractors such as the Aerospace Corporation and TRW. Both were advertising for tech writers, and I answered both ads. Got job offers from both companies, and I went to work for TRW.

Yost: You were editor of a publication called the *TRW Space Log*?

Seaborn: Eventually, yes. For the first five years at TRW I was a tech writer/editor, initially in support of the company's contracts in the ICBM programs, and later in support of the Army's development of the Cheyenne rigid rotor helicopter. I edited the *TRW Space Log* for the last two years of my tenure at TRW.

Yost: Was that an internal publication?

Seaborn: Internal and external. It was circulated to about 10,000 people throughout the aerospace industry and trade press. The core of it was a chart that identified and tracked every space launch – payload, mission, launch vehicle, initial orbital parameters, and launch results. For classified launches that information was truncated or omitted altogether. *Space Log* was a popular reference tool. We updated it every quarter. Each issue included one or two contributed articles from professionals in the field. One I remember was from von Braun.

Yost: You had various positions in the aerospace and computer industry.

Seaborn: Right. I always worked around engineers. I think some of their habits of mind must have rubbed off on me.

Yost: Can you talk a little bit about combining your educational experience and the learning process to writing for a technical audience, or at least on highly technical subject matter, and conveying it to both technical and non-technical broader audiences.

Seaborn: Sure. Well, I never could pretend to more than a layman's knowledge but I learned to work with engineers. Many of them are not especially vocal. They're more comfortable with

numbers than they are with words. They know what they want to say, but the words on paper don't always match their intent. So I learned to tease out, just by interacting with them, enough information to clarify a murky passage or a passage that seemed to lack a transition, and I learned to do it fairly painlessly on the part of the engineer. That approach proved to be successful, and it's what I tried to inculcate in new editors when I began working for the IEEE CS. This relatively intensive copy-editing process was a departure from the past practice of my predecessor, John Kirkley. John was the original editor-publisher of *Computer* beginning in the 1960s.

Yost: Was it called that, or was it called *Computer Group News* back then?

Seaborn: You're right. I misspoke. *Computer* began as *Computer Group News* in 1965. In the IEEE, technical groups and societies were authorized to publish a newsletter, sort of a house organ to keep their members apprised of upcoming meetings and other announcements and news. These publications were classified as newsletters, as distinct from a magazine such as *IEEE Spectrum*. Thus *Computer Group News* was technically a newsletter, and the IEEE persisted in calling it a newsletter even though its physical appearance and much of its content clearly marked it as a magazine.

Yost: You mentioned you saw an ad for this position?

Seaborn: It was a two-line classified ad in the *LA Times*. A blind ad, in fact – it didn't identify the name of the organization.

Yost: When you first made contact – I assume you had a job interview. . . .

Seaborn: Yes, several.

Yost: What was your first impression of the Computer Society, the setting and the people?

Seaborn: The Pubs Office was a tiny operation. It occupied two small adjoining offices in a

second story walkup on the edge of a supermarket parking lot in the San Fernando Valley. The atmosphere was warm, congenial, informal.

Yost: And you were coming from a computer services giant, Computer Sciences Corporation?

Seaborn: Yes, I was coming from CSC, which employed several thousand people. Total headcount in the Pubs Office was only five, and two of those were part-timers. Nevertheless, small or not, to me it looked like an ideal job. John seemed to have a good deal of autonomy, and I admired the slick professional appearance of *Computer*. The staff was friendly, and the work was essentially the kind of thing I'd been doing for years: helping engineers improve the clarity and consistency of their written materials. The prospect of running a small publishing operation was exciting.

Yost: What were your initial impressions on the functions of the Computer Society and this office at that time?

Seaborn: It was, as I said, a friendly atmosphere, warm, informal, in some ways like a family. The functions of the office were to publish *Computer* and fulfill orders for conference proceedings from past conferences. Essentially it was a small publishing and book fulfillment operation.   The book orders were handled by a part-time clerk who came in about three days a week to pack the orders and deposit the checks. The Pubs Office contained shelf stock of current active proceedings volumes, backed up by several cartons of volumes stacked in a nearby garage rented from a homeowner. Every few days the order clerk would drive her car to the garage, load up a few copies of each of the current active titles, and replenish the bookshelves. I believe John helped her carry the volumes from her car trunk up the stairs to the office. It seemed like a good deal of manual hauling back and forth and upstairs and down, but evidently it was profitable.

Most of the proceedings orders came in on order forms clipped from conference advance programs, which were circulated via direct mail that originated from the office of the society's executive secretary, Harry Hayman, in Silver Spring, Md. Harry was, I believe, the society's

first employee. Working out of his house, he handled conference promotion, registration, and hotel arrangements for several Computer Society sponsored or co-sponsored conferences. Conference promotion consisted primarily of circulating calls for papers and advance programs via direct mail and insertion in *Computer*. Naturally, every mailing not only advertised an upcoming conference but also provided ample opportunity to advertise previous years' proceedings of the same or similar conference titles, so every piece of direct mail did double duty and allowed proceedings sales and conference promotion to share costs. One hand washed the other. As far as I could tell, Harry deserved the credit for developing this approach.

Yost: Did he interview you for this position?

Seaborn: He did. I'll tell you about the hiring process. I was first interviewed by John Kirkley. He had accepted a job offer from *Datamation*, which was a premier monthly computer trade magazine in those days, as articles editor. That was a plum job, and it spoke well for him. John was an impressive guy: very well-spoken, generally knowledgeable about the industry, about publishing, and about graphic arts. He also got along well with the volunteers. Anyhow, he and I hit it off very well and I believe he gave me a warm recommendation. I think my next interview was with *Computer*'s new technical editor, Jack Shemer. Jack was another guy who taught me a lot, and who became a good friend. He was working for Scientific Data Systems at the time I believe. I believe Harry was next in line to interview me. And then finally I was interviewed by Al Hoagland and Bob Short -- by the two of them together. I think they were the final blessing before I received the society's formal offer.

Yost: And what was the title of the position that you were hired at?

Seaborn: Editor and Publisher.

Yost: When you were hired, you were hired in part to take over editorship of *Computer*?

Seaborn: Yes. Except for the duties of the technical editor, that was the primary component of the job.

Yost: Can you tell me, as you looked back to what had been published previously in *Computer Group News/Computer*, what were some of your earliest ideas for what you wanted to achieve with this flagship publication?

Seaborn: I can't say I came to the job with an agenda for change. My first goal was to fill John Kirkley's shoes. But as I began interacting with authors and working on their articles, my own editorial assistant soon let me know that I was devoting much more time and effort to copy editing than John had ever spent. I don't think John ever got beyond correcting spelling and punctuation errors and ensuring consistency of abbreviations. I don't mean any of this as a criticism of John. We all have our own strengths and weaknesses, and copy editing happened to be my own strong suit. At any rate I went beyond spelling and punctuation – tried to improve the readability of the articles, always consulting with the author of course.

Yost: Was *Computer* heavily material you were recruiting from various people at that time?

Seaborn: Recruiting authors was handled by the volunteer editor. In those days, that job was calledn the technical editor. The technical editor was equivalent to what today is called the editor-in-chief. I don't remember the ratio of contributed vs. solicited articles, but I imagine that information is on file somewhere. Full bylined articles represented about half of any given issue's editorial content.

Yost: You were editor, there was a technical editor. Can you expand a bit on the nature of the editorial staff and roles?

Seaborn: In the beginning, when we were still located in the San Fernando Valley, aside from me there was one editorial assistant. She did light copy editing too -- never ventured beyond correcting punctuation, spelling, and type specking. We worked exclusively in hard copy in those days, and she also handled the copying and mailing of edited manuscripts, typeset galleys, etc. We two were the only editors on staff. There was one technical editor for *Computer*, plus volunteer editors for the various departments – new products and applications, book reviews, etc.

There was one department in particular – Computer Society Repository – edited by Bob Short. It consisted of the abstracts of all the papers that had been submitted to *IEEETC* in the previous reporting period, whether they were eventually accepted or not. Each month the editor of IEEETC sent us a package containing copies of the latest batch of abstracts, along with their corresponding papers. Researchers could order copies of the full papers at $.10/page. If you wanted to know who was doing work in your particular area of research, the Repository was a good place to look. So librarians found it useful, as well as researchers and authors. We never tried to track the volume, but over the course of a week enough orders accumulated to keep a part-timer busy for a few hours to handle the photocopying and mailing once a week.

Then sometime during the late 70's, we ran into a problem. I can't recall the details -- maybe the young part-timer found a better job, and nobody had the time to absorb his work. At any rate the unprocessed orders for Repository items began piling up. Rex Rice, who had become sort of an unofficial advisor to the Pubs Office, began asking me questions about the Repository – what was the order volume, how many users we were actually serving, and whether the revenue came anywhere near covering the actual cost of operation. Obviously these were questions I should have been asking long before then. After digging up the answers to Rex's questions, I had to admit the Repository looked like a prime candidate for cutting. So we terminated it. Really we should have gone through the Pubs Board, and in retrospect I could have gotten myself in a bit of hot water for acting so unilaterally, although I did have Rex to run interference for me. But the truth is nobody noticed it. There's probably a lesson to be learned in the incident about departments and functions that outlive their usefulness. By that time Bob Short had already cycled out of active volunteer service, and in fact had passed away, so I suppose there was nobody around to speak on its behalf. Bob had told me the Repository was originally launched in the *IEEETC* under Harry Huskey, who was the editor preceding Bob. Bob then moved it to *Computer Group News*, I believe sometime during the 60's.

Yost: Can you tell me what you remember of the origins of *Transactions on Computers*?

Seaborn: I think *Transactions on Computers* dates back to the IRE, the Institute of Radio Engineers. *IEEETC* was the original flagship publication of the Computer Society. I'm pretty

sure it's the oldest refereed journal in the computing field. It was handled out of the Publications Office at IEEE Headquarters in New York. It was eventually moved from New York out to New Jersey. I forgot what year that was. But we had little to do with *IEEETC* until we took over all of our *Transactions*, and that was during my tenure.

Yost: Do you recall when that was?

Seaborn: I think that was in the late 1980s or possibly early 1990s. I remember the name of the guy that ran it: Tony Ross. He was our managing editor in charge of producing Computer Society Transactions.

Yost: What was the context for this transfer, do you know?

Seaborn: I remember it was discussed at the Pubs Board and Governing Board meetings, but I can't recall the details. It didn't seem to be a contentious issue. I think the Computer Society volunteers wanted more control and felt that we could develop closer teamwork relationships if the staff editor reported up through the Computer Society management chain rather than through the IEEE. I really don't know of any specific incident that precipitated the move. However, during the years after we had begun to add new magazine titles – *IEEE Micro*, *IEEE Software*, *IEEE Computer Graphics & Applications*, etc. – we held at least one team-building workshop between managing editors (i.e., staff) and editors-in-chief (volunteer) at the Computer Society Publications Office. Possibly the editors-in-chief of the Transactions wanted to enjoy the same level of teamwork we had established with the magazines. But I'm only speculating. What were you getting at with respect to the *Transactions*?

Yost: I was just curious what role the Computer Society had over the years, and how that changed over time.

Seaborn: Until the Transactions were transferred to the Computer Society Pubs Office, we were mainly bystanders in the Transactions publication process. All the action took place between the volunteer editor and the IEEE staff. If there was any friction I never heard of it.

Yost: Before we started the recording, you mentioned Al Hoagland. He was the president when you were hired?

Seaborn: He was.

Yost: And you mentioned that he served as a mentor. Can you talk a bit about that?

Seaborn: Al was a very low-key, soft-spoken guy. Very observant, with a stiletto-like sense of humor and an acute sense of irony. He was a careful listener. I admired the way he conducted meetings. He was a graceful consensus-builder.

Yost: I see that the staff grew significantly during the 1970s. I think I saw a figure that it was up to 14 by the end of the 1970s. Can you talk about the growth of the staff in the California office, and the role you had with that?

Seaborn: I'm confident our staff growth stayed in line with our growth in membership, sales, and magazine titles. As I said earlier, our headcount was 5 including me when I came on board in 1973. We had an advertising secretary, an editorial assistant, a bookkeeper (part-time), and a proceedings order clerk (part-time), plus myself. As the society's membership grew, so did *Computer*'s circulation, and so did our customer base. Within a year or two we had outgrown our two little offices in the San Fernando Valley and moved to much larger quarters in Long Beach. The move led to a 100-percent turnover in staff. In addition, we had upgraded the advertising secretary position and hired an advertising manager and added a part-timer to fill Repository orders. We had converted our part-time proceedings order clerk to full time. We had also moved our proceedings inventory to a local warehouse and hired a warehouse attendant to store and manage incoming shipments, as well as pack and mail outgoing orders. In 1973 we published one magazine and perhaps one or two conference proceedings out of the Pubs Office. By 1979 we were getting ready to launched two new quarterly magazines – *IEEE Micro* and *IEEE Computer Graphics & Applications*. In 1996, the year I left, we were publishing about 10 magazines, a similar number of Transactions, over 100 different conference proceedings, and

about a dozen authored books per year.

I'm not sure how much detail on staff growth you're looking for here, but the first person I hired was Dawn Peck. She was our first advertising manager – replacing the previous advertising secretary -- and I believe she was still here when I retired. Did a fine job, and grew our ad volume into a significant contributor to the society's bottom line. She pretty much single-handedly launched *Computer*'s advertising program. She developed our rate cards, recommended our rate structure, analyzed our readership's technical interests and buying patterns for use in ad sales pitches, interviewed and recommended our advertising sales reps, rode herd on the reps, and generally schooled me in the commercial advertising business. Her husband John, a mechanical engineer, designed and fabricated our first portable display unit for our booth at NCC 74. Marilyn Potes and Joe Schallan, both of them assistant editors, were hired within the first few years after I came on board. Marilyn was actually my second new hire, replacing the former editorial assistant. Both Marilyn and Joe eventually became managing editors and were outstanding performers and staff leaders.

Yost: Can you talk a bit about Harry Hayman as a manager and to what extent did he stay significantly involved with decisions involving the Pubs Office, and to what extent did you have a good degree of autonomy?

Seaborn: At heart Harry was an entrepreneur and a businessman. He was exacting and he counted pennies, and yet at the same time personally he was bighearted and generous as all outdoors. He was also a loyal friend. I never saw his job description, but from what I could tell, the main components of his job (this is all pre-Michael Elliott you understand) were to provide conference management services – i.e., handle hotel arrangements, advertise calls for papers and calls for attendance, produce conference proceedings, and handle advance and on-site registration. He offered these services individually or as a total package to conferences sponsored or co-sponsored by the society. Some conference organizers sought co-sponsorship specifically in order to gain access to Harry's services. Harry also tracked and updated the society's budget. For several years in the 70s, until Michael Elliott came on board, Harry maintained the budget on a TRS 80. Finally, he maintained liaison with IEEE staff on behalf of

the society and occasionally on behalf of individual conferences. There was little overlap between his duties and mine, and he rarely if ever had any editorial or publishing input. He was always available for consultation if I needed him, but he never tried to interfere. He and I always had a very collegial relationship. In the 70s and early 80s he would visit us two or three times a year and check our financials -- cash receipts, etc. His baby, of course, was the book sales. That's something that he had started himself, so he often had input. He would check inventory to see if we were low on certain titles, and depending on sales trends he would recommend ordering reprints. We'd get together and discuss it. If a reprint advisable, one of us would place the print order depending on who had handled the original print job.

After Michael was hired in the early 80s, Harry's job changed considerably. Michael took over the budget and much of the IEEE liaison responsibilities. And at some point, either pre- or post-Michael, the society hired a director of Computer Society Press, Chip Stockton, and a director of conferences, Anne Marie Kelly. Can't remember if these new positions were created before or after Michael was hired, but in any event they reduced the scope of Harry's activities and lightened his workload.

Yost: Was proceedings sales a major source of revenue of revenue for the Computer Society at the time?

Seaborn: It wasn't yet – not in the early or mid-70s -- but within just a few years after that it would be, and Harry could see the potential. IEEE offered the same titles we did, and they sold into the same market, but I don't think they were as aggressive as we were. As I said, Harry was a businessman and he saw a real opportunity there. He began sending out direct mail pieces to the membership, to conference attendees, and to registrants at past conferences. He maintained mailing lists in his office in Silver Spring. If we had any open space in *Computer* we would run society house ads for current or upcoming conferences and proceedings. Or frequently conferences would schedule attendance ads or calls for papers in *Computer*, and we would give them a special reduced rate – lower for sponsored or co-sponsored conferences. And then periodically, Harry would send out a flyer displaying all of our past titles. That eventually became the Computer Society pubs catalog. I don't know if we're still issuing that or not but it

became a fairly elaborate annual document of 16 or 24 pages. Harry was a super guy to work with. Throughout the 70s he and his wife Edith would routinely show up at various conferences, bringing with them a supply of conference proceedings on various related subject areas, as well as membership materials and displays. They were popular among society conference organizers and volunteers on both coasts.

Yost: And Edith's title?

Seaborn: I'm not sure Edith had an official title. She worked very hard for years as an unpaid volunteer. She made all the conference trips with Harry and knew all the volunteers. They all loved her. In those early days it was a lot like a family organization. We were still small enough that, even if you really screwed up on something you could recover if you were just willing to bust your backside enough to catch up or to redo whatever it was that you blew, and then learn to avoid that mistake the next time. It was a great way to learn the business. Joe Fernandez, a longstanding society volunteer, told me one time that his boss at IBM told him during a meeting shortly after Joe had been hired, "You can make mistakes." But then his boss added softly, "Just don't make big ones."

Yost: Along those lines, what were some of the greatest challenges you faced in the 1970s?

Seaborn: I suppose my greatest challenge was learning to be an effective manager. That's a broad category, obviously. Within it, I think the key subcategories in our particular situation were probably hiring the right people, and encouraging them to contribute their best efforts to meet our goals. Beyond serving occasionally as a lead-man on ad hoc projects, I had never held a management job before I came to the society. I had never supervised more than a secretary, and oftentimes it turned out that my secretary knew more about the job than I did anyway. Fortunately for me, at the Computer Society most of the volunteer leaders did have significant management experience under their belts. Many had run large departments or laboratories, and some had founded and run their own companies. All of them were available to me for consultation and guidance. This was an enormously valuable resource – one that I probably did not fully appreciate until years later.

Seaborn: There were a few memorable incidents that would qualify as challenges; let me think for a minute. One in particular I remember; at the time it seemed a much bigger deal than I

suppose it really was. Steve Yau was newly elected to the presidency in 1974, and he wanted to announce a few new volunteer appointments to society offices. Such announcements were sometimes treated in a brief news item in the Update section, a sort of catch-all for various news items related to society business. Or they could be discussed in the "President's Message" section – one or two pages in front devoted to special announcements by the president. Finally, and most usually, the announcements were reflected in the society roster page, which at that time was a 1/3-page vertical drop-in that we ran in every issue, somewhere in the first few pages of the magazine. This was a listing, in 8-point type, of all the society volunteers and their offices. It seemed to me that Steve checked that page in minute detail in every issue, and he would call me with any corrections or updates. Very likely, Steve himself had probably already been on the receiving end of a few phone calls from various volunteers throughout the country notifying him of the same corrections.

At any rate, in this particular instance Steve called me with about a half-dozen updates or corrections for the roster page in the June 1974 issue of *Computer*. Unfortunately he was too late. The issue was printed and already in the mail, and 10,000 extra copies had been boxed and shipped to Chicago for distribution at the National Computer Conference.

Most people would have simply accepted the facts of the situation and resolved to make the corrections in the next issue. But this was unacceptable to Steve, and he insisted on corrective action to the extent possible. The copies in the mail were beyond reach, but what about those 10,000 copies headed for Chicago? We considered printing a replacement page, a sort of errata page insert, and having that page tipped in (i.e., glued in along the spine) at a print shop or mail shop. The time and cost of that approach, plus the uncertainty of locating a suitable vendor that could perform the work and meet our schedule, made us discard that idea. The approach we finally adopted was to make up some rubber stamps, and hire two or three ladies from a temp agency in Chicago to hand-stamp that page in every copy of the magazine before it was handed out at the booth. Unfortunately the ink was prone to smearing. Some of the corrections were fairly legible; many, regrettably, were not. I wish I had kept a copy.

Yost: Sounds like quite an effort.

Seaborn: [Laughing.] It seemed sort of like a human wave approach. Steve was a very hard worker. He drove himself very hard and drove everybody else equally as hard. But you can't resent someone who calls you at eleven o'clock at night when you know it's two or three hours later than that at his end.

Yost: I think I was talking to Oscar Garcia, who mentioned that in the early years, the work capacities of other presidents or perhaps other volunteers were measured as a fraction of a Yau. That he worked so hard and took on so much.

Seaborn: I remember that. [Laughs.]

Yost: We talked a little bit about Al Hoagland. And now Stephen Yau. I thought I'd go through the rest of the presidents from the 1970s and if you can tell me anything that you recall about them, so Dick Simmons?

Seaborn: Dick Simmons was a good guy; a hands-off manager; did not try to micro-manage. He was gregarious, easy to get along with. You ask what stands out with Dick? He was one of those volunteers who had plenty of management experience in his own professional life, and that perspective tempered his demands and expectations as a volunteer leader. I'd make a similar observation about Oscar Garcia. I always thought Oscar had the soul of a poet.

Yost: How about Merlin Smith?

Seaborn: Merlin was passionate about whatever cause he was undertaking. I remember he tried to launch the Technical Interest Councils, or TICs. He envisioned a sort of superstructure of TCs, where Technical Committees would be grouped into larger categories, and he envisioned two or three TICs encompassing all of the existing TCs. The idea failed to generate much support in the Executive Committee, and I don't think it ever resurfaced at the Board of Governors. He seemed pretty downhearted over that and I felt badly on his account.

Yost: One thing about the Computer Society and governance, in looking at the broad history, it's amazing things work as well as they do; having volunteers and staff and both being very important to the organization, and also having volunteers rotating so rapidly so that at times personalities are going to be in conflict, there are ideas that are going to conflict.

Seaborn: And all are highly motivated; all tend to be driven. They would have to be to put this much effort in for the Computer Society while maintaining their own professional obligations. But if I've learned one thing, it is that the lubricant of a volunteer organization is good feelings. If you don't have that, the gears will grind to a halt, people won't give up their free time, they just won't show up. Soon you won't have an organization at all. So it's important to keep those wheels greased.

Yost: How about Tse-yun Feng?

Seaborn: Tse was another very hard worker and an insightful guy. He was president when the volunteers decided I needed an assistant publisher who could take over in case I got a heart attack or otherwise departed. So we began the search, but I had a hard time coming up with a candidate that suited me. After a while I think some of the volunteers were getting impatient. Maybe some of them even suspected I was stalling. I remember Tse and I were at cross-purposes for a time over the issue. At one point, Tse decided to write the classified ad copy himself. He sent me about a paragraph of text and instructed me to have it inserted into the *LA Times*, so that's what I did. The outcome of this was that we did in fact hire another assistant publisher – one among several. This one lasted a year or so. During the whole lengthy, painful process, we eventually hired at least five or six assistant publishers. One didn't get past the trial period. Four others were asked to leave. The last one – the one in charge when I finally retired – was a keeper, and I felt good about him. He wasn't a complete one-to-one match of my own strong points, but on the other hand he had strengths I didn't have. His name is Matt Loeb. Unfortunately we lost him to the IEEE shortly after I retired. Now I understand he was recently hired away from the IEEE to a company in Chicago.

I never did understand why it was so hard to find a replacement. I certainly never objected to the

idea, and if I had been in the volunteers' shoes I'd have wanted the same thing. We never could find one that was comfortable on the business side and on the editorial side – you know, be able to teach editors to work with the authors and learn when to make a change in the text and when to leave it alone. And of course he had to work with the graphic designer to come with an appropriate design for the cover. *Computer*'s covers were almost always a visual metaphor of some sort – a concrete or even homely example of an abstract idea like distributed processing or distributed intelligence, or computer communications. For example, an issue addressing distributed processing might show a photo of a beat-up mailbox on a country road. Or computer communication protocols might be represented by a map of a landscape crisscrossed by intersecting lines, maybe with figurines at the intersections exhibiting some kind of human communication ritual; maybe two people might be bowing, or waving, or shaking hands – in other words communicating by means of a protocol. And so it was always some kind of a metaphor like that, or at least that was the objective. But we never found anybody who seemed comfortable working with ideas like that; we found people with strength on one side or another. Maybe I was looking for too close of a match with my own interests.

Yost: Did the technical editors ever have a hand with covers or was that always your role?

Seaborn: Normally the technical editors (editors-in-chief) stayed clear of that – their hands were already full anyway. In the case of *Computer Graphics & Applications*, the EIC as well as individual authors frequently had their own candidates for cover art. We usually had plenty to pick from, and by the time it got to me for approval, the managing editor and EIC had often pretty well firmed up their own ideas, so my approval was largely a formality. But except for *CG&A*, covers were pretty much my turf, at least until the last few years of my tenure. If a volunteer editor or a managing editor had an idea or wanted to participate, he or she was always welcome. I have to admit, though, towards the end of my tenure I began to lose control of this activity, and managing editors began to take it over. I kept myself in the approval loop, but sometimes, when my "approval" was sought at the finished art stage and we were a day or two before shipment, it began to feel like a pro forma exercise. Maybe the managing editors were just humoring me. I had some serious health problems in 1995-96, and for a period there, as a practical matter I couldn't really make a meaningful contribution to the process anyway. The

managing editors did just fine, so at least I can take the credit for hiring good people. I should mention here that our most effective *Computer* covers were developed as a collaborative effort with our graphic designer, Jay Simpson, who operated his own graphic design shop, Design & Direction, in Manhattan Beach. Jay designed and produced the biggest share of our magazine covers and other artwork from shortly after I hired on in late 1973 till my retirement in December 1996.

Yost: As the staff grew in the 1970s, you went from managing just a few people to managing more than a dozen. Can you talk a bit about your management philosophy and how you managed people?

Seaborn: Everybody wants to do a good job, and your first job as a manager is to hire good people. That's the first step. Measure twice and cut once.

Yost: What were the most important qualities you were looking for?

Seaborn: After verifying the requisite experience and education and checking their references, I suppose I looked for evidence of dedication and commitment to quality of work output. Potential for growth was important. The hires that I paid the most attention to were the editors. We devised a rigorous test. They had to pass that, and if their references checked out, that's the bulk of the objective criteria. Then sometimes we'd give them a shot at editing a full article.

Yost: Can you tell me a bit about the test?

Seaborn: It was copy editing a couple of segments from our old manuscripts. We checked their mechanical skills – you know, they had to have the mechanics of grammar and punctuation of standard English down pat. There was no tolerance for soft spots. It's amazing how many English majors from reputable schools are so weak in the basics of punctuation and sentence structure. I think teachers at all levels either never learned those basics themselves, or they don't want to bother with them. Then we looked for signs of judgment of when to make a change and when not to. I always insisted that every editing change had to be defensible. I advised each

candidate to edit as though the author were looking over his shoulder. He must be prepared to defend every single change on the grounds of some established rule of standard English. For some authors, every word is a child, and whatever change you contemplate, you better be on solid ground.

Yost: Many of the presidents, especially those that came from industry, but also some in the academic world who might have been chair of a department, had some managerial responsibilities, some very significant managerial experience. You mentioned Al Hoagland, who of course came from IBM. Were there some other presidents that you learned from, in terms of managerial skills?

Seaborn: Besides Al, I'd list Roy Russo, Bruce Shriver, Duncan Lawrie, and Jim Aylor. I'd also mention a few non-presidents: Bob Short, Rex Rice, Jack Grimes, Charlie Vick, Ray Ybaben, Joe Fernandez, and Sallie Sheppard. I'd never thought about it before, but as I consider it now, one quality they all shared in common was their superior interpersonal skills. Maybe that's a commonplace observation. After all, you'd expect that from anyone at their level of accomplishment. And yet, in each case it was those skills that enabled them to enlist the efforts of others in pursuit of a common objective or in support of shared values. That's leadership.

Yost: You mentioned the West Coast Operations Committee. What was that committee about?

Seaborn: I believe it was Oscar Garcia who came up with the idea. At least he was a strong sponsor. The idea was to provide me with sort of a brain trust of senior volunteers who would monitor activities in the Pubs Office and help me with any problems I needed backup on. There was a corresponding East Coast Operations Committee with a similar charter but aimed at the Washington DC office. WC Ops would meet occasionally at the Pubs Office, stay plugged in to what was going on, and be prepared to provide an intimate, objective assessment of any problems that might arise. They would either advise me on approaches to dealing with the problem if that could be done within our own resources, or presenting my case to Michael or other levels of appeal within the society. I suspect that part of Oscar's motivation in coming up

with the idea was to offload some of the personnel workload from the president and Executive Committee in dealing with operational issues –personnel, office space, computer resources. The committee included several old hands – guys I knew well and had confidence in: Al Hoagland, Lowell Amdahl, Rex Rice, Joe Fernandez, Mike Mulder, and Ray Ybaben. There might have been one or two others but I can't think of them at the moment. Unfortunately WC Ops didn't stay in business very long. Michael didn't like the idea. In hindsight I can see that to him it probably looked like volunteer interference within his own management chain, as well as another level of volunteers to contend with. Those are not his words – indeed, he never articulated his objections in my presence, although he never pretended to embrace the idea. But if I put myself in his shoes it doesn't take a lot of imagination to come up with his probable objections. In addition, Michael was still new on the job and just getting his sea legs. The idea of standing by while one of his direct-reports developed an independent body of influential volunteers who might be disposed to support that direct-report in case of any possible future dispute with Michael would not likely be conducive to a sound night's sleep.

Yost: I wanted to ask you about a change I understand occurred in 1981 – at least this is my understanding – when Stephen Yau became the first person with the title of Editor-in-Chief of *Computer*. Previously, it had been you as editor working with a technical editor. He mentioned that he approached you about that possibility. Was that a title that you were reluctant to let go?

Seaborn: Well, really my own title wasn't going to change. I think Steve just wanted a grander title for himself on the masthead and the society roster. At that point the title of technical editor had already been upgraded to senior editor – that change had already happened sometime in the late 70s. Anyway, I resisted the notion that . . . I mean, to my mind the title of editor-in-chief implied a far broader scope of authority than the job carried at that time. It implied authority over every aspect of the publication process, from manuscript acceptance to the mailing of printed copies. That included layout, graphic design, editorial style, and overall physical appearance. It also implied responsibility for all the departments – New Products, New Applications, Book Reviews, etc. According to my view of the senior volunteer editor's job, it was to acquire and supervise the vetting of . . .

Yost: Recruitment of content and to lead the peer review management.

Seaborn: Right, peer review management of the feature articles, and to appoint guest editors of special issues. That's a key job, and I didn't think Steve's job extended beyond that activity. So I didn't like the proposed name change. It seemed like unnecessary title inflation, and it invited confusion of responsibilities. Steve had only recently completed a stint as Computer Society president, and although we had worked well together, I wasn't keen on inviting another level of management in my own reporting chain. Who knows, maybe I was thinking of that June 1974 issue of *Computer*, the one we hand-stamped before distributing copies of it at NCC 74. Beginning with *Computer Group News* in the mid-60s, the original title was technical editor. Sometime during the late 70s the senior editorial job was rechristened as senior editor, and I believe that change was applied to the transactions as well, where it was changed from editor to senior editor. I believe Phil Enslow was pubs chairman at the time.

As you said, early on Steve Yau did sound me out on the idea. I didn't much like it, and I told him so. I presumed he then brought the matter to Dick Merwin, the president, because the next I heard of it was a three-way meeting among Dick, Steve, and me in the society's hotel suite late one night following the Executive Committee meeting. My take was that Dick didn't have any strong feelings about it, he just wanted peace in the house. The discussion that night became heated at one point between Steve and me, though I can't recall what the particular issue was. We failed to reach an agreement that night, and I believe Dick deferred his own decision until he took the matter up with other society leaders. At any rate, Steve's position eventually carried the day. I assume the matter was taken up and approved by the Pubs Committee and Governing Board, although I think I would have been present and I don't remember the discussion. As things turned out, the change didn't cause any subsequent disagreements or second-guessing over the way we did our job in the Pubs Office, so maybe my apprehensions were unwarranted.

One more point: the society did in fact previously have an editor-in-chief. I don't know when the position was established, but when I was hired in 1973, one of the key volunteers who interviewed me was Bob Short, and he held the office of editor-in-chief. I believe he also served as editor of *IEEETC* at the time. As editor-in-chief of all society periodicals, he nominally supervised all society volunteer editors as well as *Computer*'s technical editor and editor-publisher. His job was to provide counsel and advice, and to run interference for us at the IEEE Pubs Office in case of any disputes with IEEE staff. Throughout the years of his service – I believe he retired about 1980 – he remained a valued mentor and friend to me. As I recall, the job of society editor-in-chief was retired at the same time Bob ended his service with the society. The fact that I had previously reported to an editor-in-chief might have had something to do with my initial reaction. I'd be surprised if Bob ever came close to pulling rank – that wasn't his style anyhow. But I wasn't keen to acquire another boss.

Yost: Now the role of publisher was growing, of course, because there would be additional titles.

Seaborn: Just by the accumulation of the additional volume, more titles, yes.

Yost: In 1982, I believe it was, Michael Elliott was hired, the first staff member to carry the title Executive Director, rather than Executive Secretary. Now, can you tell me, did you have involvement with that, with the selection of him for that position, and did you have input? And also, did that bring much immediate change to the Computer Society?

Seaborn: I don't remember being solicited for input into the hire decision, although Michael did spend a little time visiting with Harry and me before he was hired. I'm sure the president and Executive Committee would have listened if either of us wanted to comment.

Yost: I asked you about the hire of Michael Elliott and if and how that changed things at the Computer Society?

Seaborn: It did change things significantly, yes. For a while we were kind of looking for an indication of his portfolio. What was his job going to be? My initial reaction was neutral. If hiring an Executive Director was a solution, what was the problem? I mean, he was a nice guy, very articulate, urbane, smart, savvy in the ways of organizations. It didn't look like he had much industry experience, but clearly he had plenty of academic and political experience. Before long, though, he began to make his presence felt.

Michael relieved the president of the personnel and administrative workload, which had grown in proportion to our overall growth in staff. Approving merit increases or promotions was not the kind of work most volunteer leaders had signed up for, even though many of them were senior managers in their own jobs. The problem was particularly acute in cases where the president did not happen to work for a large corporation or institution that could support volunteer activity. Moreover, we had never bothered to develop or adopt our own salary administration and performance evaluation system, complete with standardized job descriptions, associated salary brackets, and performance evaluation procedures. All salary changes were necessarily processed through the IEEE payroll system, and I gathered that some of our salary levels and annual merit

increases seemed out of line in comparison with the same or similar-sounding job titles at IEEE. When annual merit or promotion increases were being processed, these seeming anomalies invited challenges from the IEEE. The Computer Society could have simply adopted the IEEE system, but that would have meant a loss of independence and control. So we – i.e., the society – decided to develop our own system. In fact that might have been one of the assignments the volunteers had in mind for Michael before he was even hired. Working closely with President Roy Russo, Michael tackled that job. Roy was an IBMer, and I believe our system was closely modeled on the IBM system. As I recall, the project took a year or more to complete. It was labor-intensive, especially the first time around, but we were a much stronger, more mature organization for it. It disciplined all of us. The process itself forced us to identify target goals and objectives for the next round of performance reviews. Just learning the system – the connections between job descriptions and salary brackets, and between performance ratings and merit increases – was a management lesson in itself. Michael and Roy deserve the credit for that effort. It was a solid contribution to the society.

Yost: Was there a sense that the Computer Society was growing and it was difficult with presidents having such short terms that you need more power within the staff that more was needed for continuity?

Seaborn: Right. That was part of the motivation. It was a smart move. The volunteer president didn't have time to negotiate with the IEEE over staff-related issues, or to approve every single salary increase. Michael was well suited for that kind of job. I believe the system he and Roy developed effectively eliminated most of these issues. We could assure everybody that our personnel and salary actions were based on a rational, well documented system and that we were expending society resources responsibly.

Before Michael came on board, we had been a freewheeling, entrepreneurial organization. We were small enough to be able respond to market opportunities and try out new ideas without having to jump through a lot of hoops. It was exhilarating to come up with an idea and carry it through to fruition and see it pay off. That was fun – I'm thinking of standalone tutorials, like the one given by Mike Galey on structured programming in 1975, or Tutorial Weeks, a solid week of one- or two-day tutorials independent of a conference. These were brand-new initiatives, and they didn't require a lot of approvals. After Michael came on board, things became more structured and more measured. I'm not suggesting that Michael somehow destroyed our entrepreneurial spirit, but rather that our growth in budget size and overall scope of activity forced us to consider more carefully the consequences of error. Mistakes simply looked a lot more costly, and we had to pay closer attention to our own decision-making. We had to

learn to be better managers, and Michael was hired to help us do that. He was an excellent manager himself, certainly one of the best in my own experience. But every change upsides and downsides. To put it in grossly simplified terms, our growth forced us to behave more carefully and act more deliberately, and part of that meant hiring an executive director.

Yost: Did Michael typically work closely with the various presidents?

Seaborn: Oh, yes, he worked hand in hand with the presidents; you bet. I mean that was an important part of his job. He damn well better: the president was his immediate boss.

Yost: I understand that the Computer Society was fairly early in launching a project to have e-mail for the organization, and it shifted to also include volunteers.

Seaborn: That's right. Ray Ybaben was the volunteer who spearheaded that effort. He was on the West Coast Operations Committee, which was established to oversee operations in the Pubs Office. Ray lives here locally; he's still a good friend, attends the same church I do. I didn't have a hand in adopting email, but I'm thankful the society was an early adopter. Goodness knows e-mail can become a time sink, but it gave us needed flexibility. It put us ahead as an organization, I think.

Yost: I understand you managed the transition for the Computer Society from hard copy to desktop publishing.

Seaborn: Yes. Well, "managed the transition" may overstate my own role a bit.

Yost: Can you tell me about that?

Seaborn: In broad outline only, I'm afraid. When I first came on board in 1973, the contents page in *Computer* was being set in hot type. The balance was set in cold type on a Compugraphic phototypesetting machine. When I started, we immediately dispensed with hot type and went all cold type. Our standard practice was to edit and type spec the author's manuscript, submit the marked-up ms to the typesetter, proofread the galleys and resubmit them for corrections, then

ship the corrected galleys and a copy of the marked-up ms to the author for approval. Next came another cycle of incorporating final author corrections. An editor – usually the managing editor – prepared a layout plan for the entire magazine, including spaces planned for ad or editorial art insertions. The corrected galleys were handed off to a production artist, who pasted them up to camera-ready mechanicals using the editor's layout plan as a guide. These mechanicals were then shipped to the printer for pre-prep. The printer (or prep house if we happened to use a separate vendor for that step in the process) used the mechanicals to create a set of negatives, and returned a corresponding set of blueline proofs for a final check.

The use of email had allowed us to compress the cycle of negotiating editorial changes with the author and getting final author approvals. We could identify two key points in the production process where desktop publishing technology could make a significant impact on cost and schedule. The first point would be at the typesetting stage. Here, the goal would be to submit our corrected MS Word files to the typesetter without requiring the typesetter to rekey the text. If our editors could enter the Compugraphic formatting codes onto the Word files, or if the typesetter could accept our edited Word files and simply add the formatting codes as specified by our marked up Word text, much labor could be saved and our production cycle could be shortened. The next savings opportunity would come at the page layout and makeup stage. If camera-ready copy could be output from the Compugraphic phototypesetter to match the layout plan developed by the editor, more labor and schedule time could be saved. Beginning sometime in the late 1980s, a few of our more computer-savvy editorial staff members like Angela Burgess, Galen Gruman, and Joe Schallan had begun to experiment with entering the typesetting codes into the Word files. But I can't honestly say we had truly incorporated desktop publishing technology into our production process by the time I retired in 1996. I believe that happened sometime after I left.

Yost: Over the years, the Computer Society and the ACM have overlapped to a large extent in the domain, and there's been joint cooperation on things like CSAB, curriculum, and computer science education. There's also been some competition. To what degree did you see *Computer* and *Communications of the ACM* in competition? Did the two publications learn from one another?

Seaborn: I never felt competition from *CACM*. In theory we were both chasing the same advertising dollars, and to some extent we carried similar editorial content. But we always had a healthy editorial backlog. So I never sensed any competition for editorial content. We had something like a 25% or 30% readership overlap, and occasionally I would notice an ad in CACM that might just as well have appeared in *Computer* or *IEEE Software*. But I don't think *CACM* even employed an ad manager or director. They did have sales reps I believe, but I never got the sense that ad revenue was a high priority for them. In any event they didn't seem to be much of a factor in that market. For that matter neither were we. We were dwarfed by the big controlled-circulation trade magazines.

Yost: *Computerworld,* and *Datamation*?

Seaborn: Sure, and *PC World* and *Computer Graphics* and a dozen others. Well, I think *Computerworld* was paid, but *Datamation* and most of the others were controlled. Heck, one of our toughest competitors was *IEEE Spectrum*. They reached 70-80% of our readership. Sure, those guys had 95 percent of the market and we were fighting over five percent of the rest. [Laughs.] But even so, our ad revenue was enough to make a noticeable contribution to our bottom line. Anyway I never felt them as much of a competitor. Our relations with ACM staff were always very warm and collegial.

Yost: The World Wide Web was developed in the early 1990s, and browsers in late 1994. Before you left the Computer Society in 1996, was there discussion about these changes and what they would mean before you left? Were there early discussions about the possibility of electronic publication, I guess that is what I'm asking.

Seaborn: Yes, I do. I believe Duncan Lawrie was an early leader and advocate in those discussions. Michael joined in too. But to the best of my knowledge it never came close to implementation in my time at the Computer Society. I think all the progress on that front has been since I've left. To be honest, I was far enough behind that curve that I didn't contribute anything to that effort.

Yost: You won the first Harry Hayman Award for Distinguished Staff Achievement with the Computer Society. Can you talk about what this meant to you and what did you personally see as the achievements you're most proud of with the Computer Society?

Seaborn: I was honored and touched to be considered for such a prestigious award. As for my own achievements, I guess I was most proud of the people I had hired, and proud of the teamwork that we had established with our volunteer counterparts. I think the volunteers had enough confidence in us that they would entrust us with quite a bit of latitude. They knew we would do whatever it took to achieve whatever they had assigned us to do. I was proud of the warm and loyal and friendly working relations that I had with those people, both staff and volunteer. You know, they were all great people. I loved to spend time with them. So I guess I would say I'm most proud of the lucky decisions – or the lucky recommendations – that I had made for the people we hired. I regarded them all as first-round picks, and some had "star" written all over them. I mean, I knew Angela would be a star. Likewise Joe Schallan and others too numerous to mention. I was proud of them all. Many years ago, Oscar Garcia told me that of all of my responsibilities, the most important was to find and hire good people. That observation stuck with me, and the truth behind it has become more and more apparent in the intervening years.

Yost: I greatly appreciate the time that you've given, and this is so rich to documenting the history of the Computer Society.

Seaborn: One final thought: This was the best, most rewarding job I ever had. I will always be grateful for the warm, supportive relationships I had with the key volunteers. It was a privilege and an honor to work with and learn from such recognized leaders as Al Hoagland, Jack Shemer, Rex Rice, Jack Grimes, Bruce Shriver, Jim Aylor, Oscar Garcia – the list is much too long to be presented here. Much the same could be said of my staff counterparts and partners – Michael Elliott, Harry Hayman, Anne Marie Kelly, and Vi Doan were wonderful to work with. I was proud to share the workload with them, and it was a pleasure to interact with them. This is just a great outfit to work for. When I left, I was convinced it was the right time and I didn't look back.

But as time moved on, I must say I've occasionally missed the pressure of deadlines and the excitement of solving new problems and the gratification of seeing a young person take a big step in realizing his or her potential. Sometimes it was a little like watching your kid achieve an important goal.

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