Damon R. Runyan, 1939 – 2011: A Tribute to One Geological Engineer from Another

Dr. Edmund Medley, PE, CEG - Geological Engineer, Belmont, CA emedley@geopractitioner.com

Early Career: 1939-1963

Damon Richard Runyan was born on March 14 1939 in Kansas City, Kansas. His father, Damon O. Runyan had served in the Navy, and after his service, the family settled in Lakewood, CO. It was there that 12 year-old Damon met Lorene Tyler, age 11, who was later to become his lifelong companion. Besides Lorene, Damon had another life-long love: stamp-collecting.

Damon worked part-time for his father's Civil Engineering consultancy until 1956. After graduating from Lakewood High School in the summer of 1957, he worked for Al Ryan and Associates as a Materials Laboratory Technician performing simple tests for construction fill quality control and asphalt quality control during the construction of Air Force runways.

Damon attended Princeton University in New Jersey between 1957 and 1961, graduating cum laude with a B.S. Engineering degree in Geological Engineering. Typical of a Geological Engineering student in those days, he took a broad mix of four courses in Geological Engineering, eight courses in Geology and five courses in Civil Engineering. His senior Geological Engineering thesis was *"Bedrock Topography of the Kingston-Plainsboro-Monmouth-Junction Area"*, based on his own field work around the Princeton area. Damon also found time to be a member of the Cloister Inn Eating Club. He was Treasurer and eventually President, of the Student Chapter of the American Institute of Mining, Metallurgical and Petroleum Engineers. Physically active, Damon enjoyed intramural football, basketball, softball, cross-country running and winter track. He was elected to Sigma Xi in his senior year. Lorene attended Damon's graduation.

Damon worked the summers of 1958 through 1961 for the geotechnical engineering consultancy Woodward-Clyde-Sherard and Associates (WCSA) in Denver as a Soils Laboratory Technician and Field Engineer, performing soils tests and fill control on construction sites.

Between September 1961 and July 1963, Damon studied for his MS in Engineering with a specialty of Geological Engineering at the University of California at Berkeley. He worked for about a year part-time for WCSA in Oakland performing standard soils tests and seismic refraction surveys. Using data from that work and WCSA projects, he researched a term paper on the *"Engineering Properties of Serpentine"* (serpentinite rock).

While Damon was at Princeton, Lorene studied Occupational Therapy at Colorado State University in Ft. Collins. (This is the school of choice for the Tylers. To date, some 26 people in the family have studied there). In 1962, Lorene and Damon were married. While Damon was at school in Berkeley, they lived in

Richmond, Concord and Martinez, where Lorene also worked for her practical training. Damon Jr. was born in 1963.

Military Service: 1963-1966



Damon (with beer), Pete Perkins, Alex Thoene and pig (also with beer) at Punalu'u, Oahu, Hawaii, in 1965 (Photo: Lorene Runyan) Damon had joined the ROTC while at Princeton. So after Damon graduated from Berkeley in August 1963, he started his military service at Ft. Benjamin Harrison, Indiana for two months of officer training as a Lieutenant in the Army. There, Damon was housed in Officer bachelor quarters, while Lorene and Damon Jr., stayed with Damon's grandfather. Damon was given three choices for postings. Cannily recognizing military contrariness, Damon declared the Runyans' actual preferred choice as his <u>third</u> preference, and as hoped, in October 1963 the obliging Army sent the Lt. Runyan to Choice 3: Fort Shafter in Honolulu, Hawaii.

Between October 1963 and July 1965 Damon was a Lieutenant in the Hawaii Finance and Accounting Office at Fort Shafter, responsible for \$300,000 to \$400,000 a month of cash disbursements and joint administration of a 100-employee civilian accounting office. Promoted to Captain and Finance Services Officer in 1965, he was responsible for the 22 Army disbursing offices in

the Pacific Area. He prepared reports and briefed General staff on military financial issues. He had a Top Secret clearance level. The Runyans lived in Honolulu until December 1966.

Damon did not separate completely from Geological Engineering while he was in the Army. As David Liu, a former partner at Dames & Moore (a then-famous consultancy in the Applied Earth Sciences) in Honolulu, recalls:

"He wanted to know what we were doing and to use our library. So he started coming on Saturdays to socialize and to talk shop. I thought that was the kind of guy we would love to have – a guy who likes both the technical and the consulting aspects of our work. So Damon joined our staff after he completed his army service."

A second son, Andrew, was born in October 1966. But in September 1967, Damon, Jr. died of Reyes Disease, a lethal infant sickness then, as now

Junior Engineer in Colorado: 1967-1969

In December 1966, Damon was Honorably Discharged from the Army, and the Runyan family returned to Colorado. Damon worked for two months in early 1967 with Zeff, Harrington and Associates, a soils and foundation engineering firm based in Denver.



Damon with Andrew in Lakewood, CO in 1967 (photo: Lorene Runyan)

Between March 1967 and June 1969 Damon was a Highway Engineer with the U.S. Bureau of Public Roads (now the Federal Highways Administration) in Denver, performing centerline soils surveys, foundation investigations; pavement designs; and, borrow pit and aggregate surveys in Colorado, Wyoming, Utah and New Mexico. He also had a focus on landslide investigations and the use of geophysics, especially resistivity. Supervising junior engineers, he was promoted from GS-7 to GS-9 in less than a year. In April 1968 he copublished with M. Everitt: "Analysis of the Point Lookout Landslide, Mesa Verde National Park", for the 6th Annual Symposium on Engineering Geology and Soils Engineering in Boise, Idaho. About this time he also became an Associate Member of the Association of Engineering Geologists, an affiliation he maintained to his death. He was also a Life Member of the American Society of Civil Engineers.

Ed Church, Damon's old friend and eventual employer, recalled working with Damon on Highway projects:

"What a great experience to have had Damon as a Geological Engineer at my first job at the Federal Highway Administration after graduation from the Colorado School of Mines. Here was a mentor to help this new guy get on the right track of a wonderful profession. Beyond the 2.5 months of work in Yellowstone National Park and NW Wyoming, it was fun to search for arrowheads and Wyoming agate for the tumblers that I would see at the Runyan homes making beautiful "rocks". The finest project for Damon at FHWA was the investigation of the landslides along the entry road to Mesa Verde National Park in SW Colorado."

Damon had added rock collecting and rock tumbling to his passion for stamps.

Junior Engineer with Aloha: 1969-1973

In 1969, Damon's "Saturday morning" visits in 1963 to 1966 to the Dames & Moore Honolulu office to "talk shop" paid off, when Dames & Moore offered him a job as an Assistant Geologist in the Honolulu Office. Damon reported to the Chief Engineer of the Honolulu Office, Howard Schirmer, Jr. (who later became Chief Operating Officer of Dames & Moore based in Los Angeles, before becoming President of CH2M Hill International). Howard had strong interests in opportunities in the Pacific and developed several projects for the Honolulu office in American Samoa with ASPA (American Samoa Power Authority).



Lorene, new baby Ondine, Damon and Andrew in Kailua, HI, late 1969 (photo: Lorene Runyan)

The Runyans loved Hawaii. The Dames & Moore office was relaxed and Damon was increasingly challenged by geotechnical and geological engineering work on highway, power facilities, and high-rise developments in Hawaii and in American Samoa for ASPA. He found time to present a paper, with colleagues Robert Wenzel and Porter-Carroll Knowles at the 1970 Annual Meeting of the Association of Engineering Geologists in Washington, D.C.: *"Interaction Between Geology and Urbanization in the* Hawaiian Islands". The Runyans began a practice of Damon preceding the family and scouting for a house, after which the rest of the family joined him. Starting with Dames & Moore in July 1969, Damon found a lovely home in Kailua, on the windward side of Oahu – a breezy house, surrounded by coconut trees, which for years demanded frequent pruning of the dratted fronds threatening to fall on their cars. By then the Runyans were four: their daughter Ondine was born in May of 1969.

The home also later became the home of Damon's mother who lived in a little cottage in the back yard, known as the Tutu Hale (Grandmother House).



At Kapiolani Park, Waikiki about 1969-1970, before the "Poi Bowl" football match between Dames & Moore's Honolulu Geologists and Engineers. From left: Wolfgang Buss, Ed Sirota, Howard Schirmer, Damon Runyan and toddler Andrew Runyan (photo: H. Schirmer).

Howard Schirmer recalls Damon's work in American Samoa:

"We worked together on two projects on the island of Tutuila. Both proved to be very challenging for different reasons. The first was the Tafuna Power Plant. It was a diesel fired generating station founded on basalt. The problem was that there was a clinker layer just below the basalt rock at ground surface. With generator vibrations, this layer could densify and compress and cause damage to the units. Damon insisted that it be grouted with a sand-cement mixture (I agreed). I had the (unpleasant) task of telling the design engineer that we will be facing a major unexpected cost to fix the site. When we grouted, it was like pumping grout out the window. The formation was loose and took massive amounts of grout. Damon was indeed right in his appraisal. The plant operates fine today and supplies the majority of power to the island.

The second project proved to be quite unique. We were tasked with designing the slopes for three roads to remote villages in extremely steep terrain consisting of weathered and hard volcanic rock. Before, there were only trails to the villages. Damon used his strong geologic skills to design the slopes on an aggressive basis, recognizing that there would be risk of landslides and extensive maintenance associated with the roads. If conventional slopes were used, it would have been impossible to build the roads. Villagers have much better access as a result of Damon's innovative work."



Damon, Lorene and Howard Schirmer at Runyan Aloha Party, Kailua, 1973 (Photo: Lorene Runyan)

For the four years that he worked in Honolulu, Damon quickly progressed from the starting level of Assistant through Project Engineer level. By the time he left, he was the acting Administrative Manager of the Honolulu, Guam and Seoul (Korea) Offices. Damon performed much of the fieldwork for projects as well as all the analysis and much of the report writing. He prided himself on his writing skills, but once told me that in his early years with Dames & Moore his ambition was to write something, anything, that would pass technical and editorial review by Dave Liu (Damon's supervisor) without any editorial mark-ups. He developed a strict standard for himself and later, me. (I recall us once arguing about my use in a report of

the elegant word "copse" for "a small grove of trees." I insisted that the word was graceful and efficient. Damon argued that engineering reports are meant to be read by paying clients who may not be as literate as us. He got the last word - it was not "copse".)

Lorene found a job as an Occupational Therapist in a State Hospital, a job she held for many years. The Runyans absorbed and practiced Hawaiian aloha. Dave Liu recalls:

"When I was transferred to Japan, there was a party for May [Liu's wife] and me at the Runyan house in Kailua. It was a happy and sad event for me – happy to go on a new adventure and sad to leave Honolulu with all the people I enjoyed working with. Lorene did the hula for us with a grace that most of us did not know before."

Temporary Transfer to Iran: 1973-1976



Ondine, Damon and Andrew in Teheran in 1976 (photo: Lorene Runyan)

D&M's culture included the "Temporary Transfer", where staff was re-assigned to another office for a few weeks or longer. (In my own experience those "few weeks" stretched to months.) In July 1973, Damon, as an Associate and Principal-in-Charge, moved the family to Teheran, Iran to start a three-year Temporary Transfer. At the hotel, the family met the wife of an American IBM employee, arriving with her 4-year old son, Brock. Brock and 4-year old-Ondine got on well - so well, that many years later, Brock Bruner married Ondine Runyan.

There was an abundance of engineering work in Iran and it was a great time to be a consultant there, particularly for Dames & Moore, which had been established in Teheran since 1965. As Damon reported in 1979:

"My arrival in Iran coincided with the dramatic price increase in oil. It was a time when everything began to shake loose. The demand for engineering services was incredible. The government's attitude was that they literally had all the money in the world and they could do anything they wanted"

"It was a very, very lucrative time for engineers. Everybody in the Iranian government was thinking big and of course there was no problem with money".

[April 9 1979 edition of *Wiliki o Hawaii*, "The Engineer of Hawaii" newsletter, published by the Hawaii Council of Engineering Societies (HCES)]

Iran had much oil but little in the way of industrial infrastructure. In Iran, Damon moved from the small power plant and foundation investigation projects he had performed Hawaii, to nuclear power stations and industrial plants. He had total responsibility for projects related to the first nuclear power station in Iran at Halileh, near Bushehr, on the Persian Gulf. Dames & Moore worked for KWU (Kraftwerk Union AG, a subsidiary of Siemens), the Atomic Energy Organization of Iran, and Westinghouse, all of who were involved at the Halileh site, which the Shah envisioned as providing the energy infrastructure for an industrialized Iran.



Damon at Persepolis, Iran in 1976 (photo: Lorene Runyan)

Starting with site selection, through detailed investigations, Damon led geological, geotechnical, fault hazard and geohydrological investigations; onshore and offshore foundation engineering designs; and, geophysical, hydrothermal/hydrodynamics, meteorological, surface water, demographical and ecological studies. He supervised up to 35 people and generated billings of several million dollars, Damon also supervised diverse projects including mineral exploration for a lead-zinc mine at Masserat and a limestone guarry at Hamadan; and investigations for paper mills, gypsum plants, natural gas pipelines, and offshore petroleum drilling and processing facilities.

In 1979, Dames & Moore had to leave Iran when the Iranian Revolution forced American firms out. Dames & Moore's Teheran drilling crew continued to work independently for many years – I worked with them in 1986. The Ayatollah Khomeini also forced the abandonment of the almost-completed Halileh power station, for being "anti-Islamist".

New Jersey: 1976-1978

In June 1976, Damon described his stay in Teheran as "...much more of an experience than I ever anticipated". The KWU job had ".. just about wore [him] out". He and the family were leaving Iran and they "...were looking forward to six weeks of vacation and a change of scene" with a slow excursion in Europe, and some leisure in Hawaii. Damon did not play very long. He was en route to another Temporary Transfer, this time to the Cranford New Jersey office. This assignment was not one that Damon had originally wanted; after all, he had studied at Princeton and knew something about New Jersey. Also, the Cranford Office had a reputation as a very large, bureaucratic office. But, there were senior staff there that wanted him to join them, and many of the people that Damon respected at Dames & Moore had launched their careers at the Cranford Office.

Damon was expected to focus on marketing- work he had little experience in- exploiting his considerable Project Management experience in the Power sector. However, he was soon tasked with developing opportunities instead for Manufacturing and local foundation engineering. Within a few months, he had made solid progress with GE, American Can, ARCO Chemical and other major East Coast industrial clients. But, becoming established with those clients, he was then re-directed to marketing to the Power Sector and East Coast utility companies. Within a year, he had developed 13 solid client relationships with firms like Delmarva Power and Light, Atlantic Electric and Philadelphia Electric. By early 1978, Damon sought a transfer from Cranford. Fortunately, Howard Schirmer, his former boss in Honolulu, invited Damon to manage a large nuclear power plant project in Korea while based in the Honolulu office. Damon was granted a Permanent Transfer to Honolulu in May 1978 to take over Howard's projects and develop Hawaii work, while Howard developed Pacific opportunities as the Pacific Far East and Australia Regional Manager.

Aloha with Korean Accent: 1978-1983



Damon and Lorene at D&M Xmas party, Honolulu, in 1980 (photo: H. Schirmer)

The Runyans returned to their Kailua home. Andrew studied at Iolani School and Ondine at Punahou School (about the same time as "Barry" Obama).

Damon, who had joined the Honolulu Office as an Assistant Engineer, returned just a few years later as an experienced Associate and ultimately advanced to Principal-in-Charge. There were few in the Honolulu office that had Damon's now-considerable experience with the Project Management of very large projects.

The Kori Nuclear Power Station Units 5 and 6 were located near Busan (Pusan), in Southeast Korea. With construction underway for an adjacent unit, an objection had been filed that the site was traversed by a potentially active fault. Construction halted for 20 days as the issue was discussed. But service of the

loan for construction was some \$200,000 a day, even during the conference delay. The owner, KEPCO, thus eagerly accepted Dr. Byong-mu (Dan) Song's (former Dames & Moore's Seoul office manager) suggestion that the presence of a fault should be investigated. Dr. Song's firm, Geosciences, was awarded the contract to verify or deny the presence of the fault. Dames & Moore was selected as sub consultant. Approximately 40 borings were drilled. Dames & Moore performed cross-hole geophysics, and also supervised the drilling operation and performed the seismic and geologic characterization. Damon led the technical effort under Howard Schirmer's management.

Dr. Song recollected of Damon that:

"....his superior knowledge of geological field provided all details of geologic data on the basis of boring data and existing geologic materials. Three rigs were used for drilling and Geosciences provided three graduate students who did all the field logging under the constant supervision of Damon. All our geologists, subsequently, obtained their PhD degrees from graduate schools in USA and Asia Institute of Technology in Bangkok. Among other things, Damon inspired our geologists and enhanced their practical OJT [On the Job Training]. Damon's contribution was definitely great for them. Our geologists brought all geological information from their Professors and we did not have any problem for the lack of existing materials for Damon to use. Under Damon's coordination and leadership, all field work as well as subsequent report preparation, proceeded without any delays and our geologists were very pleased to obtain the advanced technologies on field work as well as subsequent utilization of field work results to the report preparation. I see one of our geologists from time to time and he still talks about Damon. Damon's good nature also impressed all who contacted with him."

Dan Palmiter, a geologist based in Honolulu, worked for Damon on the Korean nuclear project remembers Damon sending him off in style to perform fieldwork:

"My fondest memory of working with him was on the trip to Korea for the Kori Nuclear Power Plant project in 1979. Before I boarded the train to Pusan for the fieldwork, I recall a fun time at a Japanese [Korean?] restaurant, complete with geishas [kisaeng, traditionally-attired hostesses] that Damon had arranged. Damon wasn't all work and no play. Rest assured, nothing indecorous happened and the food was great, although I think the soju [distilled rice wine] may have made me a little woozy."

As the Korea project declined, Damon's Hawaii workload increased dramatically. Indeed, it was because of his increased local practice that I first met him in May 1979 when my wife and I passed through Honolulu on our way to a vacation on Maui.

I did not want to go to Hawaii for vacation- it was my wife's idea – since I suspected Hawaii would be Seattle with palm trees. So, I was pleasantly surprised with balmy Honolulu. And when I visited the Honolulu office, Howard Schirmer unexpectedly and kindly gathered up a group of people to take me to lunch – such aloha would never have happened in Vancouver in honor of a lowly Staff Engineer. At the lunch, Damon quietly introduced himself to me as a fellow Geological Engineer. Coming from Canada, where Geological Engineers were common, I had little idea at the time how rare they were in Hawaii.

Learning that we were going to Maui, Howard Schirmer and Don Graf, an environmentalist in the office, asked me to look at an eroding shoreline at the Japanese cemetery at Lahaina on Maui, for a proposal he was writing. I did so, and having fallen in love with Maui, I wrote some observations.

Based on my brief report, several months later Damon asked me to work on a four month Temporary Transfer at one of his construction projects in Honolulu. I had started with Dames & Moore in

Vancouver in 1978, and on seemingly permanent Temporary Transfers, had rarely been at home since. So, thinking that my wife and I could be together for a while, I jumped at the chance. My Vancouver boss refused to let me go. He changed his mind when I vigorously threatened to leave the firm if he would not let me go.

My wife Barbara and I travelled to Honolulu in October 1979, fully expecting our four-month Temporary transfer to become a years-long assignment, because that seemed to us to be the way Temporary Transfers went. But the day I arrived, Damon told me that the project was delayed and we would have to return to Vancouver. But I was sent to a half-day job on Maui, and then asked to work at the new Maui Marriott hotel. Soon the construction work on Maui increased and I was running a small office out of our condo in Kihei, supervised by Damon in Honolulu. I enjoyed the occasional trips to Honolulu, to spend time with Damon, Lorene, Ondine and Andrew, sojourning in their Tutu Hale guest quarters

The Maui Marriott project was technically innovative since every other hotel and condo structure underlain by the deep soft coralline sediments at Kaanapali was pile-supported. Dames & Moore had designed a compacted earthwork phased surcharge to induce settlement before and during construction, which required both my full-time observation of construction and my frequent level surveys. In later years I could never go the hotel without looking in the landscaping for the survey monument bolts, or for evidence of post-construction settlement. Neither could Damon- as Ed Church recalls:

"Fast forward 10 years and I have met my wife and she is from Hawaii. It is great to learn that Damon and Lorene are in Hawaii and we got to get together on Oahu and Maui. We had dinner at the Maui Marriott and Damon could hardly eat as he was looking at the building to see if there any cracks, because he had worked on the foundations."

By mid-1981 Damon was over-whelmed with his responsibilities for both the Korea nuclear work and local consulting, which included all the Maui construction-related projects; foundation investigations; landslide evaluations; landfill studies in Hawaii and American Samoa; groundwater contamination evaluations and cleanups; and, litigation support. So, acceding to his firmly stated wish to be relieved of either Korea or Hawaii obligations, Dames & Moore decided that Damon should focus on the Hawaii tasks. But, ironically and unfortunately, within a few months, the Hawaii work started to dwindle as Asian investment withdrew from Hawaii development. By the end of 1981, work was slim, especially for construction work on Maui. With the help of Damon and Don Graf, I was assigned to Dames & Moore's Ok Tedi Project in Papua New Guinea in 1982-1983.

Life After Dames & Moore: 1983-1993



Damon at PSC Associate' office at King & Kalakaua, Honolulu, about 1983 (photo: E. Medley)

By early 1983 there was very little work in the Honolulu office, and none on Maui. In July 1983, Damon was laid off after his 14-year career at Dames & Moore. I had been laid off a month earlier and had started a Honolulu office for PSC Associates, a California firm with Hawaii projects but no Hawaii staff. Damon became the Hawaii Manager. We worked well together. I performed the fieldwork on earthwork construction and geotechnical investigations, and wrote the reports; and Damon performed analysis, technical review and business development. We had a pleasant little office above the "Chocolate Lady" shop at the intersection of King and Kalakaua Streets. But, the work dwindled for PSC Associates and in September 1984 Damon was abruptly laid off. PSC Associates in Hawaii was reduced to just me, again.

Damon started his own firm, Damon R. Runyan Inc., an individual geotechnical engineer consultancy that he ran until 1987. He specialized in small investigations and prepared reports for the then-newly enacted Underground Injection Control permitting requirements. So he, like many small consultants, made a living with "percolation tests". He also provided litigation support. Damon enjoyed working for attorneys – his ability to explain the technically complex was appealing to them. He also had a broad technical authority and, fastidious and thorough in his own work habits, enjoyed the tedious job of teasing the important details out of boxes of documents. His litigation projects ranged between rock slope instability, residential damage due to foundation defects and nearby construction; dredging construction claims, and, aggregate quality problems at a quarry on Rota, in the Commonwealth of the Northern Marianas.

I turned off the lights at the Waikiki office of PSC Associates in Honolulu. I wandered the globe for almost two years, during which time Damon and Lorene supported me by many letters and looked after my small affairs. I returned to Hawaii penniless in early 1987. So, I was grateful to Damon when he asked me to work for him on several small jobs.

In late 1987 Damon took a position as Associate in the Honolulu Office of Harding-Lawson Associates. He much enjoyed his position with HLA; his experience was appreciated. One of his HLA colleagues, Chris Muller, recalls:

"I worked closely with Damon, a great man, for several years at HLA Honolulu. Here are a few lasting memories I would like to share:

Damon performed many great QC reviews for geotechnical reports that I drafted. Often he would find fundamental data, such as moisture contents or strength test results, on the boring logs that would contradict my initial conclusions and recommendations. He had a great talent for helping me feel OK about these oversights, and for making me want to improve my work.

His coffee mug was a horror to behold – he believed strongly that his mug produced the best flavor, and he would never let it be washed, or even touched, by others who might think that coffee was some kind of standardized drink that could be imbibed from any old container. I bet the same mug is still with Damon.

He helped our branch office score a great "win" of the Aloha Tower Development, a billion dollar plan in the late 1980s. With no warning, our office manager grabbed Damon and me, told us to drop whatever we were doing, and drove us to an interview with the development team. During the grilling, I was impressed by Damon's calm, measured responses to difficult questions. At the interview's conclusion, the new client stood and extended his hand, congratulating us for being selected as geotechnical consultants for the project! I believe Damon was the MVP of that win."

Although he was a keen and thorough investor, Damon rarely took big risks. But, he really lucked out when flying between Hilo and Honolulu on April 28, 1988 on Aloha Airlines Flight 243. The aircraft suffered extensive damage after an explosive decompression occurred in mid- flight. The only fatality was flight attendant C.B. Lansing who was blown out of the airplane. The plane landed safely at Kahului Airport on Maui. Ed Church, an old friend and colleague, recalled Damon telling him that:

"The plane lost it skin over the first 7 rows and Damon was at Row 7 and had a new view of the ocean looking down at his feet with the steel-toed boots on. It was exciting to hear about the [Boeing] 737 "convertible" flight. Damon did not want those boots on, if it was an ocean landing and took them off, but as the plane approached Maui, he found the boots and was ready to get off."

Damon was not one to fuss. He once told me (when I was upset and angry) that he rarely got emotional about work. So it is not surprising to read Chris Muller's account of Damon's demeanor the next day at the HLA office:

"He returned to work at 8 AM sharp the next morning with a horrifying scar, several inches long, across the entire width of his forehead. Without a word, he strolled to fill his great coffee mug, and we had to chase him around and pry the details from him with a crowbar. It was as if we were all fussing about some minor shaving nick and we should all get back to work. Just another day in the eventful life of Damon Runyan, Geotechnical Engineer."



Damon Runyan (third from left, at back) with other Members of the Hawaii State Earthquake Advisory Board, 1993 (photo: HSEAB photo in Damon Runyan files).

Through Damon's introduction, I worked on a few jobs for Chris Muller and others at HLA between 1987 and 1989. In early 1989, I accepted a small job in South San Francisco with PSC Associates. I eventually stayed in California and earned graduate degrees in Geotechnical Engineering from Berkeley. Damon continued to be an encouraging supporter, even providing me with a copy of his Berkeley research paper on the Engineering Properties of Serpentine for my own PhD research. I repaid him later with some of my publications, which I found tidily classified in his filing

cabinets when I sorted through his professional archives shortly after his death.

Until February 1993, Damon was active in Hawaii's Seismic engineering community, being a member of the Hawaii State Earthquake Advisory Board.

Return to Colorado: 1993-2011

In March 1993, Damon and Lorene moved back to Colorado to be closer to Andrew and Ondine who were then established on the Mainland. The Runyans found a large home in Lakewood. Ed Church recalled:

"It did not take long to find people interested in Damon's experience in Denver. In Colorado it was great to have Damon back as a colleague and mentor. I will miss his dry sense of humor and keen intellect."

In 1993 and 1994, Damon worked for Ground Engineering Associates in Commerce City, Co, as a Senior Project Manager responsible for geotechnical investigations, construction monitoring and materials testing projects, and Phase I and II environmental site assessments. Between 1994 and 1995, he was Senior Geological Engineer with Michael W West Associates of Littleton, CO working on hydraulic structures and fault investigations. And, between 1995 and 2000, Damon was Senior Geological Engineer with CHURCH and Associates of Denver, CO. For much of that time, he was responsible for a small office in Castle Rock. He consulted on residential geotechnical and wastewater disposal investigations; engineering geology investigations for residential developments; rockfall and slope stability; subsidence hazard studies above shallow coal mines; and investigations of heave due to expansive soil and rock. From 2000 to 2001, he worked part-time with CTL/Thompson, Inc. of Colorado Springs performing geological hazards investigations.

From 2001 to 2010, he worked as a Senior Engineer part-time with J. A. Cesare and Associates performing geological engineering investigations primarily involved with litigation related to real estate developments in Colorado, for which he testified at about 20 trials and depositions.

Although the work that he was performing in Colorado was not glamorous like his projects in Iran, Korea and the Pacific, Damon also no longer had to be as concerned with career advancement and management strife. He was able to fully focus on his family and hobbies. The Runyans are exceptionally close; not only do Loren and Damon's two children live close by, the whole family spends as much time together as they can. The family is a clan: Andy, Jean and their children - Case (21), Connor (17) and Haeley (12); and Ondine, Brock and their children- Drake (14) and Phoenix (12). Precious family time is enjoyed regularly at the family cabin in the Rockies and on all-family excursions.



Damon and grandson Drake Bruner, 2000 (photo Lorene Runyan)



Runyans at Disney World, June 2008: Connor, Case, Andy, Jean and Haeley Runyan; Drake, Damon, Lorene, Ondine, Phoenix and Brock. (photo: Lorene Runyan)

In 2010, Damon decided that he was retired and quietly cleared out his little-used office at J.A. Cesare. Damon continued to hound rocks: his catalogued collection of rocks and minerals number in the hundreds. I am very proud of the one specimen that Lorene recently gave to me. Damon also continued to be a keen and thorough investor. He also maintained his life-long passion for stamps, with a collection that contained thousands of stamps by the time he died. And, he still ran, although not competitively anymore. However, he was more active than any other 72 year-old that I know. Early in 2011 it was his declining performance in running that indicated to him that something was wrong. He had a persistent cough in March and more difficulty breathing, which led to a diagnosis of pneumonia, which did not improve with treatment. Two 5-day hospital visits resulted in several possible diagnoses until video-assisted inspection revealed that Damon had advanced gall bladder cancer that had metastasized to his lungs. In mid-June, he was given months to a year to live, and he started tiring rounds of chemotherapy.



Damon's ashes are archived in one of his beloved rock tumblers, polished and engraved "Rockhound" (Photo: E Medley).

I made plans to see Damon a couple of weeks later but I was one week too late. Damon was urgently hospitalized on July 3 and died early on July 7. The Runyans are private and there was no Memorial Service. But, in typically witty fashion, the whole family had agreed before he died that his ashes would be placed in one of his beloved rock tumblers, with two of his rocks as supporters, in the family niches at Crown Hill Tower of Memories, a cemetery near Lakewood.

In August, I spent a couple of sad days sorting through Damon's vast collection of technical literature, his several orderly cabinets of job files and his library. It was a pleasure to learn from Lorene the details of Damon's professional life and the history of the Runyans. I also was reminded again that some thought has to be given to how and when one passes on professional legacies; Damon had started downsizing files and library when he retired but, of course, at the end he had more important things to do. I am proud to now own the books that he had wanted me to have.

Some Reflections on Damon R. Runyan

I have been remembering Damon much as I have been writing these pages and I share some reflections:

Damon was a splendid Geological Engineer. Nowadays, most American geoprofessionals do not know what a Geological Engineer is. But as a Geological Engineer, Damon knew a lot of engineering stuff that many geologists did not know; and certainly he understood more geology than most geotechnical engineers should know but don't care about. He studied all his professional life, and exhibited that consummate quality of the excellent geopractitioner - the curiosity to get to the bottom of things. It was his ability to understand the breadth of the Applied Earth Sciences (the by-line of Dames & Moore), and to translate the disciplines for others that made him valuable to his colleagues and clients. That he could communicate with wit, made him likeable, too.



Damon Runyan in 2001 (photo: Lorene Runyan)

Damon was the toughest, most demanding boss I have ever had. He rarely praised me but when he did I knew that I had exceeded the standards that he set himself, and my pleasure was narcotic. I wanted more – and so worked even harder. In that way, Damon was a good manager. He did not just extract yet another dollar from a project, but was an empathetic, mature and honest leader who knew how to motivate his staff.

Damon had a pervasive influence in my career and professional maturation. Damon was my first and most influential mentor. It seems odd now that I had to wait until I was 31 to be discovered by a caring, older man – up and until that time, I was independent-minded and thought I could figure out all the problems I created by myself! But Damon guided me, coached me, harangued me, and protected me. I recall most that Damon protected me; he was a straight-shooting, candid, champion. I still mentor one or two young professionalsin caring for how their careers and lives develop I am following the instincts that were encouraged and groomed and by Damon.

Something there is about climbing the career ladder from Assistant to Principal that corrupts and warps the moral fiber of some consulting professionals; that softens their stiffness of character. But, Damon was an exception- he was consistently the most straightforward, honest and principled Principal have ever worked with. Howard Schirmer, who knew Damon for almost 50 years, wrote recently:

"Damon was an insightful critic and a real fighter for what he felt was right. He was also a champion for his clients and subordinates. Many would say he was stubborn and maybe even argumentative at times. In today's world, we see too much wavering for what is best for one's career, brown nosing, playing politics and a lack of integrity in decision making. A client of mine recently remarked that in the recent recession, people have lost their ethics. It is clearly not the same world as when Damon, Ed Medley, Don Graf, Dan Song and others, including me, were young professionals. We all learned about hard work, professionalism, integrity, technical excellence and client service either directly or indirectly through Dave Liu's mentoring when we were young and strived to exhibit it throughout our professional lives."

I am grateful to have been able to write this affectionate memoir of Damon Runyan, a man who gave me some oft-needed nudges and helped me during some major lurches in my career and life. I hope that if you are a young geoprofessional, you will also be fortunate to be guided by a mentor, boss and friend like Damon R. Runyan.

Acknowledgements

I owe special thanks to Lorene Runyan for her patience and aloha while I was inquisitively researching Damon's and her life. This tribute is based on my recollections of Damon Runyan; conversations with Lorene Runyan; a review of Damon's professional files; and, email correspondence and conversations with Howard Schirmer, Ed Church, Dave Liu, Don Graf, Mike West, Byong-mu (Dan) Song, Dan Palmiter, Chris Muller, and Ed Hultgren. I am grateful to them all. Thank you, Lorene Runyan, Howard Schirmer, and Jeff Raines, for your review comment and suggestions. Photograph credits are as attributed in captions.

Ed Medley, Belmont CA, October 21, 2011 emedley@geopractitioner.com