



## Memorial to Vladimir P. Pentegoff (1899-1982)

As he was known to his friends, “Walley” passed away February 2, 1982 in Laguna Hills, California, after several years of failing health. He will be missed by all who knew him, for he was an unusual man. His insight and ability to separate the irrelevant chaff from the important seed of a geologic problem became well known amongst those dealing with him in his years with the U.S. Army Corps of Engineers, and later as a consultant. He spoke with a Russian accent and a quiet manner, which made everyone in a meeting listen intently to his words of logic and wisdom.

Walley had an extremely eventful youth. He was born on June 24, 1899 in Chelyabinsk, about 200 miles north of Magnitogorsk on the east side of the Ural Mountains, Siberia. His father was a mining engineer and superintendent of a nearby mine. In 1918, when Walley was 18, he became a soldier in the newly forming local White Russian Army. The ruthless Bolsheviks were organizing in cities to the west and a confrontation was certain. In 1919-1920 several tens of thousands of people fled eastward, mainly on horseback, to avoid the pillaging communists. Their hope was to reach Vladivostok, 4,000 miles away, and then to board a ship to the United States or at least seek refuge in China. Only about one-quarter of the original migration survived

the harsh winter and made it to freedom. Most died from gangrene resulting from frostbite, and many died of typhus. Sustenance for many was dead horses. One of the largest obstacles was the 400-mile long barrier of Lake Baikal; it had to be crossed in dead-winter when its surface was frozen.

Walley was the youngest of three sons. The middle brother fled as far east as the town of Chita, near Mongolia, where he took residence. His parents followed later, but only got as far as Barnaul on the Ob River, and died a few years later of pneumonia.

His oldest brother was a well-known chemist/physicist in Vladivostok. Walley thought he worked on the Soviet A-bomb in 1940, because that was the last time he heard from any of his family. His brother in Chita wrote to Walley in California that his older brother's wife and son were forcibly sent by the government from Vladivostok to Stalingrad, because of the secrecy of his work. Walley believed that his older brother was killed in a nuclear accident on Sakhalin Island. The middle brother's last letter to Walley in 1940 said, in effect, “Please don't write to me anymore from the United States, it makes it difficult.”

Back in 1921 Walley found himself in Vladivostok. Some of his colleagues decided to stay there,

as did his school friend Nicholai Kolesnikoff. Walley and some other friends decided that they would have a better chance to get to the United States if they traveled the 1,600 miles to the port city of Shanghai. He arrived in Shanghai not speaking a word of Chinese. For food he would enter a restaurant and point to items on the menu, then be served some weird food he never tasted before. He decided to frequent the same restaurant and keep trying menu items until he found certain things in liked. In a few weeks the waiter would call out to the kitchen for Walley's favorite dish as soon as he saw him come through the door.

After about a year in Shanghai doing odd jobs, he met two Russian musicians who each donated \$25 so that Walley could buy the \$50 passage in the hold of a ship destined for Seattle. There were 16 young Russian men aboard; Walley told of the First Class passengers inviting them to the upper deck for singing and dancing their Russian folk music.

Upon arriving in Seattle in 1923, they contacted a Russian (or Greek) Orthodox priest who turned out to be the hero of Walley's life. He found work for Walley—as a meat packer and lumber mill worker—and after hearing that Walley wanted to be a mining engineer like his father, corresponded with a friend at the Colorado School of Mines. During this time Walley was reunited with Nicholai Kolesnikoff who arrived in Seattle a few months later. The priest mailed away for and (amazingly) received a transcript of Walley's grades from the Chelyabinsk gymnasium. The priest then recommended a scholarship loan from the Rockefeller-sponsored Russian Student Fund for Walley and a fellow Russian immigrant to attend the Colorado School of Mines. It was approved, and on \$50 per month Walley completed the five-year curriculum and graduated as a Geological Engineer in 1928. He gradually paid back the loan from the Russian Student Fund. He also, in later years, wanted to repay the Colorado School of Mines for his education and fond memories. In 1978, on the 50th anniversary of his graduation, Walley donated \$10,000 to the school, to be used as a fund for needy students, as he once was.

After graduation he came to southern California with his nickname, Walley, "because nobody knows how to pronounce Vladimir" (Vlad-EE-mir). He went to work for the now-defunct Radio Geophysical Company in Pasadena. One of his jobs was to determine if a buried ancient stream channel in a granitic terrane would be crossed by the Metro-

politan Water District's (MWD) Val Verde Tunnel of the Colorado River Aqueduct. The few core borings that were made by MWD during the investigation period in the early 1930's missed a deep meandering channel that was eventually crossed three times by the tunnel. Walley's geophysical crew located the channel crossings. He asked if he could talk to the MWD Geologist, but was told that there was none on staff. Walley said he would like the job, and was told that the MWD only had field titles of Engineer and Inspector. Walley was hired as a "safety engineer," but he sneaked in some valuable geologic tunnel mapping on the side.

Dr. F. L. Ransome was geologic consultant to MWD in the depression years of the early 1930's, and Walley was once Dr. Ransome's field assistant for mapping tunnel routes in the desert. Walley wryly remarked, "Between us, the consultant and I make \$23 per day—he get \$20 and I get \$3."

Future AEG members who worked with Walley on the aqueduct for the MWD in the 1930's were Edward J. Zielbauer (fifth President of AEG), Thomas F. Thompson (more later), and James R. Townsend (who later worked with Walley in the Corps of Engineers).

Walley had been in southern California about six years after graduation from the Colorado School of Mines when, at the beach in Santa Monica, he noticed a man walking in a peculiar manner. He thought to himself "No one walks that way but Nick." He yelled out his name, the man turned around, and it was Nicholai Kolesnikoff, Walley's schoolmate whom he hadn't seen in ten years since they parted in Seattle in 1923. "What a celebration we had that night!" (They continued close friends over the years; Nick and his wife, Mera, live in San Diego and helped me with some of this early history.)

From 1940 to 1963 Walley was Chief of the Geology Section, U.S. Army Corps of Engineers, Los Angeles District. The District includes southern California, Arizona and parts of Nevada, Utah and New Mexico. In the years of World War II, Walley was among the first visible, pioneering, engineering geologists in southern California. He was in charge of investigations for major flood control dams, including Sepulveda, Whittier Narrows, San Antonio, Santa Fe and Prado.

One of the most tragic events in his life occurred at his retirement ceremony at the Corps of Engineers building honoring his 23 years of outstanding service. Walley was summoned from the audito-

rium to find that his wife of 28 years, Louise, had died of a heart attack in the elevator going to his ceremony.

Walley, my wife, Ena, and I became even closer after that tragedy. His only companion at home was a huge Siberian Husky, "Cherna." He renewed his friendship with a long-time family friend, Marjorie; they were married in a quiet ceremony in 1966. This was just prior to the AEG Annual Meeting at the Disneyland Hotel. The four of us attended, and years later took delight, along with the late George D. Roberts, in recalling tales of how the Banquet speaker went on and on for three hours describing his exploits with the pygmies of Africa.

I met Walley first in 1958 at Lake Mathews Dam near Riverside, California, where I just started working for the Metropolitan Water District as a grouting inspector/geologist. He was a geologic consultant to the MWD and was called upon to locate a quarry for riprap for facing the dam. (It seems that an engineer earlier had pointed to a boulder-strewn hill nearby and said, "That will be our quarry!" No geologic advice was sought and no borings were taken; the hill turned out to be completely decomposed, and ended up as a borrow area for common fill.) Walley and I tramped around the hills and he finally recommended another boulder-strewn hill, but one that had abundant rock outcrops; it turned out to be a good quarry.

Walley and I soon became close friends—both liking straight bourbon and water ("Wodka has no flavor"), and his chuckling at my attempt at talking college Russian with him. Both of us also were intent on convincing some engineers the importance of a thorough geologic investigation prior to construction, and the importance of having geologists, not inspectors, log all borings and tunnels. We slowly won our point and during the 1960's a dozen geologists were hired specifically to perform geologic work, and not be part-time inspectors on construction projects.

From about 1960 to 1974 the MWD explored for and built 25 miles of tunnels and two dams for the distribution of California Aqueduct ("Feather River Project") water. I was in charge of geologic investigations for MWD and Walley was our on-call geologic consultant. By 1963 we both became aware of the vast scope of the construction work ahead—it would cost about \$300 million—and Walley should have some top-level assistance. We had long discussions as to who should be included on a three-man MWD Board of Geological Consultants. We

decided one member should be Richard H. Jahns, then a professor at nearby Caltech and editor of the tome "Geology of Southern California." The third member was the late Thomas F. Thompson, consulting engineering geologist and formerly a tunnel inspector/geologist for MWD in the 1930's. I was fortunate in that my office was the meeting place for this high-powered team. They met several times a year and prepared classic geologic reports on proposed tunnels. The reports boldly gave *opinions* of anticipated tunneling conditions along with the factual data; this was a relatively new idea in 1965. Their philosophy was that collectively we are the geologists closest to the project and have spent the most time on it, therefore our opinions should be the best estimate of anticipated geologic conditions. We felt that if a condition is encountered during excavation that is materially different than we thought, then it is a true "changed condition" and the owner should pay the contractor for any real expense. There is no way of knowing, but we believe that this philosophy saved the MWD considerable money by allowing low contingencies on contractors' bids, and by submission of fewer changed conditions claims.

I often chauffeured Walley to the various drill hole and construction sites. He was strongly patriotic, having become a U.S. citizen in 1930, and was an avid anti-communist ("You can't trust those bastards"). Walley was a happy person and often would sing and hum in the car as we drove. His two favorite songs, or at least the two that he knew all the words, were *God Bless America* and *Just a Gigolo*(!)

One of the most humorous incidents that Walley enjoyed retelling was at the courtroom hearings following the San Fernando Tunnel explosion of 1971. He was an expert witness and was being shown movies made from a helicopter that flew over the terrane of the explosion site. The acoustics in the courtroom were very poor, and so were the attorneys. Part of the proceedings sounded like a TV sitcom and went something like this:

Attorney: What do you see on the screen, Mr. Pentegoff?

Witness: Well, ah—it looks like a dust storm. (court laughter)

Judge: Will someone focus that picture!

Attorney: OK, now what do you see?

Witness: Some hills.

Attorney: What geological formation are they?

Witness: Pico Formation.  
Attorney: Did you ever see any fossils?  
Witness: Foxholes?! What—  
Attorney: Yes, fossils.  
Witness: I never saw any foxes, maybe some gophers and—  
Attorney: What? Gophers?  
Witness: —yes, and maybe some squirrels.  
Attorney: Your honor . . .

Walley was also on the Board of Consultants of the Los Angeles Department of Water and Power. The Board was organized in 1964 for geologic and seismic reappraisal of all the city's dams, following the failure of Baldwin Hills Reservoir. The Board also included Dr. Charles F. Richter, later honorary member of AEG, with whom Walley became good

friends, as they had much in common; they were the same age, had the same logical and precise manner of thought and expression, oftentimes were of the same iron-willed temperament, and they lived close to one another in Pasadena.

Walley will be remembered as a good, kind and gentle man. He dropped membership in professional societies in the past few years because of his failing health, including a progressively worsening eye problem caused by the winter winds of Siberia in 1920. He is survived solely by his gracious wife, Marjorie, with no known living kin.

*Do Svedonya, Gospodin.*

Richard J. Proctor  
327 Fairview Avenue  
Arcadia, CA 91006