

Oral History of J.P. (Jack) London

Interviewed by: Jeffrey Yost

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J.P. (Jack) London

Conducted by Software Industry Special Interest Group

Abstract: In this interview, J.P. (Jack) London describes his Naval career, including earning a master's degree in operational research at the U.S. Naval Postgraduate School and how that, plus his doctorate in business administration from George Washington University, led to his work doing logistical planning for the U.S. Naval Material Command. When he left the service, that experience led him to private sector companies that contracted with the Navy for logistical support. This ultimately led him to a position with CACI, which developed and sold the simulation software product SIMSCRIPT. Dr. London remained with CACI for the rest of his career becoming CEO in 1984. He describes the transition of CACI from a company providing services using the SIMSCRIPT product to a full service IT contacting firm developing large-scale logistical systems for the U.S. Military and expanding to include document management for the Department of Justice Office of Litigation Support and extensive IT support for a number of intelligence agencies. Most of CACI's growth strategy and expansion into new areas of expertise came about through strategic acquisitions, and Dr. London talks in depth about the importance of company culture and how identifying compatible cultures was the key to their success with mergers and acquisitions.

Jeffrey Yost: This is an oral history interview conducted as part of the Government Professional Services History Meeting at CSC Headquarters in Falls Church, Virginia. The date is April 1, 2009. The industry pioneer being interviewed is Dr. Jack London. I'm Jeffrey Yost from the Charles Babbage Institute. This oral history is part of the Software Industry Special Interest Group's ongoing oral history project and will be transcribed and edited and posted on the Computer History Museum website. Jack, could you begin by telling me where you were born?

Personal Background

Jack London: Surely. I was born and raised in Oklahoma, in Oklahoma City, in 1937, as a matter of fact.

Yost: Can you tell me a little bit about yourself as a student? Were there particular subjects you were interested in or had a special aptitude for? Your pre-higher education?

London: In high school I had an interest in mathematics and science and physics, but also a real deep interest in history. American History, which we were taught in grade school, and Oklahoma history. And then on to more American History a little later in high school. I enjoyed those areas in particular. But I also had an interest in commercial art, art crafts, if you will. And, of course, the athletic programs through the high school. That would pretty much represent my interest in those early days.

Yost: You made a decision to study at the Naval Academy and embark on a naval aviation career. Can you tell me about that?

London: Well, that was a little bit of a strange turn of events for a young man of very modest means from the state of Oklahoma. I realized in talking with my mother and father when I was in high school – I'm the first of two sons – that the financial plan for going to college, if there was going to be any, was going to have to be something I had to invent because the family didn't have the kind of money to put me through school. So I had to find some kind of scholarship or some kind of program where my schooling would be paid for. I had some friends that I knew through high school that were in the Naval Academy. Didn't know them hardly at all but I knew they had gone there and so I reached out to them and they were most interested in providing information. They were very warm and cordial and provided me with all kinds of ideas and I met some other people who lived in the area and had been in the Naval Academy. Some of them were older gentlemen a couple of them even served in World War I, others in World War II. So I got very interested in it, put in my papers, applied to both the senators from the state and my congressman.

It was very competitive in Oklahoma in those days so we had to take what's called College Boards and I boned up for that, and, as you might imagine, they were pretty strong on physics and science and math and history and English and so forth. So I did pretty well. Those were all topics that I enjoyed so I became eligible from a grades standpoint. So it was a matter of getting an opportunity.

I was nominated by Congressman John Jarman from the 7th District of Oklahoma and also by my senator, Robert Kerr, a famous oilman who was a senator in those days. I had two appointments and only needed one, so I returned one and went to the Naval Academy. It was just about that straightforward.

There was a lot of angst as to whether I was going to make it or not because I was looking for something that would pay for my education. I had looked at the University of Oklahoma where I had also received an opportunity to be in the Naval Reserve Officer's training program. In those days the United States government, the Navy, would pay for education for young men who would go into the military for some obligated service. I think it was about four years.

Education at U.S. Naval Academy and Early Naval Career

Yost: What did you focus on in your studies at the Naval Academy?

London: I must say in those days there weren't any choices. Today the United States Naval Academy is run much more akin to what I would call more civilian-style universities and institutions where students get to elect their programs and courses and so forth. In the mid 1950s on the back of the Korean War, there was still a lot of military regimen. We were in the midst of the threat from the Soviet Union, we didn't know where they were going, there were hydrogen bombs and things. So it was very militaristic. I've been over to the Naval Academy several times since then and it is still the Naval Academy but in so many ways a more modern, different institution. But the course there was very scientific, engineering, lots of history, a lot of naval history – no surprise – and you wrote a lot of themes and papers. They were trying to get us to learn how to compose three or four sentences that made sense in a paragraph and it was a struggle for them but most of us finally figured out how to do it.

My program there was all regimented. Every midshipman took exactly the same course. One elective you had was language. From the draw, you put in your one, two, three choices and I got my second one which was Portuguese. In those days they taught as you might imagine Russian, German. No Arabic in those days. I suspect they have a full curriculum of Chinese and Arabic today. It's a different world.

Yost:	I'm sure they do. It was 1959 that you graduated?
London:	Yes, graduated with the Class of 1959.
Yost:	And embarked immediately on a naval career?
London:	Yes, I did.

Can you tell me about that?

Yost:

London: In those days, you were commissioned on graduation. It was kind of a simultaneous event and began four years of obligated service in the United States military. You could go into the United States Marine Corps, the Navy, and, in those days, we had maybe 1 or

could go into the United States Marine Corps, the Navy, and, in those days, we had maybe 1 or 2 that would go in the Army and maybe 10 or 15 that would go into the Air Force. They usually made those choices because they had a parent that had been in those services. So they allowed those kinds of waivers or latitude. And, of course, a big contingent went into the Marine Corps because the Marine Corps is part of the United States Navy in the broad sense.

But I went into the Navy. I was commissioned Ensign on the 3rd of June, 1959 and stayed back that summer to bring in the new recruits that were the new midshipmen. They're called Plebes. They come in the early part of summer and the graduating men then have the position of taking care of the new people through the summer. So I stayed there until the fall of 1959.

In September, I went to Pensacola and got into the flight program at Pensacola, the aviation training program and was there about 18 months and then became a naval aviator and I went into the helicopter business. I flew Navy helicopters for five or six years after that and enjoyed it immensely. There's nothing like flying helicopters, especially in the old days when there was a lot of bubble and glass around you. It was a lot of fun.

Introduction to Computer Technology

Yost: And either at the Naval Academy or in the early years of your naval service, were you introduced to computer technology?

London: Oh, yes, indeed. Yes, indeed.

Yost: Can you talk about that?

London: It was kind of coming along, if you will. Let me give you a quick anecdote. The Naval Air Development Center in Johnstown, Pennsylvania, not too far from Pittsburgh was the Navy center in those days, Jeffrey, that had a budding, and actually you'd say flourishing, computer technology lab. I'm not sure of the organizational titles but they were doing a lot of research and doing a lot of work with computers.

One of the things we got to do as midshipmen – I think it was the summer of 1957 – was go off on what were called field trips. We went various places up and down the East Coast, bases and installations and so forth, and one of them was up to the Air Development Center. And, lo and behold, they had a Univac-style computer up there and we were taken into the computer lab. I'll never forget that a Navy Commander walked us through and he was in the midst of programming the computer and programming in those days was plugging cables in the back. I remember seeing the vacuum tubes and these huge banks of carriage racks for the storage devices and so on and this was a computer. So that was kind of a primitive introduction to it.

Later on, in the late 1950s and early 1960s, the Navy began to use certain kinds of computerstyle technology, very rudimentary navigation support things and weapon delivery support technology and so forth. So I got into analysis, the side of military tactics where computers could be used to simulate projects and problems and war situations or tactical situations. During that first four years of the early 1960s, when I was in the helicopter squadron in Norfolk, Virginia, one of the tasks assigned to us through the Navy hierarchy was to help work on special tactics for chasing Soviet submarines because it was still a huge threat in those days. The Soviets had nuclear capability with warheads that they could deploy off the coast that could sling devastation into our homeland. So we began to work very diligently on the tactics of how to track these fellows and find out where they were going and monitor and make sure they didn't pitch weapons, especially in a crisis situation.

That was work that was done by the applied physics lab up at Johns Hopkins University in Silver Spring, Maryland, and I made a couple trips up there with my commanding officer to review tactical projects that the university scientists and engineers were working on to help the United States Navy to become more effective at chasing these subs. So I kind of got in the swing of it and that was awfully exciting in those days. You kind of imagined the computers were "Wow, what's this all about?" and that was being talked about all over the place. And we had satellites in the works. As a matter of fact, part of this was the recovery of John Glenn. On February 20th, 1962, Colonel Glenn made the trip around the earth. He was the first American to circumnavigate the planet, and my ship, the USS Randolph, and my helicopter squadron, were down in the Caribbean on that day. We were the recovery ship.

Yost: Wow!

London: And, of course, that was computers driving all that stuff from Cape Canaveral and the Johnson Space Flight Center in Houston and all that. So you can imagine how exciting it was.

Yost: It must've been a thrill.

London: Oh yes. He came back on our ship. We were supposed to pick him up. In fact, I was supposed to be part of the Airborne Recovery Team but it didn't turn out that way because he flew past the ship and overflew downrange and was picked up by the USS Noah, a small ship. They pulled him alongside and recovered him and then later on that day he flew back to our ship and landed on the carrier deck and you can imagine the high-fives. It was one of those days, about 110 degrees in the Caribbean. It was a very, very warm day I'll never forget. Bright, sunny sunshine and him getting the hoopla when he got onboard our ship.

But, as you can see, computers were sort of around doing part of the mission. I didn't have any hands-on experience but was taken with it and was reading articles about it in the Navy magazines and institute proceedings. But I definitely was interested and, matter of fact, a little bit later in my career I shifted to a designator specialty area having to do with aeronautical engineering and a big piece of that was computerized systems for logistics for operational issues and components and capabilities.

Graduate work at U.S. Naval Postgraduate School

Yost:	And you extended your education at the Naval Postgraduate School?
London:	I did, indeed.
Yost:	When did that start?

London: That was after the first assignment I had out of flight school in the helicopter squadron. That was all on the USS Randolph and, by the way, we were there also during the Cuban Missile Crisis which was another interesting thing. That ran me up to about 1965. I went to the Naval Postgraduate School partly because of this interest in the analytical processes and modeling and simulation and the things they were doing at Johns Hopkins. I could see how fascinating and important it was. It was both interesting and challenging, and had what I would call real payoff. We had pretty immediate use of some of the tactical developments. We would even try tactics before they were fully tested in field experiments, if you will. I really enjoyed that part. I won't call it entrepreneurial but it was rather adventuresome.

So I applied with the help of my commanding officer to the U.S. Naval Postgraduate School in Monterey, California. It was one of these things where you put down your first three choices. Everything in the Navy was your first three choices, where you want to go, what kind of planes you want to fly, everything. I didn't always get my first choice – nobody does. But I did get my first choice there, which was the study of operations analysis, which I would actually call operations research, and the Navy part of it was the analysis part. So we had OROA, ops research, ops analysis, and it was a two-year program. It was a very rigorous program, full-time, two years, nonstop, three semesters through the summer. We were paid as naval officers so the United States Navy and the United States government said, okay, we're paying you, you're going to school, you're going to go to school all the time. No breaks.

So it was very rigorous and I matriculated with a Master of Science in Operations Research in 1967. I would just say that that's a fine institution. I had heard a lot about it and you think, well, it's a good school. But then you get out there and, I mean, I had to scramble. I was constantly chasing the cut line. That first year I had been out of the Naval Academy for about five-and-a-half years and I'd had calculus and a little bit of probability and statistics, but not a whole lot, and they got to a very deep academic level really fast. Some of the professors were formerly in the math/sciences area at Stanford University, and the curriculum was rigorous. I think it's still recognized as a very good school, but in those days it was really high-powered and frightening because there were people that didn't make it and you would not want to be one of the people that was turned back to the fleet because you weren't able to get through school. So you can get a sense of the competitive nature. It was friendly but it was a competitive situation. I was very pleased to have gotten through there with good marks. I was B +.

Yost: Was computing or programming part of the curriculum?

London: Big time.

Yost: Can you describe that?

London: The school had a Control Data 1604 and we learned to write assembly using CODAP. It was assembly language and, oh, this was all brand new and I mentioned the rigor. It's all of a sudden from flying helicopters to diving into the back ends of computers and learning the difference between binary and octal and all the rest of it. I'm so delighted and pleased at this point in my life that I had that couple years' exposure because there's no doubt in my mind how computers work, what it takes to get you to operating capabilities.

And it gives me such an incredible appreciation for where the technology is today compared to where we were with writing programs. These were student programs; we weren't working on anything that had to do with national security because this was an academic environment. It was challenging work. We programmed, we wrote simulation models. Fortran was big in those days. I never got much into COBOL. Had a little flavoring of it but I got to be pretty competent at Fortran programming. In fact, I did a wee bit of that after I left the service and went into industry, some rudimentary quick patch-type projects for a while, in the early part of my civilian technical career. But we really were immersed in it and I was delighted we got to operate equipment and use tapes and punch cards.

I worked at the computer facility and it was a magnificent experience. It was every bit as much as I had thought might be possible there. I had good expectations when I went but that institution at that particular time was right in the midst of the buildup to the Vietnam War. So everything was serious. Everybody was serious all the time. China was looming over the horizon and Russia was still a significant threat so we had lots of bears and boogiemen out there. All of them were regrettably quite real. So there it was quite serious, but I really appreciated those years. The Naval Academy was a good education. I'm proud of the education there but I really cut my teeth on becoming a professional during those years [at the Naval Post Graduate School].

Naval Material Command and Doctoral Program

Yost: What type of work did you do following that with the Navy, after you finished?

London: That was a wee bit of a--disappointment's a little bit too strong a word-- but I was a little bit set back because I had wanted to go from there to Vietnam because that's where the future was in terms of a professional military career. Not that I enjoyed the concept of fighting a war but if you're going to be a military officer then one is expected somewhere along the line to do that part of it as well.

I was not accepted. I tried three times and was turned down three times in a row over about a four-five month period, the last part of my second year. I was trying to get my orders lined up, and completely out of the blue something happened that was never on my wish list. You know I said you usually get one, two, three choices and I didn't have anything on there saying, "Go back to the Naval Academy," but that's where my orders went. They sent me orders to go back to the Naval Academy. I said, "What for?" They said we have an expanding curriculum in the operational field, science and tactics, science and technology, and one of the disciplines we are emphasizing is operations research for the midshipmen. We want them to understand how tactics are developed, how the operations research and scientific methods can be used to enhance our security through strategic design, through weapon improvement, through better logistics systems, through better training programs, all the rest. So that's where I went.

I spent a year-and-a-half there. That was when I changed my designator to 1510 which was an aeronautical engineer. I thought well, I like this discipline and I can see that by not having been selected for an operational tour in the combat theater that my chances of that route were diminished. Not eradicated but diminished, so I joined the other side.

I spent a year-and-a-half at the Naval Academy teaching with the Naval Science faculty and during that time pursued my education at the doctoral level at George Washington University. The first place I tried for was Johns Hopkins. Johns Hopkins of Maryland and Silver Springs had a wonderful reputation for these fields but their program was campus-driven and the timing of it was such that I couldn't fit it in and still do my job at the Naval Academy. George Washington had a program in Business Administration, which is not what I initially wanted to do. But I could specially tailor it to bring in management sciences and enough of systems analysis and some of these disciplines such as data processing management. Enough that would fit my overall interest but, most importantly, I could fit it in and that was crucially important because it's a showstopper if you can't do your job. It doesn't work that way.

Yost: Did you embark on this with the idea of a long naval career and extending your career there?

London: Oh, yes. I was still all the way in and I just plowed into it. Jump in now, think later. It was a very successful program but then I got selected to go to Washington, DC. I had been promoted early to the rank of Lieutenant Commander, which I was very thankful for and very humbled by and appreciative of, but part of that was that I became visible to flag officers that were looking for aides, administrative assistants, special technology advisors and those kinds of jobs, which typically come in and support flag officers and command structure.

So I got tapped to go to Washington, DC to the Naval Material Command by a three-star admiral at the time, Vice Admiral J.D. "Jack" Arnold. He was also an aeronautical engineering duty officer. So he had the same 1510 designator, aeronautical engineering, at the three-star level. That's a very small community but he found out that I had shifted over and my dossier, if you will, was made available and he was looking for an assistant. So he called me for an interview, I went over, interviewed and signed up for the job. You interview and talk to people, they check you out and so forth. I did receive the job and I went to work for him in the spring of 1969, just after my second child, a daughter, was born at the Naval Academy.

So I was transferred out of the Naval Academy over to Washington, DC and worked for the Naval Material Command. This was the organization that in those days managed the procurement and acquisition of everything the Navy bought, from paperclips to aircraft carriers and everything in between. So it was a magnificent experience and then, with my business administration experience that I was getting through the academic program at GW, that put the frosting on the cake, if you will. I had the Naval Academy, I had the scientific technology degree, operation research, then I had the business management, and I even stood for comprehensive examinations in accounting and statistics.

Yost: A very broad education.

London: But I always had this interest of being in and around the computer world. In fact in those days, even in the late 1960s, it was still coming along. You know, they had the BM System/360 and we had some modern equipment but the challenge was still getting things to work inside the box. We needed software that would run and we had the huge cost of building these large-scale systems and then problems with overruns and delays. The challenge was not the hardware being able to compute and compile. If you wanted to really get the killer apps leverage out of it, you needed to have these larger-scale systems and they were terribly complex and difficult. I wrote my doctoral dissertation on methods for evaluating large-scale system projects. I learned a lot from it. I spent a lot of time reading the literature and interviewing and using survey questionnaires and so forth. I'm not sure that I broke down any barriers or created any breakaway process technology but I learned a lot. I was very interested in methods for evaluation because the problems in those days were how do you keep track and how do you measure progress and so forth. I would give myself a decent mark in terms of

concept. Probably, if I had to do that work over I would take it to a more sophisticated level than I did in those days. Of course I've got 35 years of experience now so it's a different world.

Yost: Were naval personnel involved in programming logistical applications for the Navy?

London: They always had been. The Navy in those days had development shops and organizations that actually wrote code and still do to some extent but much less today. Of course we're talking 30, 40 years ago. I mean, it's a big difference in time and the evolution of technology and all the rest. But in those days there was a viable career opportunity. I chose to leave the service because I felt that with the Vietnam War winding down there would be some pullback in the levels of interest and they were trying to get rid of military issues. Actually, it went on until 1975 when finally Saigon fell to the communists. But I had made a decision, in 1970 or so, that I really would probably be better off moving to the civilian sector. I had gotten myself into a situation where the possibilities weren't as great and I could see that the competition was going to be terribly fierce over a few small spots. I'd had pretty good luck on that one, two, three stuff but I'm not sure it was going to last very much longer.

Of course, in the later parts of a career, the one, two, three stuff doesn't matter as much as the personalities. But I was not there yet. I was at 12 years. When I started making my decision, I had been at 10 years. So even a 20-year career was still 10 years ahead of me. I made the right decision. I was able to stay in the Naval Reserve and complete a total of 24 years, 12 active service and 12 in the Reserves. So I've always been in and around the Navy in one way or another. I admire the Naval Service. It is a special place, obviously, in my life and the challenges were there and I'm very glad that I went ahead and served 12 years in the Reserves. I wound up my last couple years in the Reserves being the commanding officer of an engineering and logistics unit for the Naval Aviation Systems Command so it was kind of a nice end-of-career situation and I was very thankful for that and appreciated that opportunity. But that takes me through that part of my life and out of the Navy.

Yost: Did you have a sense of what types of opportunities you wanted to pursue in the civilian sector?

London: Well, your mind runs wild, I guess. There was a name that you'll know that had been a Naval Academy fellow that had gone into the computing field about ten years before that and had been extremely successful: Ross Perot.

Yost: Oh yes.

London: And I won't say that Ross was in any way like a role model for me but I was aware of him because most people in the Naval Service and certainly those of us that went to

the Naval Academy in the 1950s were. I think Ross was Class of 1953, so he was six years ahead of me, and I think he served four years and then left the service and went to work for IBM and became one of their lead salesmen on the East Coast. And then he created EDS, Electronic Data Systems, several years thereafter. I knew that computers were really going to be something. That part I got right. Maybe some other events I didn't get so right but that part I did have right and I was fascinated with it and I had the exposure at the school.

By the way, when I taught at the Naval Academy we taught courses where the students could solve some of the problems with small programs, writing little Fortran programs and so forth. So I admittedly wasn't very deep into it at the Naval Academy because it was a different level than graduate school. But I was still in and around it, and still aware of what was going on and then the experience in the Naval Material Command was that computers were all over the place. And the same thing was true in my schooling at GW at the same time.

So I was going to night school at GW while I had the position with Vice Admiral Arnold. That was amazing. One anecdote on that. The men that were in the Navy in those days and those senior officers with senior positions that were all veterans of the Second World War, Admirals, Vice Admirals, Rear Admirals, had a tremendous impact on me because they were truly role models. These were some of the finest people that I have ever known in my life or ever met. They were dignified people, they were gentlemen, they treated ladies like ladies. It's amazing. It was just a wonderful thing to be around. These were real men too. I mean, they fought to the death in carriers and flying airplanes. There are no wimps. But they were wonderful people and talk about role models. I am a little wistful as I remember these fellows. One of them in particular was a fellow that lived here in Annapolis and just died a couple years ago in 2007. I think his 11th or 12th combat patrol was along the Chinese coast and there were a lot of Japanese warships and he received a Medal of Honor for that. They called him the Galloping Ghost of the China Coast and I've heard that cliché around him and that was Gene Fluckey. What a wonderful man he was. So it was a wonderful experience for me to be around those people and I'll never forget them. I watch the world around me today and there are people like that out there.

I had the wonderful opportunity to have been in and around people like that for a couple years of my life. Of course most of them are gone now. I think my boss is still alive. He's in his mid-90s but all the rest of the men that were there those days are all gone. So time marches on. The Greatest Generation some people say. There's a lot of truth in that.

Beginning of Career with CACI

Yost: How did you end up at CACI?

London: That is a very straightforward situation. When I left the service my wife and I deliberated a while. Her father was an Air Force Colonel, a Second World War veteran, and he had retired. He had been very enthusiastic about my career and encouraged me in a father-in-law fashion. He was a fine guy. A very dignified man and I liked him a lot. So I paid a lot of attention to what his advice was. But my wife and I decided that my promotion opportunities probably weren't as much as we would like and that I had developed the capability to provide some kind of opportunity in the commercial sector. I didn't really know what, to tell you the truth, but I went on a search during my last year. As a matter of fact when I left the service, I was still searching, and I wound up not finding what I wanted.

I was looking for a job out West. I was planning on maybe going back to my home in Oklahoma. I still had family there in those days, though they're all gone now. We're talking 1969, 1970, and I found that my marketability was pretty much going to be in defense-related work. That was my most likely significant step. I had two children by this time and a mortgage and car payments and no income. As I've indicated, I didn't have any money from anywhere except whatever I earned. I went to work for an organization that was in the electronics and sonar field and digital processing was coming along big time by then. So I went to work for them for about nine months.

Yost: Do you recall the name?

London: Yes. It was Challenger Research, Inc. but at the time I left it was being acquired by EG&G out of Boston and became a small division of EG&G which is in the nuclear energy and science and engineering field and had some work down on the Cape. But about the same time I got a call from a chap at CACI who literally called out of nowhere. In fact: "What did you say it was? CACI?" One of those stumbling kind of "Say that again please?" So we got together and he said that one of his customers was the Navy Weapons Systems Analysis Office, a division of the Naval Material Command where I had worked. He said that Captain Sulliman, one of the naval officers over there, knew that I had left the service and knew that I was very much into military logistics and had an interest in the scientific side of things, so would I be interested in coming down and talking about participating in a proposal that they were going to submit to this office? We had some project work that was coming along in simulation technology and I had my connections through the Naval Academy teaching simulation modeling to the midshipmen plus my academic background. We wrote some fairly sophisticated models. I would call them sophisticated but not advanced like you do in the commercial world. You do some really hairy stuff because that's to get the leverage out of technology.

I wound up talking to him for a couple months because I was pretty happy where I was. I was a little bit uncomfortable with the idea of jumping companies within a year. I wasn't sure how this was going to work. So I had a series of meetings and finally wound up accepting their offer and joining their firm. We were successful in the proposal and some others as well, but there was

one before I started that had had a lot of simulation work with SIMSCRIPT. Well, CACI was the SIMSCRIPT company and they'd been in business about 10 years. I guess I was about the 35th employee. It was a very tiny company. They had three or four people out in California who were writing SIMSCRIPT compilers and the rest of the people were doing modeling work of some sort or technology supporting the U.S. government and/or commercial clients, primarily in the aerospace industry.

So that's how I got started with CACI in July of 1972 and that's another career, another story. Challenger Research was located in Rockville. CACI had an office right in the middle of Rosslyn in Northern Virginia, across from the Key Bridge and what's now the Kennedy Center.

Yost: Can you describe the organization of CACI when you arrived and who was in charge?

London: Well, Herb Karr was Chairman of the Board.

Yost: He was the co-developer of SIMSCRIPT. Was he a friend and boss?

London: Exactly. The other fellow was Dr. Harry Markowitz. Dr. Markowitz had left by that time. They had parted company in the late 1960s, 1968 as I recall. But in any case, Karr lived in California but was Chairman of the Board and they had a small office out there that I mentioned, writing compilers for different machines.

Yost: The original SIMSCRIPT was in the public domain but for each machine it had to be programmed.

London: Exactly. So that's how the company got going. Dr. Bill Fain, William Fain, was the president at that time. There was a vice president by the name of Ronald C. Steorts who hired me. I came in as a project manager and started on the particular Navy project I mentioned with simulation. We were doing things like logistics kits for patrol aircraft, determining what kinds of parts were needed for deployment and so on, some for helicopters and also for ship to shore, movement of material goods and people. If there were requirements for airplanes it would do that. It was a good model to get optimum range and operational configurations and so on.

Those are the kinds of things we did for this office. They were an analysis office supporting aviation programs. So Bill Fain gave me this little project with two or three people working for me. They created a department that they put me in charge to work on this Navy contract we had won. So that's where I started. It's not much more complicated than that. And it was, I would say, a very flat organization. It wasn't a big deal. I mean, we had a few officers in a couple of parking spaces and that's about it. A couple of typewriters and away you went. Computer support was from a service bureau or provided by the Navy on their facilities.

CACI Business Model Based on SIMSCRIPT

Yost: In 1964, CACI came out with a product, SIMSCRIPT 1.5 and then 2.5 in 1971. How significant were these products to the revenue of CACI when you arrive?

London: Significant. I would venture almost all of our business stemmed in some fashion from the simulation technology. Let's say 75%. In one way or another, we were doing modeling or writing compilers. We were selling product software to people that just took the compiler and did their own projects. We had services efforts which did simulation. The customer bought the software. Two or three of his people would develop the requirements and specify the job to be done and my little team would go to work. We'd get in and put things together, load the databases; in some cases we would even help research the data needed. In the meantime, between failures, time-distance factors, usage rates, those kinds of data, sometime we had to search through the system. So it was technical services and support work and that's sort of how we did our jobs for a number of years.

Yost: There was a very important project for the Commerce Department in the late 1960s. Can you tell me about that?

London: Qwik Qwery? I didn't have anything to do with that project but I was aware of it. It was a database retrieval kind of package. I became somewhat familiar with it because I wanted to be able to represent it to new prospects and customers that we might be visiting with. If there were needs for these kinds of tools, there weren't a lot of them out there and they weren't any good.

It was a completely different environment than today. So different it's hard to even be able to describe how primitive it was. There weren't many things that worked very well and everything took forever to put together. It was just labor-intensive, everything took a long time, we didn't have documentation, and it had to be done with typewriters. And this is even before the IBM Selectric typewriters came in. It was pretty rudimentary but we got a lot done and we did become very sensitive to priorities.

This product we're talking about, Qwik Qwery with the Commerce Department, was very successful for the company for a few years. I never was in charge of that product and it did go out of the market before I became CEO in 1984 and that product was in the late 1960s, early 1970s. We had a flourishing little business for a while and then first thing you know something else comes in and overlays it. System 2000 was a database package, TOTAL was there, IDMS. Are you familiar with those?

Yost: Yes.

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London: They became so widely used and, of course, it wasn't too long after that Oracle came on the scene with their system. That was the late 1970s, early 1980s when they began to get some market penetration. So Qwik Qwery had a place and time and it worked and served a purpose but the Qwik Qwery technology became overtaken by these other more advanced and sophisticated products that were sold by companies that were designed to do just that.

CACI, I must say, was really never designed to be a software products company. It started with simulation software but that's such a narrow niche of what you have to do if you want to have any kind of a business. You have to have the services around model building. You sell SIMSCRIPT and then for a number of clients, if you're fortunate, you'll have a small project team that will help that client implement that tool for viable and successful applications and that's what we did for a living for five or six years.

Yost: In the early and mid-1970s roughly what was the breakdown between revenue from the products versus services?

London: My estimate of the situation is about half. And of course the rest of the story is that the services part, the specialized services, became huge over a period of time. We're still selling SIMSCRIPT. I think I mentioned that.

Yost: Yes, you mentioned that yesterday.

London: It's still a viable product. There's a small suite of very loyal customers, loyal in the sense that they like it. They get the annual update for their programs and they use it to analyze a problem, usually a threat scenario. They run some strategies and see what happens and provide their report to their Chief of Staff or whatever. I don't know how many installed system we have. It's a very small number but it's still a viable product and we still maintain the compiler and enhance it. Of course it's a different environment now and it's really a small business. A lot of fun though. To have a product for many years and to still have a market of any kind is somewhat remarkable. One might pose the challenge that it's the longest continuously commercially marketed and sold software product ever because it started, as you know, in 1962. Shortly thereafter they got that contract to build those special compilers to be used for the public domain stuff. They cleaned it up, made the output reports more sophisticated and then targeted it to the different types of computers.

Yost: Many of the other very early products like Autoflow and Mark IV are, of course, no longer around.

London: Isn't that neat? It's kind of interesting. It's almost like I'm not sure I believe that but it's true; SIMSCRIPT is still viable in its small niche.

CACI Financing in the 1970s

Yost: It is, yes. In 1968 CACI had its first initial public offering to raise funds, half a million dollars, and then, in doing some background research, I saw that there wasn't another public offering for 34 more years. Can you talk about the financing of the company in the 1970s? Was it able to bootstrap?

London: Yes.

Yost: How did it get the money to continue to expand?

London: That's a wonderful question and you used my favorite term, "bootstrapping." I came into an organization that was very keen on running a business. Herb Karr had an MBA from USC, I think it was. Bill Fain was a PhD physicist from the University of Texas, but he had a very keen business mind and we paid a lot of attention to invoices, collecting payments. We would love the idea of making payroll. Everybody wanted to get a check and it actually was an issue in those days. We wanted to have enough money in the bank every payday to give a paycheck to people, and, well, it can be a challenge! Not everybody always is successful in small organizations like this and a smaller organization doesn't have any influence over banks so you usually don't have much working capital until you get to be a large corporation like CACI today.

Our relationship now with the bank is such that we're borrowing money all the time. So it's a completely different world than it was in those days. But we learned, we focused a lot on cash management, especially submitting the invoices and collecting the checks. That was a big deal, even for the project officers. In other words, we didn't separate the business function from the technical project function. You had all of it between your ears. You did all that. So it was kind of running a little micro business of your own, which is good. Excellent training. I learned so many things, notwithstanding that I had a doctorate in business administration, I was still learning the street smarts, if you will, and that was compounded by the fact that I was raised in a family where my father was an independent proprietor. My mother worked with him and they had a carpeting and interior decorating business. I could remember discussions when I was in high school. My dad had somebody that owed him money and he'd have to go out in the evening and see if he could collect money.

So I had a good idea about how business worked but we have always focused on that at CACI. Cash management and managing our monies, collecting money, is a big deal. Our DSOs [Days Sales Outstanding] very seldom wind up above industry averages. We're industry average or better and I'm very proud of that for a big organization like this and it has become a cultural thing. To answer your question, I didn't mean to take a long way around, but it kind of fits together. We had to get the focus on profitability, making sure that we were very careful in expenses and the company provided its own working capital in essence. I remember in the early days just after I took over as CEO, for a number of years I used to put in the annual report and my letter to the shareholders that we had no debt. I didn't quite have the sophistication to understand that a reasonable degree of leverage can give you quite a business advantage, if you use it prudently and invest money and I mean really invest it in a proper way. Of course you could also lose your shirt. Now we're absorbing some of the largest corporations in America today that were less than prudent. That's it in a nutshell really. They did things that weren't prudent to do and they're paying a terrible price, all of us are paying a terrible price for it. I'm sad about that because I think it's clear that that was a culture issue or an ethos issue in those organizations that they got started down that trail and there's got to be an end to that somewhere.

But our view – not that we're perfect, by no means do I mean to imply that – but there were some things that were focused on very intently and that was one of them. I think that that's one reason we didn't have to go to the Street. The other thing is diluting shareholders. When you raise money by distributing big equity pieces, you dilute the ownership of whoever's there. So there was concern for shareholder interest. We're very shareholder-focused.

Our main focus at CACI though is the customer. I think the reason the company has been successful, if I were to try to pick one reason, is because of the intense customer focus and lot of companies in our industry share that perspective. I think we do it better than almost anybody and certainly I don't know of anybody that surpasses us in terms of believing in being customer-focused. What happens is when you establish a culture like that, you've got momentum and people that believe and share those values tend to remain and attract other people who share those values. And people that don't have those values tend not to be happy and move on or sometimes get nudged out. It's just something that evolves over a period of time. And we work on it.

CACI Business Development in the 1970s

Yost: In the 1970's, can you discuss how communication of customer needs got back to the leadership of the company in making their decisions. How did that occur?

London: Well, leadership was pretty thin.

Yost: Herb Karr was chair. Was there also a president or CEO?

London: Bill Fain. When I joined the firm Dr. Fain was the president and he was the president up to 1981 when he and Mr. Karr had a falling out. I'm not sure I know all the details.

Fain left and Karr took over as CEO again. But in the 1970s I think that the way we found out what was happening in the marketplace was we had very, very small views. Our worldview was pretty small and our capability to pursue opportunities was pretty small. We couldn't even think of competing with someone who had computer science for mainframe sites. It would be preposterous to think you'd go after a huge job against an established software company. So we would look for projects that were close to where we were. Were customers down the hall nearby or was there a new initiative, a new challenge, a new project or a new problem that was coming along and then the government would be was trying to figure how to solve this thing and maybe they'd put an RFP out to get some ideas. So it was kind of adjacent worlds, contiguous. We weren't very far afield but you begin to grow and those footprints begin to expand and so on.

Yost: Who were your primary competitors in the 1970s?

London: In the 1970s, the industry had not matured anywhere like it did in the late 1980s and certainly in the 1990s and then this last decade. But the kind of work I would call information technology, we didn't even use that term then. They were information systems and it was almost all in the applications area. The industry was applications. We had work with a Trident submarine that I'd uncovered and successfully competed for.

Competitors were a company called Essex and another company called Bradford Systems. They were companies about our size, maybe a little bit larger at that time but in the same realm. They were very interested in Navy ship systems work. There was a company called AdTech, Advanced Technologies, which was later bought by PRC by the way. Booz Allen was in that market space to a significant degree. We saw Computer Sciences from time to time. We almost had a hard rule not to compete against them – they were too big, too powerful – and they could cut rates and we couldn't because we couldn't stay in business if we had to. The economy of scale in a small company isn't much but you do have economies of scale in larger corporations and that's a competitive advantage.

But we did have some expertise. Because of my doctorate on evaluating large-scale computing systems, I was successful in working with the Department of the Navy. They had some instructions that came out in the early 1970s about the problems of managing large-scale computing systems and the need to have certain evaluation plans before money approvals were given. This fit, interestingly enough, right with my dissertation field. Maybe not a perfect fit but so close that at 10 years away, I didn't know the difference. So I became sort of a, I won't say guru, but sort of an authority. I won't say I was purporting to be an expert but I was an authority in this area. I'd done some research in it. I had some ideas. I could go into a room of Navy people and give a presentation and explain issues and challenges and cost benefit examinations and systems planning and contingencies and whether you needed to use PERT techniques or whether it was a waste of time and so forth. I got a whole series of jobs in a row for about 10 years to do these kinds of plans.

Yost: What was the first one that came in?

London: It was in 1973 for the Trident Integrated Logistics System, the ILS data system. That was a special purpose, extremely important computer-based system because it was a system that would manage the parts requirements for the ships, their deployment packages. When they go to sea, they can't get resupplied so they have to have the right mix of components in their storage bins when they go to sea. Someone's got to do that and you've got to get it right. So that's what this system was designed to do.

I wrote what was called the ADS Plan, the Advanced Data System Plan. The one that I wrote for Trident, for the ILS data system, was approved by the Secretary of the Navy and Congress funded the program. You have to have a little notion of what that means in Washington. To be a consultant to a technical agency that uses your product, there are letters and assessments and so on. I don't mean to say it just walks up by itself because it's not true at all but I had a big piece of the technical package that went forward for this big, multimillion dollar program with hardware and software and so forth. And it was approved.

So once the word got out on the street that CACI could do these plans and get them approved, guess what? We even had one Navy captain who heard the name CACI and looked us up in the Yellow Pages. He had a system they were thinking about trying to implement for aviation, a logistics data system for Naval aviation – spare parts usage, mean time between failures, resupply rates, information on each component, different kinds of parts, all kinds of logistics metrics. Some of those things are very expensive. Some of them are fast moving, some are slow moving and so forth. So he called us up. This is the truth. This is the only time it ever happened but I'm just trying to share. It's a small town. We weren't a big name. He had heard the name in the halls at one of these briefings and called us up. Finally, the call came to me and so I went down and worked with him for three or four weeks, trying to find out exactly whether we could do the job and what they really wanted done and so forth. We then wrote a proposal. They put a notice out on it; nobody wanted it so I got it. And we wrote the second one. Then there were two more for NAV SHIPS – I think there were about five or six all together, and some smaller ones a little later on that I didn't participate directly in. We might've done seven of these plans over that period of time and we got a reputation for being able to do this successfully.

Yost: This was really a path breaking product.

London: Yes, it was a specialty, a niche. But what happened is – and I learned this and it really sunk in on me – you get a little bit of reputation and image and that's really good but, by God, you can't drop anything. All of a sudden, you have to be "perfect." So it worked real well for about a decade. The thing that it did for us, it allowed us to get involved with these large-scale systems and first thing you know, I was able to get a small programming task and maybe a requirements document for a database over here or a functional spec for the telecom. First

thing, I got rid of the simulation business. We used to be simulators, now we're systems guys and that didn't happen overnight. The transformation took about a decade. But by the late 1970s, we had the big Saudi Arabian navy contract that was through the US Navy. The US Navy was building a supply system for the Saudis and they chose CACI to do the IT, the information systems piece of this and some of the supply systems structures, infrastructure and so on. We had that job, so we got a name with that big contract plus these ADS plans. This was all my bailiwick. The company was doing other things, too – geo-demographic work, marketing systems, simulation compilers and so on.

Yost: The geo-demographic work grew from the Commerce work?

London: It did indeed, yes, absolutely. Actually, it was on the back of the census. We were walking in the halls and, again, this is a small world from a business development perspective. If we hadn't had some of that Qwik Qwery work and some of that Commerce programming work, we'd have never been there.

We found out that this was going to happen. It's one of those things of being there, interested, competent, capable, attentive and having an opportunity walk by, so to speak, that you pay attention to. It's that kind of thing. I probably blitzed it up a little bit there but that's a notion of what happens.

Yost: CACI also established European offices very early. Please talk about the European expansion.

London: They started early on, yes. This was, quite frankly, things I'd heard about in the halls of the office but didn't have anything to do with. My swim lane was pretty well defined. A small company like that, keeping yourself in business is a big challenge and it's mostly up to you. If you're going to run an operation and be in charge of it, then you've got to make sure it keeps fed because that's where your paycheck ultimately comes from, as we all know.

But the European operations began to come onto the scene. There were some decisions made that I had nothing to do with and I found it fascinating that the appetite and the entrepreneurship was such. I really liked the entrepreneurship about the company. We were in The Hague and the Netherlands. We had an office in France for a while; we had one in Hamburg. We had one obviously in the UK. The operation we have today is headquartered in London. It has some things in Birmingham, Manchester and some other places but it all started about that same time. The UK part related to the geo-demographic data and the business on the continent was set up as consulting departments and they were not ultimately effective. In fact, one of the reasons that I wound up with the opportunity to become the chief executive officer was because those business pieces in Europe had failed by then. They'd had a flourish for a while and I'm not sure,

even to this day that I know what happened. It certainly wasn't a recession. It was more, I think, a matter of control and the quality of the people and competition.

That's the other thing. More and more competition was coming into the industry at that time, even in Europe. By the time I became CEO in 1984, I had to basically shut those things down in Europe. In fact, that's one of the first things I did. Mr. Karr was very dynamic, a wonderful entrepreneur and a genius in many ways, especially when it came to finance. But he didn't have a good way with people. He knew it had to be shut down over there but he didn't want to do it, and I don't think probably could've done it. I'm not sure if that's the right statement but I wound up taking the position because he wanted to turn the company around. We were starting to lose money and lose revenue and at that point in the early 1980s, the biggest business P&L in the company was the one that I was in charge of. I had a lot of wonderful people, committed people. We were in our swim lane and we really plowed through the water. He never did say this to me, but I think he felt that I was stable and capable and could do the things that needed to be done to get the thing going again. Whether he felt, at that time, that there was any long-term future with me, I don't know. It's probably flip the coin and see what happens.

Impact of the Competition in Contracting Act in 1984

Yost: Were there other problems on the domestic side in the first half of the 1980s?

London: On the domestic side, it had to do with all of our business because of that Competition in Contracting Act of 1984. The CICA as it was called. We used to just hee-haw about they took our name just to irk us. We used to really laugh about that. We had a whole business model that was chugging along pretty good. It wasn't perfect but we had a good delivery record. All of a sudden, the way we were doing our business was deemed to be inappropriate and no longer permissible. Some people said it got outlawed. I don't want to use that word because that implies we were doing something illegal ahead of time and that's not even close to being the case. There are administrative, regulatory ways of doing things and the federal government changes its mind from time to time, which in those domains it is fully entitled to do. So it changed the way it wanted to do things. The big issue was how do we stay in business because we don't understand this new way. So it was a real challenge.

Yost: This legislation was the same year you became CEO?

London: I think it was a little bit afterwards.

Yost: Quite a challenge to have in your first year.

London: You know something? I wasn't even aware of it. We heard about something but you have to appreciate the fact what it's like for a small company like this in an industry like that

in a town that size in those days. It was very challenging just to stay in business, let alone keep up with the United States government. But then it soon became very clear what had happened to us that first year or so. I was concerned about the potential for the company to stay in business. It could've folded. It was small. It was big enough that it had some momentum because the government contracts have some time associated with them. They don't all end at the same month so there was some overlap in contracting. So we had some momentum, if you will, but not enough to keep us in business unless we were able to get this competition thing solved, which we did.

But it took us several years. We flipped the ratio. It had been about 90% of what they call sole source contracts. It flipped over to 90% of our work was competitively awarded. That's far more competition. I must say and I would say it to anyone, the sole source was extremely competitive. There weren't any rules which is what made it so competitive. But with the formalities that were implemented in 1984, we had to learn the rules on how you did these things effectively, which we did.

Yost: Did top line and bottom line gross suffer in a severe way during this transformation?

London: We had some real traumatic times. Again, I think I wound up with the opportunity to become the chief executive officer because of it. I'm very appreciative of that. I'd been with the company since its beginning in a sense. It'd been in business 10 years before I joined but it had almost gone nowhere in those 10 years. I think it's fair to say that when we opened the venue of what the company could do in the systems business, and the fact that systems were really going to be here to stay in a real big way – that was something that emerged from the 1950s, 1960s and 1970s – it took time to realize where that was going to go. Our losing money and profits and revenue in the early 1980s was terrifying and again, was the basis for my being able to take the position. Dr. Fain had left in 1981. I was asked to join the board then. Herb said "Jack, I'd like to ask you to step in and take a board seat," and I said "Sure. Thank you for the opportunity." That was in 1981 and so I dealt with him at the board level and obviously was doing my thing in my swim lane and building my part of the business for three years, 1981 through 1984. They were having trouble in Europe and losing money over there. And we had the CICA, Competition in Contracting Act, so we had some difficult issues. That's what became my opportunity.

Yost: When did you get into the third party packaged software business and what led to that?

London: I think you're referring to Oracle? What an interesting story this is, not that I know a lot about it. But it's interesting to realize that at one time, CACI in Britain was the sales agent for Oracle. That sounds like "What? Say that again slowly." Yes, we had a department

that had been created for that and, again, it's the entrepreneurial essence of the whole company in those days. We had an individual – Jeff Squire was his name – who had joined our firm and became the department manager for Oracle sales as a third party relationship to Oracle. He was very successful at it. In fact, when that arrangement ended, Jeff wanted me to finance their payroll and continue to build it. He was the executive who built the United Kingdom business practice for Oracle. He created Oracle UK. He had good colleagues, but he was the guy on the tip of the spear and was very successful. I've seen him once or twice since then and the last word I had is he's retired and a very, very wealthy fellow with a lot of Oracle stock and commissions over the years.

It's the kind of thing you like to hear, those kinds of stories where people take an opportunity and just really run with it and make things happen. And you could still do a lot of that in the industry at that time, but it didn't last more than a few years. We did a few other products like that. I don't recall what they are offhand. It was not a successful OEM/sales rep kind of a thing. We tried it because we thought we wanted to have an important part of our business devoted to products and commercial products was a piece of that as well. We thought we knew about products from SIMSCRIPT and it turned out we didn't know products from our SIMSCRIPT experience; we knew simulation. That's what we knew and the technology associated with it but it's not universally transferable.

Let me put it this way. We were not able to do it. There perhaps have been others who have but we did not make a success out of that and we soon left that business. I shut down some of that when I became CEO but it was pretty much feathering itself out even before because of the problems with our prospects of success in Europe.

Major CACI Contracts in the 1980s and 1990s

Yost: In 1987, CACI developed a pioneering EDI system for the Army. Please discuss that.

London: You're talking about the SAACONS. Yes, we won a competition for the Standard Army Automated Contracting System. That was a defining moment because that was to build what amounted to a product. It was perceived as a possibility to be a killer app in the Army contracting purchasing system. You wouldn't use that software to acquire a battle tank because that's much more sophisticated specifications. But for hundreds of millions of dollars worth of procurements, you could use an automated technology that could pump out RFPs, insert specifications, pull down certain data clauses or requirements specifications out of master data files, certain defense acquisition regulation clauses, "Participants must have security clearances," or "Buy American," or whatever clauses that might be appropriate for this job. So this system could do all that. It was a fixed price contract. It was a bit of a learning experience for us. We'd had one fixed price software development job before that for the Strategic Air

Command out in Omaha. We had a big fixed price contract out there. Fixed price software development contracts are certainly the best business strategy I can think of.

Yost: Huge risks.

London: Huge risk and what's almost laughable is the upside isn't that great either. So you're carrying a big, huge risk package on your back for the prospects of a Hershey bar. It's the end of the trail. Something doesn't fit here. I'm exaggerating, of course, but not too much. So we learned a lot on the strategic side. By the way, we did one of the first email systems, a type of email system in a network used in the bunkers and so forth at the North American Defense Strategic Air Command Center in Omaha. It had the deep level security requirement, and it had messaging and had a little computing technology. It was a primitive email system, but we put it in and got it delivered. This was in 1984/85.

Then the job you were taking about, the SAACONS project with the Army, turned out to be successful. We made some product entrées into the market with some smaller packaged capabilities for federal procurement, non-DOD, civil agencies. And we also had a product that was a database of the regulations because with the procurement regs, something changes every quarter and keeping that current was a little business we had for a while. Those have all pretty much atrophied as time has marched on. It was over 20 years ago. It was a good experience for me as a chief executive in terms of the fixed price world and I approved both of those bids. That was my job to do. We scrubbed them and briefed and debriefed and what not. But there's still an inordinate amount of risk because you're working in a world where you have all these fixed issues – time, schedule, prices and so forth – and yet the complexities of dealing with people is a dynamic thing and the ability to estimate when you're going to accomplish something in that domain is extremely difficult to do, even with the new metrics and measurements. It's still something you've got to be careful about. So it was a wonderful opportunity. I think we did a good job for the Army but it was a big learning experience for us.

Yost: Talk broadly about how the opportunity for contracting in IT for DOD changed in the 1970s and 1980s. Was there a sense early on that they wanted to have these IT capabilities internally and did that mindset change?

London: Yes, but I'm not sure I can tell you exactly why. But I can speculate. I would submit that during the 1960s and 1970s, there was a lot of internal capability, programming houses in the United States government organizations. The difficulty in getting things fielded, internal cost overruns, the challenges of being able to shift technologies became, in my opinion, overriding issues of extreme importance because the ultimate objective is to get these systems up and running, to get them operational and working. It's not just to develop them. The fact is that in many cases you could never quite get the feel of it, the requirements of change – I'm talking about the government – and then it would just not ever quite make it. There are a

number of examples. I even have some in my dissertation, like the Air Force Logistics projects. Everyone was just devastated by a number of big, huge overrun problems. I think they went more and more to industry in the 1970s and 1980s because of the ability to work cost-plus and to have a more fungible staff. They could shift the needs with the technologies. You didn't have a fixed staff. I don't mean anything demeaning about this statement but it's the truth, that if you can go to different sources to find expertise that's evolving in a market space, your flexibility as a management organization is greatly enhanced. You don't have to have them on your payroll if you can buy the skills from suppliers.

Yost: Can you define the time period of when these programming houses go away in the branches of the military?

London: I'd say the late 1980s, early 1990s for sure.

Yost: Were they declining before that?

London: Yes. Let me make another statement. In the 1970s and 1980s, the 1980s in particular, systems were big customized systems. The Trident Logistics Data system was a custom deal. It wasn't pulling things off the shelf here and there and putting them together. The large scale custom systems work lasted through the mid-1990s. I'm talking about contracted systems. What happened then, though, was you heard the phrase COTS – Contracts Off The Shelf. That is what really happened. There began to be packages and products in and around the minis and micros and the desktops and the software applications and killer apps that made it feasible not to have to build these huge complex customized systems everywhere. They started doing it differently and that really meant they didn't need to have big programming shops because they could hire a contractor with specialties in database and telecom and this, that, and the other thing with some applications guys who knew all about submarines. We'd go out and get the system built in two years. So the whole style or method of building systems changed from these large custom jobs where configuration management was terribly important and Deming and TQM and those kinds of things were really important [Dr W. Edwards Deming was a leader in developing the Total Quality Management concept]. We did those kinds of things. They were important. They still are in the sense of quality but when you have these systems that can be pulled together from off-the-shelf or existing technologies and capabilities, it's so much more efficient.

The other thing that you can do in that world is build a little, test it, build a little more, test it. You're more likely to get to the result you want while spending less money. Some people have said "Jack, that means you guys are going out of business, doesn't it?" No, because of the demand to use modern computing capacity. You go into the federal government, you go into any office in America today, and the likelihood of seeing a suite of desktops, laptops, PDAs, this is the way things are done today and demand for these kinds of things has just gone through the roof. There are huge requirements and the federal government is still a part of that and we still have a role to play in all of that, of course. We do more than that now. We also have services contracts. Everything we do uses computers. Some of it is completely focused on a computer and in some of the work we do, computers are important tools for support, so you get a little bit different mix in your business paradigm, business model.

Yost: In the late 1980s, you got into the document storage and retrieval business. Tell me about that.

London: That's a very interesting story by itself. It came about as a result of CACI's work with the Department of Justice. We started our business contract work with the Department of Justice in, I think it was, 1975. It was a little bit before my time at CACI. By that, I mean it was in a different swim lane when it started than I was in. By the time I became CEO though, I had met the customers down at the Department of Justice. We started out with some little software programming jobs. It was very common in those days to put out tasks to industry: "I want three COBOL programmers for six months and we're going to do this." Or "I want Fortran programmers." So it was almost like staff augmentation, not quite, but similar to it.

We got started with a little job down at the Department of Justice, but we soon became aware that this was the Office of Litigation Support, OLS, for the functioning departments – the tax division, the criminal division, the anti trust division, the civil rights division, and so on. Those are the litigating divisions which are populated by lawyers. They're the ones that, when the government gets sued, somebody responds or when some laws are breached, those suits go into court. The OLS works for these different divisions. Its role is data processing, MIS, ADP, IT – what we call it today. We called it something different 20 years ago. Right now, it's IT.

We got involved with those people and with document management. It turns out that in litigation, you have this process called discovery, which all of us are aware of. Depositions are taken and documents discovered that different sides of the litigation provide to each other. When the United States government acquires these car loads, truck loads sometimes, of documents and records, it needs a way for a service bureau to handle them, bring them in, put them into systems, into databases, organize the material so it can be used and reviewed by lawyers and attorneys, as they seek through issues to support the case and the points they're trying to make.

Is there evidence of impropriety or fraud or breaches or whatever in the documents and records and files and so forth? So part of what we began to do with the Department of Justice is develop very highly specialized processes to bring this material in, organize it, code it, classify it, categorize it and get it scanned and put in the system. That didn't all happen at once. That evolved over a period of time. Today, the United States Department of Justice, supported by CACI, I would maintain, has one of the most sophisticated litigation document/record management systems in the world because of the volumes of material.

You say "What kinds of lawsuits are you talking about, Jack?" I'm talking about the asbestos litigation for lung damage. I'm talking about tobacco lawsuits. I'm talking about the Exxon Valdez oil spill up in Alaska, the litigation with Exxon and so on. I'm talking about the contracts that have to do with stealth fighter contract terminations. Those are huge fights over big money. The asbestos case, of course, is one the largest ever. Tobacco was a big case. The Mariel case, which was the Cuban refugees who came into this country as illegal immigrants. So CACI has been a supporter of these large lawsuits. The Challenger, the spaceship that exploded in the sky, that was a huge litigation. All the records and reliability studies and reports associated with various equipments and parts, all that became part of the record. Then the attorneys would search through with their engineers, trying to find out what was going on and what the liability of the government was and of the contractors.

We have really a name out there now as being one of the companies that does advanced work in this area. I'm very proud of that work. In some of that work, we've invested money in building proprietary capabilities for the government. We don't market and sell the software. The repository is theirs and we have the expertise in building these systems.

Sometimes we get a little bit ahead of ourselves, sometimes we get a little behind, but we are always trying to maintain the best technology capability for the Department of Justice. I'm very proud of the work we do for them. It's a very honorable job to be able to help them in this role. The customers there have been in that organization since the beginning. They're still there and they've made technology and enterprise systems to manage that work for the Department of Justice. It's a big operation now. These lawsuits are big, big dollars, lots of implications, life and death issues. So it's an interesting thing.

We do have one other thing that's associated with that, a product suite called DOCEX. It's a scanning and analysis document management system somewhat like what we do for the DOJ. By the way, the product for DOJ is called ADIIS, Automated Document Indexing and Integrating System. DOCEX has even been used in battlefield situations because it's deployable. We found some of the Taliban documents and records in the caves in Afghanistan, papers, booklets, scraps of maps and so forth. We used CACI's DOCEX to scan those and to provide information to the Department of Defense. So we do a lot of special purpose applications like that. It's a very fascinating system, special purpose, quickly deployable. So we're big in that part of the world.

Growth through Acquisitions in the 1990s and 2000s

Yost: In the 1990s, you started a major spree of acquisitions. Was this primarily to expand the scope to get into new areas or to scale up in areas?

London: I think it's fair to say both. I started out in the acquisition business in the late 1980s before Herb Karr passed away. He was never high on it. He raised some money early on in his career, spent it and he used to say "I wasted every bit of it when I bought companies that didn't go anywhere." He used to dramatize. I don't think it was quite that bad but he liked to make a point that he was never going to do it again. So he wasn't very hot on my getting involved with it but I felt that the companies he had bought were small product companies and I wasn't interested in product companies.

I was going to buy services companies with niche specialties that could do ADS plans or could do document specialties – services but with deep specialties that had a competitive advantage. Once he passed away and I was elected chairman of the board, I struck a deal with the board and said "Let's try it. Let's work in some of these areas," and we did. I learned quickly that in the Merger and Acquisition (M&A) business, you can write down specifications or requirements of what you'd like to buy but you can sit there forever because the world doesn't work that way. It's not like going to CVS or Giant, going down to where the soaps are or over here where the hamburger is or something. It doesn't work that way at all because these companies come along and something you might be very interested in but the ownership's not interested at all. "Get out of here. We're busy." They're not in the market yet.

Or sometimes, a company will be ready for sale and you're not interested in it. So it's almost entirely opportunistic. That's not quite the whole story because you have to be out meeting people. It's a constant development of a network of companies and players in certain niches that you're interested in. We built the company up in the 1990s by buying some companies that augmented lines of business where we were and gave us additional depth or new customer sets. Or, in some cases, we acquired companies that moved us into completely different domains. We were successful in moving the company into two different dimensions of our business.

The first is in the telecommunications field with GSI and a couple of other companies that we acquired in the mid-1990s. So I moved myself into a network communications, network services business. Then in the latter part of the 1990s, I began to get a whiff of the issues with the intelligence community. So we had an opportunity to buy several companies that had "intel" capabilities. In fact, I bought six of them. We now can legitimately represent that half of our business is in intelligence-related work, not necessarily all with the CIA, some of it's with the military organizations, but we do an awful lot of intelligence-related, command-and-control

intelligence, surveillance systems work, from the IT side, from the analysis side, from the database development side and so on.

We bought our way into that recognizing what the trend lines were and saying "Hey, let's see what that might be for us." There certainly were no easy answers. It wasn't a textbook lookup. I would say it's more akin to exploring. Exploration is a pretty good word, contrasting that with the idea that somehow you can say "I want to buy one of these" and you go out and find one. It doesn't work like that.

I actually thought it did at first because I did do my list. I even hired some M&A search firms to help me do that and they didn't get anywhere. It was best efforts and so forth but it just didn't work. So I realized that it would be better to get going in the market space and develop a network, which I did and I had some outside consultants who helped do that. They did that full time for us.

Yost: I get the sense that CACI has a very strong corporate culture and has for a long time. Describe how you ensured that engaging in a number of mergers wouldn't disrupt your culture.

London: That's a very penetrating question. The results haven't been uniformly good. Well, they've been good, but they haven't been uniformly perfect. First, let me relate to the premise. The premise is that there is a legitimately definable cultural perspective in this organization that you can write down some attributes and say, "That sounds like what these people are trying to do." I believe that's true. Is that equally shared by every employee who deposits a paycheck? Probably not. It's almost ridiculous to make that claim. So these issues are a matter of proportion, aren't they, not a matter of all or nothing.

It is whether we have enough people who share this view to be able to make a legitimate statement that there is a culture, as opposed to chaos. I think we can. How I discovered this was back in the early days, about running projects. In the systems and software business, I quickly discovered, to my absolute horror, that I never really knew where we were in these jobs. People would send me a little note or they could have a meeting or a briefing, a chalkboard, or show me the code pad or whatever, but I wasn't really sure, until we got down at the end, when we were doing testing and trials and whatever. So what I did was I discovered that people were crucial. They weren't just important, they were crucial. And the most important thing was their attitude and their integrity. You say "You've got to be real skillful and so forth." But they can be skillful and slightly not as honest as I'd like.

I began to kind of get the idea that it was more important to recruit people who shared an ethos of integrity. I'm not saying a bunch of do-gooders. I'm talking about just straight, honest, legitimate people who were saying we were doing okay or we have a problem. They'll say

"Here's what I'm planning on doing to fix it." It's a maturity kind of idea, of mutual respect and dignity and we're going to figure out how to do this. I respect you. You're going to give me advice and I'm going to share with you. Or I'll suggest some advice to you. I learned that I couldn't do these projects without key project directors and I soon learned that I couldn't build a services company unless I could have a management cadre that I had a good relationship with and trusted in the business way. They didn't have to be buddies, we didn't have to go to the movies together, didn't even have to have hamburgers together. But there had to be a business connection that was sincere, mutually respectful and had what I will call dignity and integrity.

Those things are crucially important as I saw them in my career of trying to build these packages for the Navy and other government customers. That quickly became the way that we wanted to recruit people, which quickly became – when I say quickly, I mean over several years – sort of an ethos or culture for all the things we just discussed a few minutes ago. But then that conveys even into the M&A. You're looking for companies that share similar values. Every human being, every company is different. But you want to find organizations that, by and large, their leadership and their management are trying to do the right thing. You can sense pretty quickly what kind of people you're dealing with. It's amazing. It really is. And we just paid a lot of attention and still do, I believe, as part of our due diligence apparatus and our due diligence checklists and stuff, to what is the culture.

Here's one little anecdote about culture. Culture isn't the fact that we all wear t-shirts. Culture isn't the fact that we like to have pizza brought in on Fridays or on Monday night we have a mixed bowling league. Culture is how you view the customer, how you view and respect each other; culture includes that while money and what we get paid is important, we have an obligation to earn what we get paid and we have an obligation to come to work when we're supposed to. That's culture and if people want to go bowling on Monday in Nebraska or if they want to have pizza parties on Friday or if bagels in the office on Friday is their favorite, then pay a buck and one of the guys or gals brings in a bag of bagels. Okay, that's not culture, friends. That's fun and makes life interesting and collegial, but culture has to do with how we treat each other and how we treat the customers, what we think of our work, our respect we have for our work. That's culture.

Yost: Other than trying to hire the right people to fit in, are there tools you use to instill and strengthen that culture?

London: I tried it for a while 20 years ago. I had a psychologist who helped me interview. I had some of those tests that you can give, psychology tests and so forth. We don't do that anymore. I found that I could use them fairly well but it was because I was interested in it and most people didn't have the patience for it in their recruiting. I guess I did away with that in the 1990s. Herb Karr was good at this. He had an affinity for it and believed that you could interview people, have several people do the interviews and you could learn a lot about people, and I

think he's right. Then the testing, Michigan Test, is a variety of psychometric tests that Myers Briggs created. We did those kinds of things.

Of course, I don't recruit anymore at all. I'm with the board. I think our last decision was the CEO. They say the board has really two major responsibilities. One is to determine whether or not to sell the company and at what point, and whether or not to keep or replace the CEO. Those are really the serious duties that a public board has. They've got other duties, too – compensation and audit committee and stuff – but really the big ones are those two. So I don't recruit anymore.

Yost: In 1998, CACI made a major acquisition with QuesTech and got into the intelligence market. Describe the decision to make that strategic move and what that business has meant to CACI.

London: You've got a beauty here. This is one of those defining events. In the late 1990s, as I was indicating earlier, I kept looking around and observing the world of intelligence and security issues that were facing our nation. It had occurred to me that one of the things I wanted to work on was that there might be some business opportunities out there in terms of companies that were interested in being acquired. These were cases where the ownership or leadership was interested in exit strategies and cashing out. I'd done quite a few deals up to that point through the late1980s. I think the first intelligence one we did of any consequence was in 1993.

The QuesTech transaction was brought to me by a fellow by the name of Doug Schmidt who was an investment banker in the Baltimore area and had previously worked on Wall Street and was very good in this industry. He had been around this industry and I knew him. He called me up and said he had this company that was looking to be acquired and they had some things going on and weren't happy with the way things were proceeding – would I be interested in it? I said yes, I would. So I went out and had lunch with Vince Salvatori who was the chairman and CEO at the time, and one of the founders.

Vince had been the CEO and built the company up, then stepped aside for a while. They hired a new CEO who didn't work out and so Vince had come back. The board decided, "We're sort of at the end of having to do all this stuff. Let's cash out for the shareholders. We've got a nice business here, a lot of wonderful employees and some good customers. So let's take our opportunity," which they did. I entered into this discussion and negotiations and so forth. Vince is a wonderful guy. He had been in the Air Force and started an intelligence support and engineering support company. QuesTech was about \$80 million in sales, I think, in round numbers. They had some very interesting work with Ft. Monmouth, with the intelligence community here in Washington and some engineering work with, I believe, the Navy and the Air Force, R&D and such. They had some great people. We acquired the company.

The fellow who has come through that company to CACI is a chap by the name of Bill Fairl. Bill now serves as the president of the North American or domestic business. We have two pieces of business, by the way. One is the United Kingdom, which is a very small piece, and then all of the US domestic, and Bill is the president of that operation. Our chief executive officer of course is Paul Cofoni. But Bill Fairl came to us from QuesTech and has worked his way up, promoted himself if you will, through his achievements and successes and outstanding performance, and has now the number two role in the operations side of the company. So we're very happy about that and that acquisition was a defining moment and defining event. It really positioned CACI in a meaningful way into the intelligence community and I mean that at-large in the Washington area plus the Army side as well.

We then acquired another company in 2004, a part of American Management Systems, their Defense and Intelligence Group – DIG it was called. It was about \$400 million worth of business as I recall. So between those two, we really made a presence in the intelligence community. It turns out we had acquired some other companies and began to win a lot of large contracts on our own. So it was the defining moment for CACI into intel with the QuesTech acquisition that you mentioned.

Yost: Were these the largest acquisitions?

London: The one from AMS was the largest and certainly QuesTech was one of the larger.

Yost: What do you see as the greatest challenges and opportunities for CACI moving forward?

London: That's a wonderful question. I think it's fair to say that I've spent most of my career trying to see through the looking glass. I actually work on it. I try to read trends. "What do you mean by that, Jack?" I will take an issue or a situation and I'll work myself up a little checklist and I'll watch over time. If certain things happen, I'll check them off and if they happen in a certain sequence and certain way, then it begins to tell me that it's going in this direction or it's going in that direction. You can do that with things like government budgets, who gets selected to run certain agencies, what kinds of government policies come into place with regard to contractors, whether they're going to pass a new CICA act or not. So you can get some insight.

Reading the future, of course, is impossible but you can get some notion of what is likely to happen and I spend a lot of time with that. I talk to a lot of people. That's one of the things we do. We have this strategic advisory activity on our board where we go out and talk to people and have visitors come in and share perspectives and viewpoints. I guess what I would tell you is that I see a very dangerous world, a frighteningly dangerous world. I really wish it wasn't that

way because I'm not sure that it isn't more ominous than I sense it, except for maybe in the 1960s with what was happening in Russia with the missiles, Vietnam and China. That was very dangerous and we all sensed it then and we were very conscious of it.

I have that same feeling today in a different way in that today I see it all over the place. I see it in North Korea with its missiles, and China. I see Russia is maybe going back to some ways that changes what's happened in the last 15 years. Iran, Iraq, Pakistan, Afghanistan – not a good place. A lot of stuff that's not very good. South America, Sudan, Africa, the Islamic fascist movement, the Islamists and the Jihadists – they've been gaining momentum. People don't even understand that they actually have gained momentum through all this. So I think it's a dangerous world out there.

I think CACI will continue for the foreseeable future. We focus on the defense and intelligence communities but we also recognize there are information technology areas in health systems, in the new energy position that may be taken by the President and the administration. And we're keeping our eyes out for IT applications and maybe some specialty work in those areas. But I see a dangerous world and I think the business platform we have provides the United States government some capability to seek solutions with us and I think we will continue that.

Final thoughts and Comments

Yost: Jack, the last question I always like to ask is are there issues or questions that I haven't asked that you feel are important or that you want to talk about?

London: Thank you for the opportunity. There are a couple of things I might share. One is kind of a business perspective issue, and one is kind of a personalities issue. On the business perspective, the M&A – mergers and acquisitions– I think our count is 41 transactions, and we're still in the market. I would say that this has become a significant core capability of this organization. All of those transactions have been good ones, some much better than others, clearly. There's no one size fits all. We have built up, with my colleagues – and from the very beginning when I did this mostly by myself in the late 1980s to early 1990s when I finally got where I could do it with the board's approval – built up a whole set of due diligence methodologies and processes that we employ with a checklist and such, and of course knowledge of the individuals.

It's been something fascinating for me to observe. I wouldn't have thought that when I started down this trail that this would be the way it would turn out. That has been a surprise, but it demonstrates the stamina and momentum of our organization, the culture, the way you do things, and that everybody's a part of it and expects it. I think that's been something that's been interesting to observe.

You can say, "Well, Jack, that's not unique to the computer field." I recognize that, but I thought it was interesting to add that flavoring to what we do, the cultural side, for the computer people and technology people who like to be recognized for doing a good job. Of course, that's what we all want.

The other point I wanted to discuss is about people and recruiting and personnel. Recruiting is probably the most important thing an executive or a senior manager can do. They do a lot of things, make a lot of decisions, but people and personnel and staffing decisions, in my opinion, are extremely important. I think it's important in any organization, whether it's a hardware company, a software services company, U.S. government, the military, the church – you name it. It is all important, the people. I have a little four-factor formula on recruiting. I believe that there are four pieces of it. They're very simple. I believe that finding people with a good attitude is the first thing that you need to do. You've got to have people that have the attitude that's compatible with you and your organization, if you're going to work together. If you can't work together, nothing good is going to happen. Matter of fact, probably a lot of bad stuff is going to happen. So attitude is my first gate, threshold.

The second one is integrity. People say, "What do you mean? Is that second? Why isn't that the first?" Well, people can be honest and pure as the driven snow, but can't get along. So I've got to have them get along. Then I got to have them being honest and have good integrity. The next thing is commitment. Got to have people who can make a commitment, who can get in and really take things seriously. I don't mean burdensome with it, but really are in the game to play, to make something happen in a positive way. And the fourth thing is domain expertise, or technical capability, or whatever it might be. It's a financial person, an IT person, a project director, or business development person. And people say, "Wow, boy, you got to have people that know what they're doing." I agree, but you need all of that. Nobody's going to argue that, at least from my chair. Somebody else's chair maybe, but not me.

But I really need to find people that are compatible, and that's the first thing I look at when we do an M&A program. How do these people behave? Do they respect things or not? You had better know. I think it turns out to be very important. The second thing that I want to point out is my experience with Herb Karr. For about six months I couldn't figure out who this guy was, or what was going on. I knew he was my boss. He was in California.

We had two- or three-hour telephone meetings on Sundays to catch up on things. This was back in the days of thermal fax. I don't know if you remember thermal fax, that brown, plastic-y looking stuff, the predecessor to a fax machine. We sent a lot of papers back and forth during the week and talked long distance once in a while. But I got a little bit confused about what he wanted to achieve, and I kind of pestered him about it. You know, "What do you want me to do? How do you want me to behave? What do you want my role to develop into?" He said, "Well Jack, we have a wonderful little company. It's a fine little business; we're proud of it. We do a

lot of interesting things. We want to keep it that way. We want to have good people here. So my objective is very simple. You're to build the company." I said, "Okay, that makes a lot of sense. That clarifies that one. What, might I ask, is your role?" He said, "Well, let's go get a hamburger."

So he put me off like that for about another two or three months, and I kept pestering him about his role. He said, "Jack, I'm very interested in this company's success. I want to know the people. I want to understand what we do. I want to keep a close eye on the financial performance and other issues, stock market issues, things like that." And I kept pestering him, and he said, "Okay, all right. I've thought a lot about it. So, here's your answer. I don't want to be the boss, but I don't want to have a boss." And it was like the lights going on. That told me exactly how he wanted me to be in charge, but I was to work with him. And I had lots of latitude to create the future of the company. So it was like creating a license, with a very clear understanding. Because he said something else too, and this is the payoff in terms of dealing with people. "You got to understand, Jack, I'm for your success. I didn't bring you in here to second-guess you. I want you to be absolutely, totally successful. Because if you are, then I am too."

It's pretty simple. This is not complicated stuff here. There's no table lookups. And he said, "I'm 100 percent behind you, maybe even 1000 percent behind you, and you never need to worry about it, not one bit, unless I tap you on the shoulder. And if I don't tap you on the shoulder, I'm backing you." So there was no confusion about that. He said, "It's very important to make that clear right from the get-go. As long as you're doing stuff and we're working together, everything's fine, I will never, ever come back behind you. If I have something that's a problem, I'm going to tap you on the shoulder and say, I got a problem. So you don't have to constantly worry about whether you're doing the right thing."

Those are such empowering concepts. In a CEO role, where you are so to speak in the corner office, the buck stops with you – you don't have some committee somewhere. So to be empowered like that is something that was really a lesson in personnel and relationships and behavior. I've tried to deal with my colleagues this way and the folks that report to me over the years, and I learned that from Karr, and I think it's terrifically empowering. And it's especially empowering when people have a lot of technical responsibility, or like a CFO. "I'm not going to second-guess you. If I've got a problem, I'm going to pick the phone up and I'll tell you. So otherwise, full speed ahead." So anyway, those were things that I thought might add some flavor to our conversation here today. It's been a lot of fun professionally speaking.

Yost: Well, thank you, and thank you so much for your time. It's been a great pleasure.

London: Thank you very much. Thank you.

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