

Family Expeditions

A Family Expedition to the West Coast

One of the registrants in our first summer course was Karl Martinez, a test pilot and chief of the electroacoustics branch of the Boeing Airplane Company in Seattle, Washington. At his instigation, the Boeing Company invited me to give a summer-session course on "Materials Research and Applications" for its scientists and engineers. As a result, I had an excuse and could pay for a family trip to the West Coast in the summer of 1955.

Without the interstate highway system of today, such a trip was still a real adventure. Sister Olga came from Germany and brought a Klepper faltboat* along. Niece Ursel mobilized her "Kasperle Theatre"** to bail us out with puppet shows. Two cars were loaded with tents and sleeping bags, cooking utensils and all gear needed for camping in the national and state parks and other wilderness locations. Since Peter and Arndt were working, Frank, Daggie, and I were the drivers of the expedition.

Setting out via Fort Ticonderoga on Lake Champlain, the family caravan crossed the Adirondack Mountains and the St. Lawrence River, circled the upper part of Lake Huron, crossed the channel connecting it with Lake Superior, and traversed Wisconsin to the Mississippi River at Red Wing, Minnesota. There we were charmingly received for a rest period of three days by the "Three Musketeers" and their families: Frank Chesley, Dimi Jelatis and Gordon Lee, students and co-workers of mine during the war years. Frank Chesley had analyzed X-ray

* A kayak that could be disassembled into a rubberized skin and the modules of a wooden frame and packed in duffle bags for travel.

** A folding puppet stage. The name of the lead puppet, an intrepid boy, was Kasper.

diffraction patterns to determine materials structure, Dimi had developed the M.I.T. Coax Instrument for measuring dielectric constants with standing waves within the microwave region, and Gordon had produced and ran our microwave-oscillograph. After the war, the three joined forces and founded The Central Research Laboratory of Red Wing, Minnesota. Frank's father-in-law, the botanist, Professor Anderson, had invented popcorn and had built his own research laboratory there, which formed the nucleus of the new venture. The Central Research Laboratory became *the* factory in our country where remote manipulators were produced for the handling of highly radioactive materials. Our visit and especially Ursel's puppet show were long and warmly remembered there.

Continuing west, we camped at Devil's Tower, Wyoming, and subsequently in the desert late at night on a patch of cacti, which collapsed all our air mattresses. Then we pushed up the Yellowstone River to the National Park. But, just as we settled happily there in an empty camping spot, a big bear appeared out of the bushes and dived head first into a garbage can. This convinced Daggie that we had better move to the huts at "Old Faithful" that the Park Service rented to visitors. However, when she went into the bathroom with the happy exclamation, "At last no bears!", a big bear walked nobly behind her on two legs.

The geyser, with its astounding display, the hot pools with their colorful deposits, and the animals -- all still relatively undisturbed by tourist traffic -- were a memorable sight. Driving on west, we visited our friends, the Biermanns, at their summer place in Montana and arrived finally in Seattle. There our friends, the Martinezes, had rented a house for us on the shore of Lake Washington -- and the vacation for the rest of the family began.

My own activity was hard work: lectures and discussions at Boeing from Monday to Friday -- partly interrupted by the howling engines of the new 707 plane* on its test-stand, where the engineers were trying to develop effective silencing devices. However, on Saturdays and Sundays, I was free for family expeditions into the rain forest on the Olympic Peninsula and to Mount Rainier, where a bear actually crept into our tent while I was in a sleeping bag changing films. He was greeted by Mai and left disappointed because the other edibles were stored outside.

While at Boeing, I attended the first official demonstration of the new 707 plane. As we watched in consternation, the big plane suddenly flipped over onto its back, flew upside down for a distance, and then elegantly righted itself. Even the Boeing officials were awed by this unexpected display.

* The first U.S. jet-engine-powered passenger aircraft, which was originally developed as a tanker for the U.S. Strategic Air Command.

My lectures convinced Boeing that they needed a good Materials Research Center. Homeward bound, we crossed the Columbia River on a ferry, went east over the mountains of Oregon, passed through Idaho to Salt Lake City, visited the Grand Canyon, stayed with the Liscos for two days in Chicago, and reached our home again via the Niagara Falls. It had been a glorious trip but I was quite tired. Therefore, at the urging of our children and Ursel, Daggie and I took off at the end of November for a two-week holiday in Bermuda. They managed wonderfully without us.

In Idaho, stopping for luncheon at a little eating place, I had found the owner in the process of slicing in half an "Iron Idaho Potato" which a young boy had brought in. I became suspicious that it was a meteorite, bought it for \$20, and took it along for further investigation. It has not yet been studied seriously.

A Second Trip to Europe via Iceland

The Laboratory for Insulation Research had become an excellent establishment for modern materials research. On May 17, 1958, we had celebrated its 20th birthday with a party for 80 at the Endicott house. A quartet directed by Joe Stein played Beethoven, the gardens were in full bloom, an excellent dinner in buffet style filled the hungry, and a film show of Dr. Seuss's "The Ten Thousand Fingers of Dr. T" followed by a lecture by Harold Edgerton ended a lovely day. After an 8-day lecture series in Washington, consulting trips, etc., and taking care of children, research programs and domestic affairs, on August 3, 1958, Daggie and I, with Eric and Mai, set out for another trip to Europe.

In Reykjavik, a car with a student driver awaited us for a week-long exploration of Iceland. There was no large street system yet nor public gas stations outside the town, but the student, who was the grandson of the farmer who owned the "Great Geyser," proved to be a wonderful guide.

We went to the old Thingvellir place -- the meeting place in old times of the Althing, the governing council of Iceland. It lies in the crack separating the American and European plates. The valley has steep walls and has widened by

many feet during my lifetime. The meadows were full of flowers and the hot springs, pools and lakes inviting for swims.

The high mountain volcanoes of Iceland are covered by icecaps and now and then erupt causing disastrous floods. One, in cascading down toward the ocean, destroyed the first Viking settlements. Driving up to the great falls at Guldafoss, we saw the most spectacular rapids and were quite alone in those majestic surroundings.

Afterwards, visiting our driver's grandfather and his Great Geysir, we found the old farmer in dismay. The king of Sweden had been visiting a week before and the Geysir had refused to perform. When the same thing happened to us, the grandfather grew angry and threw a pound of soap in its mouth. Thereupon the Geysir blew a soap bubble but remained unimpressed. As a last resort, the farmer threw soap into a little geysir near to it: the little geysir spit water and soap into the big geysir and a fountain arose about three feet high instead of the advertised sixty feet. Coming back with Frank and his son, Paul, in 1977, we found the great Geysir restored and blowing a mighty fountain at its appointed hours.

We passed old Viking settlements, climbed into caves, visited hothouses growing all kinds of exotic flowers and fruits warmed by geothermal heat, admired the lively Icelandic ponies, and looked out to the Vesterman Islands across the stormy sea. Some years later, Surtsey Island was born there in a tremendous volcanic eruption, was destroyed by the waves, and was built up again, until at last the first animals -- sea lions -- began to settle and the first flowers sprouted from seeds brought by the winds.

After a glorious week, we flew on to Sweden, to visit Grandma Franck's relatives in Stockholm and Göteborg. Today (November 1981) as I write this, Aunt Greta is still alive in Stockholm, entrenched in an old ladies' home and ready to give you a heart-warming welcome. She is the daughter of Daggie's grandfather's brother, who, according to family lore, was taken into the grandfather's business, ruined it, then grew rich and never helped his brother. Whatever the truth, Aunt Greta is a delightful and very dignified lady, Two of Daggies maternal cousins, Folke and Erland Josephson, are scholars in Upsala¹ and Stockholm respectively, happily married and very nice relatives. Folke can speak any language under the sun; Erland fell in love with a Polish girl and overcame great obstacles to get her out from behind the Iron Curtain.²

Two sisters and one brother of Grandma Franck lived in Göteborg. Now all are deceased. One of the sisters was a special phenomenon: she always carried a travelling bag along in case she decided on the spur of the moment to leave for Stockholm, Copenhagen or some other place on the spur of the moment. On the

streetcar in Copenhagen, she once put on an uproariously funny play-act which kept all the passengers spellbound and her relatives slightly embarrassed. During World War II she had dreams about where the Nazis would strike next and became a slightly feared oracle at Swedish Army installations.

A reunion with the Bohrs in Denmark brought us to Tisvilde. Niels showed us new excavations of Stone-Age graves nearby. The King of Sweden, an amateur archeologist, telephoned while we were there, asking to visit those graves too, but was told by Niels to come a few days later because he had American guests. What a wonderful style of democratic living!

Flying on to Hamburg, we had a warm reunion with Curt Bondy, who had become the successor to his old professor, William Stern. Eric, strolling through town, was nearly hijacked by a little prostitute. After a very nice visit in Göttingen with Tante Bezi and East-Prussian relatives, we came to Bonn to see Ernst and his family.

While in Bonn, I suddenly received a message from Gert Lüers that he was waiting on the other side of the Rhine. He asked if I could come over and speak with him. Our friendship had collapsed when he naively believed Hitler and joined the Nazis. During World War II, he had held a high Army Command in Northern Norway, building streets and communications with his Pioneer Division. Returning home, he learned about the concentration camps and the true nature of the Nazis and had dedicated the remaining years of his life to the rebuilding of towns and social institutions. All his children have followed him, working in Germany and abroad in humanitarian enterprises. We came back together across the Rhine and remained close friends until his death.