

Field Geology in the Borrego Chaos with Prof AEJ Engel

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Al Engel was considered a tough customer by many students and other denizens of Scripps. I got along with him well because he was so much like my father (an equally demanding engineering prof). I had started the UCSD earth sciences degree as a freshman in 1966 and when the major was cancelled my sophomore year, I was allowed to take classes at Scripps. This saved me — as I did not find the Russian and Chinese post docs (TAs) teaching undergrad classes very inspiring. They didn't want to be teaching and I didn't want to be tormented by calculus or physics. I preferred surfing.

I was able to sign up for Al's SIO256 Field Geology course. This challenging field class involved mapping in the metamorphic rocks on the east side of the Peninsular Range batholith just west of Borrego Springs. Steep rocky terrain gave good exposure for the rock formations that had been tilted, folded and mutilated. It was hard for students who weren't used to scrambling or reading topographic maps. I loved it..

On field trip Saturdays we showed up at 5 or 6 a.m. for the two-hour drive. This would give us a full day in the field and at least a few cool hours. While someone else drove the van, Al entertained with stories that were sometimes hard to believe. Attacked by birds and filled full of cactus spines on offshore islands... Milk fever during the war while looking for quartz crystals in the south... Crawling through abandoned graphite mines looking for material used to mark welding for warship fabrication. Stumbling on a group of human skeletons deep in Baja... Sewing up a cut on one of his sons with dental floss...

The climax for the field course was to be a three-day excursion around the granite batholith. We were camping out along the way. On the first night in Anza Borrego Desert State Park we turned in early. The night was clear, cold with some light from the moon, dazzling stars, and a gusting wind. With the cold dawn, I was the first one up and I found Al lying on the ground outside his bag and shivering. I got out a clean sock (I didn't always carry a first aid kit back then) to cover the congealed blood on the side of his head and helped him sit up and get him back into his sleeping bag. I managed to find a cloth and helped him clean up some of the blood. He still looked dreadful because scalp cuts bleed quite a bit.

The rest of the class gradually awakened and were looking on in horror, "What happened?" He explained, "Well, I took a new medicine for my arthritis last night. When I got up to pee I fainted and hit my head on a rock when I fell down." He said his head felt like he had a weeklong binge drunk hangover - without any of the fun.

We got some coffee and breakfast into him (and us) and finally convinced him to go back to La Jolla to see a doctor. He insisted on stopping to discuss some key outcrops along the way. He later confessed that he passed out in the car when he reached the ER — having refused to let us drive him over. No surprise, he had a significant concussion! He didn't appear at Scripps the following Monday. On Tuesday, he showed up with his head bandaged and still looking the worse for wear. When Jim Hawkins (another geology prof) saw him in the corridor, he reacted as we had. "Good God, Al! What happened?" "Well, I fell and split my head open on a piece of granite." Then, he corrected himself. "Actually," he specified, "it was quartz diorite."

Classmate James H. Natland provided some details.