A World Wide Career

Behind my Sperry Badge

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My career in the computer industry began at the old plant six on Ford Parkway and the East River Road in St. Paul on June 15, 1959, with training on the operation and maintenance of the Athena Guidance computer. My immediate boss was Ken Fechter, under whose tutelage I had completed part of my practice teaching in completing a BS in Education at the U of MN. Other people in the management chain at the time were Ed Olszewski, Les Brunker, and Larry Reid. Some of my classmates were Eldon Stevens, Gary Holthusen, Bob Ruud, Herb Carrol, and others. Some of the instructors were Ernie Horning and Ed Silkowski (not sure of that spelling*), often referred to as Ed Kirplopski.*

TEXAS

In July of 1960 my family and I relocated to Wichita Falls, Texas to supervise the training of Air Force personnel in the operation and maintenance of the Athena as a component of the Titan I missile system. Leonard O'Brien had been site manager during the installation and checkout of the equipment at Sheppard AFB. Among the instructors who joined me there were Doug Dorner, John Nygaard, Bill Doe, Steve Fink, Thain Dikkers, Ron Brumm, Fred Schmugge, Jim Arbona, and Ted Torkelson. Ron Brumm took the helm of the group at Sheppard AFB when I was briefly hospitalized in Texas in June 1961.

MINNESOTA

My family and I returned to St. Paul, and I joined the Field Engineering Proposal Development group. While on assignment in Texas, our home in Roseville had been rented by Roger Syvertsen, who at the time was assigned to the NTDS Documentation group. I also spent short periods of time in St. Paul on projects such as documentation on the ADD (Advance Digital Device) which Dale Klette headed up, and Project Dormant, headed by Bernie Jansen. Another mind bending assignment was in support of a proposal for an Air Defense System for the Government of Switzerland called Project Florida. It included planning for the installation of equipment deep in caves high in the Alps, at elevations well above 10,000 feet. I was also assigned to Clint Haggerty for several months when he headed up the training dept. In time, I was named the Manager of the DSD Technical Training Dept., and had offices at one time in the balcony above Plant 2 as well as what was then called Building 6, the Guard Shack on Minnehaha Ave. in St. Paul.

From March of 1964 through March of 1970 the training activity at Univac went through some rapid expansion, and little by little more of the offices in the building on Minnehaha Avenue had new instructors take occupancy. This resulted in several requests to Plant Engineering for improvements in some of the rooms, as well as for new lighting in the center hall, and upgrading of the floor covering. Eventually, the only two rooms the training department did not occupy were the Navy Security

Office, reserved for the military officer to be put in command should circumstances require onsite military security, and the fairly large room at the far north end, which had at one time been an automobile servicing pit when that building was in private hands. I had been told to stay away from the security office, and felt I had no option but to request the large room at the far end of the hall be divided up, and part of it would become offices for me and the secretarial staff. I drew up yet another request to plant engineering for what I was sure would be the training's final change to that building.

That last plant engineering change request got me introduced to Mr. Knight Prior. I was summoned to his office, thinking it was to review some details. When I arrived, he stood to his feet, and produced the entire stack of change requests we had generated over the last couple years. In particular, he made reference to the new lighting and floor covering along the hall. He exclaimed he had now caught on to my carefully thought out scheme to have a little Taj Mahal for myself at the end of the hall. The request was denied, and during my tenure, that room was used without change. Wishing I had the moxie to actually develop and carry out the plan I had been accused of, I moved into the Security Office, where I went unmolested for several months, until a site inspection was done by the military, and my use was tolerated until such time as circumstances demanded otherwise. That event did not arise. At the time of the inspection, I was made acquainted with a small feature below the floor, not very obvious, and securely under lock and key, which contained a stash of armaments for facility security by military staff if needed.

Names of staff personnel during this time frame include people like Dick Wagner, Marv Nickle, Roger Stern, Dan Newton, Adam Charsean, Al Gresbrink, Dave Ruckman, Ron Trowbridge, Ken Boehm, John Hartmann, Roger Dalziel, Elmer Turcotte, Lon Weidenhaft, Walt Deitz, and several others I can visualize, but not fix a name on.

At the time, I reported to Roy Hegler - others on Roy's staff included Dick Roessler, Pat Casey, Paul Murray, and Bob Stevens - with Diane Plait as Roy's secretary. This was about the time that the construction of the new plant (8) commenced down in Eagan.

Shortly thereafter, Dick Roessler took a job as an administrator in the engineering organization, and became involved in the allocation of space in Plant 8 for departments moving to that location. Dick and I took time out for a coffee break one day, and since Dick had a set of prints for the new plant with him, he shared what the then planning was for who would go into what new space. In looking at the prints, I observed that the space in the basement of the new plant had not been allocated to anyone at the time. I took out a lead pencil and wrote "future home of Education Dept." into the space, and recognized the grin on Dick's face, indicating, if it were only that easy. I don't suppose I will ever know if that penciled in comment was of any significance or not, but in due course, I was invited to suggest a layout for the Education Dept. in that area.

Up until the move of the training function to Plant 8, classroom space had been made available in Plant 2, the old glider factory. A couple incidents are worthy of mention: one is that part of the building had once been added onto, and the addition included in the new floor space, a fire hydrant. That feature became something of a

mystic attraction, since the bottom of a lectern was cut out and sat squarely over it, and periodically, one of the instructors would appear to relive himself behind it. There was also just a bit of excitement in one of the classrooms the day an electrician working in the rafters above it, lost his footing, and had his legs come through the ceiling tile before his fall was stopped.

Many of the details associated with getting the "garden level" at Plant 8 ready for the move in of the education function were facilitated by Les Swanson who joined my staff as an administrative assistant. As Les carried out his tasks, I was regularly grateful that he was putting his energy into meeting our needs, and not addressing the needs of any competitor for that area. I almost felt Les was loyal to a fault, but then he was working for me.

About coincident with the move of the Education Dept. into Plant 8, DSD became FSD. This not only added to the suite of equipment for which training courses were conducted for the military, it also resulted in me being assigned accountability for educational functions in Washington, D. C.; Slidell, LA; Houston, TX; and San Diego, CA. The UNIVAC Digital Trainer (UDT) had also gained acceptance with both the Navy and the Air Force, and several instructors were being instrumental in converting many military personnel from the analog to the digital world on that device. Paul Burly, Doug Dorner, Dick Wagner, Roger Stern, and others who I recall spent time on the road performing that function.

As demands expanded, the number of instructors on the staff of the Education Dept. expanded as well: Cliff Sheets, Don Moran, Tom Dunn, Sharon Woods, Dottie Tucker, Dick Lundgren, Dave Klinzman, Gerald Engelke, Wally Houer, and a host of others joined the staff. Meanwhile, experienced people like Marv Nickel, Dick Wagner, Elmer Turcotte, and others moved on to other demanding functions within the Sperry organization. In spite of seeing several members of the staff move on to other productive roles, what had been a staff of thirteen in March of 1964, the Education Department grew to more than 120 instructional personnel in March of 1970.

Much of the ongoing recruitment for the education function was being performed by Bob Wells in the Personnel Organization, working for Bob Patterson. Eventually, Bob was transferred to Blue Bell, PA, where he had accountability to do recruiting for several components of the International Division.

SOUTH AFRICA

In January of 1970 I was visited by Bob Wells, who had been assigned the task of putting together a team in support of opening a new subsidiary for Sperry in So. Africa. Establishing an educational component there was part of the planning. He wondered if there was someone on my staff I would recommend as a candidate to take on the role of Training Director on that team. I decided to accept the position myself, and when I filled Roy Hegler in on the prospect, Roy's first reaction was, "I'd give my right arm for an opportunity like that."

At that time, all commercial sales were done on a "bundled" basis - the price of the data processing system included all system analysis to meet the customer's needs, the training of the customer's staff to participate in the software development, and a specified period of time during which the equipment would be

maintained by the seller. A deal was struck with Elli Hiller, the Director of Marketing for the new subsidiary, whereby customers could enroll their employees in Sperry offered training classes on a tuition basis, and if they later purchased a Sperry product they would get a full deduction of the tuition from the system price.

After just 7 months of effort a Sperry computer school had been established, and several dozen tuition paying students were enrolled in programming and system operations classes on Sperry products. Included in the instructor staff was Dave Klinzman who had gained knowledge of the 1100 system operating system. The subsidiary was also well on it's way to exceeding the planned bookings and revenue for the year, with hopes of doubling it by years end. However, due to a world wide economic downturn, the management staff at Sperry South Africa was directed to reduce staff by three. This reduction was directed for a staff which consisted of individuals who had just a few months earlier were considered to be of sufficient talent and knowledge of Sperry products to warrant shipping them and their families several thousand miles to this location. Being a part of the management staff and endeavoring for several days to determine who to "let go," I proposed we send the names of the entire staff in Johannesburg to Personnel in Blue Bell with instructions to seek other positions for any three, and to reassign duties at the subsidiary among whoever was left. A fax to that effect was sent to personnel in Blue Bell about the 15th of November, 1970. At that time, my family and I were struggling with a critical illness suffered by our youngest child.

MINNESOTA

Within days, I received a phone call from Dick Gehring, then VP and GM, inviting me to return to St. Paul. When I asked Dick what positions were available, he responded, "I'm aware that you are struggling with enough right now, and if you have as much confidence in me as I have in you, let's talk about that when you get settled back here and your personal maters are less demanding." That offer was accepted and my family and I returned to St. Paul. Just before Christmas, at the age of 9 years and 10 days, our youngest child succumbed to his disease, a lymphoma, and in January, 1971 I joined the Program Management organization in St. Paul, reporting to Leo O'Brien.

From chicken fat fouling (no pun intended) up an air flow sensing relay aboard submarines, to supporting proposal efforts for numerous international customers, the next four years entailed dealing with a wide variety of challenging issues. Part of this time I worked for Thomas Morris, and later in this time period reported to Ernie Hams. One major effort was in hopes of becoming the supplier of Air Traffic Control equipment for the Government of Canada on a program they labeled JETS. One incident that stands out for me on the JETS proposal effort is worth noting: The proposal team had taken over the main conference room in Plant 8 (Univac Park) and furniture had been assembled from a variety of sources to meet the needs for key members of the proposal team. We were in the last week to 10 days to complete the proposal and deliver it to the customer, and action was hot and heavy to resolve a host of technical issues and delivery matters. I was called out of a meeting in which we were resolving some of these issues to meet someone from the Sperry Corporate office who wanted to know what was being done in that room. His main issue was

that the desks, chairs and tables we were using were not of the same color and design. He wanted the room cleared out immediately until such time as that need was addressed.

There was no way I was about to explain what impact that decision would have on our efforts, and I wasn't about to argue with him. I simply suggested his observation was exactly what was needed but on a much broader scale than just this room, and directed him to Dick Seaberg's office to address this critical issue. I never saw or heard from him again. Although the Univac proposal for JETS was rated best technically and priced below the competition, political matters prevailed, and the award went to a Canadian company.

I've often wondered, however, if there might not be a bit more to the story. Don Lampland was the marketing representative, and organized things when several senior officials from the Canadian aviation authority made a two-day visit to St. Paul. In typical fashion, Don orchestrated quite a dog and pony show, keeping the visitors busy from sunup until well after sundown. It is my understanding Dick Seaberg, then VP of Marketing, was included in the team that took them back to the airport where they had a government owned aircraft awaiting them. As the Canadian officials were about to board their aircraft, Dick commented to one of them "We look forward to fully meeting your needs on this procurement, and hope your visit with us answered all your questions." One of the Canadians commented, as he pulled a sheet of paper from his suit pocket, "We did have a few questions of our own, but we never were given an opportunity to ask them!"

ENGLAND AND RUSSIA

In January of 1974, Sperry decided to pursue an Air Traffic Control project with the USSR. I served as proposal manager for this effort, thus transferring to the World Wide Marketing and Services Division of Sperry Univac and reporting to Romuald Slimack. In due course, I relocated to London, England. Among the many others who contributed to this effort were such stalwarts as Dick Paulson and John Flood. Richard J. Hansen was the technical team leader, and worked diligently in sorting out the technical details that could be released to the Soviets, from the many issues for which getting an export license was going to problematic. Dick and I spent several weeks endeavoring to learn the Russian language. George Soldata, who had lived for a time in the Soviet Union, was working on the proposal and was our instructor. We later learned that George was originally born in Germany – his pronunciations of Russian were all influenced by a German accent. Once the proposal was in the hands of the customer, Sperry Corporate management seemed to have second thoughts about the viability of doing business with the Soviet Union. Gerald Probst, who was now the President of the corporation even proposed that the system be set up and demonstrated at a mutually acceptable location, outside the Soviet Union and sold there on a turnkey basis, leaving it up to the customer to pack up and relocate to where it was to be utilized. It was not hard to convince him that that was not practical, however, I spent much of the next several months assessing our ability to recover from the typical difficulties that occurred in the performance of similar contracts under more friendly circumstances. Of particular concern were such issues as getting specialized personnel in and out of country and dealing with the myriad of

minor “unpredictable’s” in an environment about which so little was known.

In conjunction with hosting the Olympics in 1980, the Soviets were also upgrading their airline reservation system, and that effort was also being pursued by Sperry in collaboration with Air France, who was interested in delivering the software for the reservation system. Sperry Corporation sponsored an equipment exposition in Moscow in conjunction with the effort to influence the customer on the scope and depth of Sperry’s technical capabilities. New Holland farm machinery, an 1106, and a host of other products, as well as an opportunity to play chess against a computer, were shipped to Moscow for the exposition. All the equipment was to be uncreated and put in place by local labor, with Sperry personnel on site to operate. It quickly became obvious the local labor was not going to be able to meet the schedule, thus providing an opportunity to test the ability of get a backup crew in place in short order. That was accomplished by arranging to get a crew of technicians in from West Germany who were able to expedite the process and get the equipment unpacked, set up and in operation with little time to spare for the opening of the exposition. Such was not the case, however, with a quantity of breads, sausages, and other food items the German team wanted sent to Moscow, not sure what the food in the Soviet Union would be like. Fortunately, it was adequate since the inbound food shipment did not clear customs until the day following the exposition.

Ingenuity also overcame what was delaying the uncrating process when one of the technicians made use of several zenner diodes to make a power tool run in reverse to expedite the process of unbolting the shipping crates. Those diodes were part of the spares sent for the show, and represented one way unforeseen issues could be resolved.

While supporting an ongoing negotiation process, I also delved into the concern of corporate management to determine how difficult it might be to deal with other unforeseen issues. The technique developed was to randomly select trouble reports from prior installations done within the US, and to seek to resolve those problems on site in Moscow. In most instances, the result was to make recommendations on spares quantities to be shipped with the equipment, as had been the resolution of the issue of getting a power tool to perform in reverse. One other incidence did result in adding parts not normally included in either the installation or the support spares compliment.

During the installation of the ARTS III equipment in Chicago some years earlier, it was necessary to remove a back panel to repair a cable. This entailed the removal of several small screws which attached the sheet metal ‘skin’ to the cabinet. That work was commenced late in the day, and the small screws were shoved into a corner for safe keeping for the night. Unfortunately, the night janitor did a thorough job of vacuuming that night, and the screws went out with the trash. In Chicago, that meant sending someone to the local hardware store to purchase replacements, and the filing of an expense reimbursement to cover the cost of only the screws.

In Moscow, in 1974, there were no hardware stores. The only local source I was able to identify there was through a government procurement program. That source would not only take several months to supply; it would also require the ordering of a minimum number of screws which was several orders of magnitude more that all the ARTS III installations then in place. I think it was three days later that I eventually

located a more immediate source, but that was in Frankfurt, W. Germany at a US military surplus store. The expense reimbursement? Were this problem to actually occur during one of the installation efforts in the Soviet Union, the expense report would need to cover much more than the cost of the screws. Needless to say, plans were initiated to review the provisioning documents to be sure those screws and similar items were added to them.

Once again, a lot of hard work, and many important lessons learned, had to wait for application to another project. Political issues within the Soviet Union resulted in the selection of a European (Swedish) supplier.

GERMANY

In November of 1975 I was assigned to work for John Butler, then Director of marketing in London, England, and surveyed the European market for possible application of Sperry's ATC competencies and equipment. An emerging need was focused on within West Germany. Upon arrival in the office of Willy Bannow, the GM of the German subsidiary, I was told this was an opportunity only to the extent that Sperry could improve its position with the German Government by submitting a highly professional proposal. He was certain this contract was already wired to go to IBM, however a first class proposal on this request would significantly improve the subsidiaries prospects on other business with the German Government. So, my first task was to give him a cost estimate to get that proposal written and delivered on time. Having recently gone through the Proposal Management course conducted by Jim Beverage, I felt this was a great opportunity to try out some of what was suggested in that course. The next day, when I sat down to see what Willy was willing to invest, I asked if he had any current employees who had worked for the agency initiating the request, and found he did have a senior field engineer who had left that agency and come to work for the subsidiary in the last couple years. I suggested I'd like him to be loaned to the proposal team and given an expense account to cover beer money to find out from the agency what factors in the request were of most concern to them. I also wanted to know if the subsidiary had any former IBM employees who might be able to put together an estimate of how they would approach the technical issues to be addressed, and could they get that task done in sufficient time to be useful when time came to review the proposed costs for the Sperry approach? That too, he was willing to arrange. The last issue had to do with getting the proposal to include strong evidence it came from an organization which had the competencies to deliver what was being offered. As I expected, he put his hands in the air, and said that was way beyond anything he knew of within Sperry in Europe. Could I include the cost of bringing over a crew from a stateside technical team within Sperry that could fulfill that need, fully expecting it would result in meaningful content for that Sperry component as a consequence? This too, Willy was willing to accept, I really think because he was so much of the opinion there was no way this business would be awarded to Sperry. At this point I wish I could remember the names of the phenomenal team that came over from DSD to support this proposal effort. The subsidiary employee with past experience with the agency quickly identified something called the DUV adaptor as the area of greatest concern. It would entail new technology for them. The former IBM team also came though with

some fairly solid guesses on what big blue would offer, and that gave us a target to strive to beat. For close to a month, the team from St. Paul with support from the German subsidiary was essentially stuck in a hotel conference room except when they went to their rooms to sleep. Most meals were served in that conference room. It was only when the last draft of text went to the print shop that anyone got any free time to explore the surroundings. Even then, we had elected to cut a corner or two. While the technical write up covered the entire system being proposed, in response to the RFQ asking for a *Project Implementation Plan* developed specifically for this project, and due to the proposal team's inability to get everything accomplished, only that portion of the plan relative to the DUV adaptor was submitted. Our excuse was that it was the critical element in the implementation of the project, and had addressed meeting that element in detail and saved the reviewers the need to read through aspects Sperry considered routine and straight forward, and that the rest of the document would be available in time for anticipated contract negotiations.

Fortunately, the rest of the proposal team had been requested to return to the hotel after a couple days of sightseeing while the final document was in the production phase. The proposal was delivered on schedule, missing some portions of the implementation plans. That planned final gathering of the proposal team took place a couple days later, at which time the subsidiary employee that had formerly worked for the German aviation ministry informed me he had been contacted by someone internal to the ministry suggesting it was very much in Sperry's interest to deliver the rest of the project planning document within the next week *"over the transom."* Plane reservations were cancelled, hotel room reservations were extended, and most of the proposal team returned to the conference room, and the rest of the project implementation plan was planned and printed, all within the next week. This was the ZKSD project that eventually came back under my purview.

(*Parenthetically, I would add that we later learned some of the reasons Sperry was selected over the competition. One reason had to do with the project implementation plan; IBM had reportedly taken exception to the need for such a specific plan as part of the proposal and had submitted their Standard Project Management Manual as adequate. Secondly, the cost estimate we were given by the subsidiary's former IBM employees was quite realistic, and big blue had built in lots of cushion, feeling secure in the knowledge they were the preferred supplier. And third, there seemed to be validity both in the design approach Sperry had offered on the DUV adapter, and in the technical competencies associated with the State Side elements of the Sperry Corporation.*)

MINNESOTA

In June of 1976 I once again returned to St. Paul, taking a position with Jerry Squires in the Quality Control organization as Director, Program Quality. My associates at the time were Tom Morris, Dick Roessler, and Paul Welshinger. Tom headed up factory quality operations, Dick was Director of Reliability, and Paul had responsibility for all incoming materials quality inspection. In addition, each of us would be tasked with "other duties as may be assigned." My job was essentially to represent DSD customer's quality requirements and to be sure all were met. Some of my staff members were Norm Alrich, Alex Trembly, Bob Kochendorfer, and Leroy

Jernigan.

One indelible memory from this period in my career at Sperry had to do with Mr. Don Ream and the contract Sperry had with the US Navy. A problem existed in the manufacturing of thin-film memory for the UYK-7s. Paul Welshinger was assigned the leader of a task force to determine what the problem was and to publish a report of his findings. Months of hard work and dedicated sleuthing went into the effort to resolve the issue. Paul drafted a report and I performed an edit, seeking to put some balance into the document, and softening what appeared to be accusations which were more suspected then necessarily real. When I called to get a PX number for the final document, the next number on the list was PX 1234567. Just the PX number was enough to make Don Ream think the whole report was a white-wash. The problem was eventually resolved when it was determined that the glass substrates on which the thin-film deposition was being made, was being purchased in bulk quantities, and hence, some of the glass "aged" before the deposition was made. The glass surface was oxidizing slightly as it aged, and that oxidation resulted in poor film deposition.

KOREA

In April, 1978 I was reassigned to Program Management in the International Division of DSD reporting to Jim Stahley. My first assignment was to manage a proposal for the recently established International Division of DSD for an Air Traffic Control system for Kimpo Airport in Soul, Korea. It also brought me back to working on the German ZKSD project. Initially, an Input/Output Processor being used on the ARTS III programs was incorporated in the system design of the German ATC project. The first system performance demonstration indicated that either a major redo of the software was to take place, or that the IOP be removed from the system, and be replaced by something much faster. At the time, a fare amount of friction had developed between Sperry corporate entities involved in the program. Lufthansa, the German air line, was using Sperry 1108 processors, hence logistics support for that equipment was in country and under German Government control. A task force was commissioned to determine if the 1108 could be used to perform the functions of the ZKSD project if the IOP were removed. When that proved to be a more efficient approach, and both the system timing and the reliability requirements could be met, making the change was proposed. This presented a new and unique issue; there would be no DSD hardware content in the project, and the German subsidiary lacked the technical personnel to complete the system design and implementation. Dick Seaberg was agreeable to an approach whereby I was able to recruit several people from DSD to relocate to Germany with the provision that a job would still exist for them back in St. Paul when the assignment was completed. Fortunately the ZKSD contract was in German currency, and even though several missteps had occurred in fulfilling the contract, primarily leading up to the removal of the DSD hardware, at the time the dollar was falling against the German currency and at contract completion, profitability had been reestablished.

The proposal for the Korean ATC project resulted in a contract, with me serving as the Program Manager during implementation, thanks to the expertise and on-site management skills of Bruce Clark and the dedication of Bud Krammer. That contract too, was brought of a successful completion. It was not without a fare share

of trials and tribulations. One of the major components of the system was a diesel engine driven back-up electrical power unit to operate the Air Traffic Control system in the event of interruption of commercial power to the site. This unit was purchased from a company in Baltimore, MD, and had to be shipped to Seoul, Korea. At the time the unit was available for shipment, political issues were disrupting the movement of ship traffic through the Panama Canal, and rather than taking the risk to have this unit shipped by freighter from the US east coast, and hence through the Panama Canal, it was elected to send it by rail from Baltimore to Oakland, CA, where it was to be loaded on to a freighter for Korea. The story goes that the US Defense Dept. was also concerned about the potential for things getting hung up while being shipped from one coast to the other through the Panama Canal should a national defense issue arise, and they were on the look out for something big being shipped via rail to test just how responsive the rail system would function in getting material from one coast to the other. The back-up power system was one of the items suitable for use in doing a test of the system, and without Sperry's knowledge, a DX rating (what I understand to be a military high urgency to keep it moving identifier) was placed on it with the railroad doing the transfer from Baltimore to Oakland. There was a snow storm in upper New York State, and some of the rail lines were blocked by the snow, resulting in a re-routing of the train. Someone failed to check vertical clearance on the secondary route, and the top of the deliverable shelter the back-up power unit was in was sheared off as the train went under too low an overpass.

I got a call on a December morning, telling me there had been an accident, however, I was to be informed that the back-up power unit had suffered no damage, just the crate it was in had been damaged. When I informed the caller the unit was not in a crate, but in a deliverable shelter, there was a brief pause followed by the proverbial, "Oh Shit."

That prompted an investigation internal to Sperry to gather enough data to make some assessment of the g forces at work when the shelter came in contact with the overpass, to determine if any damage had occurred to bearings in the power generating unit. That research concluded, thanks to the competencies of Norb Ewald, and there was the potential for enough damage to make it questionable the unit was appropriate as back-up power to a mission critical system such as Air Traffic Control. Thus an insurance claim was filed, a replacement unit was ordered, and the unit involved in the rail mishap became property of the insurance company. When the insurance company listed the unit for sale as scrape, I got word of the pending sale to our Plant Engineering folks, knowing they were in need of a power unit for a test bed under development, and Sperry ended up buying that unit for pennies on the dollar. I was informed by our corporate insurance gurus that the insurance company thought it highly unusual that Sperry would on one hand, claim the unit was damaged goods and unsuitable, only to turn around and purchase it.

Not surprisingly, dealing with governmental organizations in other countries means contending with cultural norms that are seldom show up on the surface, just as they become the unwritten rules of operation in our own country. I had accepted a challenge to find some means of obtaining a modification to the Korean contract; Texas Instruments was our chief competitor and Sperry management had priced out the Sperry contract at cost to keep TI from establishing international credentials in

ATC. Since the initial proposal and contract negotiations had taken a couple years to complete, an obvious place to begin getting a change was to replace the mechanical relays in the message switching unit to currently available technology in micro processing. The subcontractor for that part of the system was a small firm in Hawaii and he too was all in favor of seeing this change accomplished. It would not only mean a better system for the Koreans in the long run, it would do much to improve the marketability of the Hawaiian firms products to other customers, and, it turned out, would actually be less expensive to build.

The president of the company in Hawaii had done other business in Korea, and he agreed to join me there to support gaining a modification to Sperry's contract. We got the in country agent of the FAA to support our efforts, and prepared a long list of benefit's the Korean's would gain, and at a minimal cost, then at no cost. No matter how solid an offer we made, we got a pleasant audience while we talked, but never any decision to agree to any change. As a last resort, I had Gordy Lamb go with me to Korea to make one final effort at getting a change agreed to. This trip included an evening on the town with the Korean project manager, and a trip to a karaoke bar after dinner. It was there, after we had enjoyed several after dinner cocktails, that I learned what I was up against. Mr. Bune, the Korean project manager informed me that someone else had signed off on issuing the contract to Sperry - more or less putting his life on the line - that if this ATC system was installed as defined, it would work. That person was now assigned to another agency, and his future was contingent on our ATC system performing as specified in the contract. If there were any changes made to that contract, that person's name would be replaced by the current project manager's name, who would thereby assume full responsibility for all aspects of the system's performance. Nobody in the current organization was interested in taking on that responsibility.

Incidentally, the day we left Korea from that trip just happened to be Gordy Lamb's 60th birthday. Just how many people end up in a situation wherein they spend a full 36 to 38 hours, all in the same day, celebrating that birthday?

I vividly recall my visit with Emmett Johnson in his office when I informed him I had come to the conclusion I was not going to able to meet the commitment I'd made of getting a change modification to the Korean ATC contract. All 5' 8" of Emmett got to his feet, stood directly in front of my 6' 2'' frame, and tapping me on the chest said "Glen, you're getting tired, and you need to be more creative in getting this task accomplished." It was very difficult to keep from laughing as I told Emmett I could not control how he perceived my message to him, but, tired or not, I felt an obligation to give him my honest assessment of there being no way to accomplish that task.

MINNESOTA

By September of 1980 the Korean contract, all as spelled out in the original contract, had been essentially completed, and I moved on. I became the principal proposal manager on the SUBACS contract definition phase, reporting to Bob Bro, working with the Autonetics Marine Systems division of Rockwell. Here again, my effort was amplified by the talents of several others, including the likes of Larry Debelak, Quint Heckert and several others. On the plane returning to St. Paul from

the Autonetics plant in L. A. one evening, I was trying to get my trip report in order on the flight home. The person next to me had a couple scotches before I closed up my briefcase and joined him in a relaxing beverage. His opening comment was, "I'm wondering if you're one of the guys who are working on finding what you want by banging on the inside of a long pipe?" When I commented I found that an interesting way to start a conversation, he exclaimed, "I spend my days finding out what I want to know by banging on the outside of a long pipe, and I know the government has an interest in doing just the opposite. Are you involved in submarine warfare tactics?" His occupation was to locate problems in pipelines. His firm had developed techniques to measure the reflections from pounding on the outside of the pipe in both the metal of the pipe, as well as in the fluid in the pipe, and thereby determining the location of a fault or break in the process.

In October of 1981 my job was titled "Principle Proposal Manager" in the Systems Engineering organization responsible for engineering content on systems proposals. My job description stated the positions was "responsible for providing proposal management for all command and control pre-proposal, proposal, and post-proposal activities related to all major and target Command and Control programs.' This included a staff of proposal coordinators, among whom were people like Leo Bock, Ron Favorite, and several others, whose names also escape me. As was my normal approach to new challenges, I had high expectations for how we as a group were going to improve the quality of proposals out of the systems engineering organization, and set about to determine how to make all that happen. Some of my staff were as long, or longer term employees than I was, they were dedicated to their tasks, and polite in their reactions to my efforts to bring more enthusiasm to our tasks, but also seemed to know there would be a limit on how long I would keep up the "better expectations" attitude. Perhaps I'd been in the "get better organized mode" for 2 or 3 months, when the first clue came to roost. I'd been informed by marketing a major proposal was in the works, and marketing had an interest in who the proposal manager was going to be. About a day or so later, when I had finished my assessment of the workload of the department, and was getting settled on my choice, I got a call from Bob Bro informing me that Joe Stoutenburg, Bob's boss, had appointed Dale Klette as the proposal manager and I was to get with Dale and see what support he needed from my organization. Within another month or two, another major proposal was kicked off, only this time Dick Kuhns was named proposal manager. Both Dale and Dick were line managers in the systems engineering organization, not part of the systems engineering proposal management organization. Now, to my mind, something seems askew when the VP of an organization keeps bypassing the organization chart to make major appointments.

In due course, I felt I had no recourse but to address the issue with both my boss, and my boss' boss. Was there a credibility gap?, was there past history that no one was willing to share with me?, what was going on seemed to me to be stifling to the careers of the people in my organization, and it seemed to me the chosen line manager often had his or her hands full already, and really didn't have the time to pay attention to proposal details appropriately.

So, I took about as gutsy a move in my own career as I did at any other time. I informed Joe, through Bob Bro, that I took exception to how things were being done,

and requested that one of two changes be made. One was to place individuals in my organization in whom he had the confidence to negate the need to draw them from the line organization, or the other was to transfer the people in the systems engineering proposal management group back into the line organization where they could also take part in new engineering and technology advances, and I would find something else to do.

Joe chose the later option.

No doubt my bold action with Joe Stoutenburg was related to an activity I had been challenged to investigate, which was to determine what action should be taken by the organization since the changes in technology which occurred would result in a change to our customer base, and that change resulted in frequent organizational changes which were being made by Sperry, which was increasingly becoming problematical since the Sperry workforce was both aging and resistant to change.

That subtle "oh, by the way" assignment had led me to meet a Janet Hagberg, a local Twin Cities guru in finding ways to keep workers motivated in being creative and productive. In a nut shell, Janet's model for making this happen had to do with determining just who was in charge of developing and carrying out a career plan for each employee. She was working with Honeywell on a similar assignment, and had contracted to do a prototype workshop for Sperry production people in Plant 1. I attended that workshop and came to a startling conclusion. My boss' job description at the time said essentially, he was responsible for my career, and my job description in essence said I was responsible for each of my subordinate's career. In thinking about that, and realizing how seldom I'd ever done anything for a subordinate of mine regarding a career move, I realized how disjointed and uncoordinated my own career plan had been spelled out by my bosses. Solution; get someone else in charge!! Janet's thesis was that the best person for that to be assigned to was the person living out the career being planned.

As I discussed the prospects of bringing about such a change in the Systems Engineering Organization, Janet wanted to know how many professional technical people were in the organization. At the time, there were right around 600. Her immediate response when I told her that number was "there are 200 people in that organization who are going to be willing immediately to take part in a workshop to take responsibility for their own careers. There are another 200 who are "from Missouri" and will be interested, but want to see how it goes for others before they will be willing to get involved. The third group of 200 needs to be subdivided into two groups. One of those subgroups will not need to attend, and they will tend to question the need for anyone else to. Why? Because they have somehow already assumed responsibility for their careers, and assume it is "natural" for everyone to do so. The other subgroup is in essence a lost cause in that their resistance to change is so ingrained they are stuck, and just want their boss to take care of them. You will need to find a way to keep this last group from becoming the target group to work with, since "management" will want them to be the first to make "appropriate" changes."

Since this discussion suggested that two-thirds of the people in the organization could be influenced, I asked Janet: "How do we proceed?" Arrangements were made for her to conduct one-hour interviews each with Joe Stoutenburg and his staff to

assess their openness to promoting a change in career planning accountability within the organization. Bob Bro was of great assistance in getting agreement from each of these people to participate. When completed, Janet reported she had found a receptive, but cautious team of managers in general, with a couple who were encouraged that something tangible could be accomplished. With that, Janet and I worked together to design a modification to the workshop which she had completed for production workers, to do one for professional engineering people. We agreed that if a usable product was realized, it would be hers to market to the world out side of Sperry, but Sperry's to be used for any follow-on career development activities.

Attendance had to be on a strictly voluntary basis (being assigned by a boss was not allowed) and there could be no boss/subordinate relationship in any one group that was participating. Workshops would have participation limited to 6 to 8 people each. The text for the course was a book Janet had published earlier, titled *Inventuring* in collaboration with Richard Lieder. Initially, the workshops were conducted during normal work hours, and participants were expected to put in what ever extra time was needed to carry out their normal responsibilities. The resulting workshop was one four-hour session each week for four weeks, plus a couple of individual one-hour sessions by each participant with the workshop leader. Janet conducted the first couple, and we then co-taught a couple while I was getting into the swing of things. By the end of 6 or 8 months, a total of close to 100 people had signed up and completed workshops. About that time, I was sitting in on Joe's staff meeting when he announced that in the last 6 months, the Systems Engineering group had hired about 55 people, but that about 50 people had left the organization in that same time period. All the time and money spent to hire 55 people had only netted the organization 5 people! As any reader can imagine, a shudder went down my spine. Is Joe going to come to the conclusion the "manage my own career" workshop the instigator for some of these 50 people to leave?

Back to my desk, I called personnel for a list of all people who had left System Engineering in the last six months. The response? Forget it Glen, that information is protected by all sorts of considerations, and not available to you. OK, here's my workaround alternative: If I bring you a list of systems engineering people of interest to me (those who have attended the career planning workshop), can I have you review the list and tell me only how many on the list have left the organization? That they could do, but it would take a day or two to complete. I compiled the list and got it to them within the hour. It was about a day and a half later when personnel called to tell me that <u>none</u> of the names on the list had left the organization, and it was not more than another hour before the anticipated call came from Joe. I had to take the list of attendees to Joe to get him to accept that they were all still in the organization.

Joe had been one of the more reluctant management people to have this change in career planning accountability take place, and after having his concern eliminated that the career workshop was encouraging people to leave the organization, he became a "representative of management" to come to one of the sessions to discuss "future needs of the organization" to be factored into individuals as they completed to workshop activities. If I recall correctly, Joe was the presenter who mentioned a likely need for someone to take an assignment in Australia. Wally

Houer was in that workshop and immediately got to his feet, asking where do I sign up?

I had also gotten involved on the QWL efforts Dick Seaberg had introduced as part of the Human Resources Enhancement effort. I'd attended Pete Freeman's Action Team Leader workshop and was coaching several action teams. I chaired a planning committee which orchestrated the planning and conduction of a one-day seminar on promoting innovation in the workplace, which was attended by several hundred managerial and professional people from DSD. I became a Loaned Executive and spent several months as the interim Executive Director of the *Minnesota Hispanic Technical and Professional Education Project* which raised funding to support ways to get Hispanic kids to pursue careers in technical and professional fields, rather than food and social services, which were the more typical careers of choice. In the course of the time period I was on loan, the MHTPEP raised over $81,000.

In July, 1983 I went to work for Dave Kolling in the Systems Engineering component of Command and Control Systems. Following a brief period of getting reacquainted with life at DSD, during which duties included evaluating IR&D requests and recommending which ones had merit, working with people like Bill Geiger and Dexter Pehle, I was named the Director of Systems Engineering Support Operations. The staff consisted of John Fritz, head of the Mini-Labs; Jack Anderson, manager of Configuration Control, someone who headed up the Systems Logistics function (Fred Murray?), and the manager of a cadre of folks who managed the task of getting systems engineering proposals out on a timely basis.

I continued to manage and conduct career planning workshops and even got a "cost savings reward" when those sessions were held outside normal working hours. I participated in the activity of a consultant organization which was hired to assess what changes needed to be made in Command and Control operations to be able to achieve the stated objective of becoming a major systems supplier to the US military. Remember what came out of that consultant's analysis? The Technical team of professionals in the C & C organization took the position that the organization had all the technical competencies needed to be successful, however the management team needed beefing up,, and the management team was equally convinced just the reverse was true!

RETIREMENT

I remained in C & C Systems engineering until November of 1986, at which time drastic steps were being taken to significantly reduce the professional staff within DSD. A corporate program had been developed whereby employees with longer periods of Sperry employment were given "incentives" to accept and early retirement. Meanwhile, Janet Hagberg had found a waiting market outside of Sperry for a career planning training workshop. I'd made arrangements to conduct some of those workshops as a member of her staff, and found it to be an enticing new opportunity to pursue a career outside of Sperry. Hence, I had evaluated the Early Retirement Incentive package Sperry was offering, and accepted that offering as of December 1, 1986.

NEPAL & NEW ZEALAND

In the fall of 1987 my wife and I and several members of my extended family made a trip to Nepal and spent a month hiking in the Himalayan Mountains, following which my wife and I spent a month in New Zealand.

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Shortly thereafter, I enrolled at St. Mary's Graduate Center in Minneapolis and by December of 1960 completed a Masters of Arts degree in Human Development, focusing on career development, marriage enrichment and retirement planning. Much of the hands-on credit in each of these areas was achieved either as an employee of Janet Hagberg and what she had named the *Good Work* program, or as a volunteer with an international marriage enrichment organization and the Minnesota *Senior Resources* organization.

POSTSCRIPT

Hey, there was a lot of life to be lived outside the corporate structure. There were opportunities galore to make a few bucks, and to spend some time making a contribution to society in enjoyable and rewording ways I'd not had time to consider earlier in life.

Edited by John Skonnord and Lowell Benson