

Timothy Andrew Graul

50 year SNAME biography

I was born February 20, 1941, in Alton, Illinois; an industrial city on the Mississippi between the Illinois and Missouri Rivers. Lock and Dam 26 is there. I grew up drawing boats, cars and airplanes (even in the margins of my schoolbooks); building and fixing things. An eighth grade classmate told me there were people who designed yachts - "naval architects" - and that you could learn to be one at Webb Institute. I set my sights on going there - and I did, briefly.

After recovering academically at Southern Illinois University, I applied and was admitted to the University of Michigan. In 1961, I got a summer job at the Grafton Boat Works, a very small boatyard a few miles up the river from Alton. Crusty, self-taught boatbuilder Everette Fry wasn't sure what to do with me, so he had me make drawings of boats they were building. I had to complete the drawings before the boat left the yard.

The summer of 1962, I sailed from New York to Portugal on a 45 foot ketch; hitchhiked through Europe for three weeks, then sailed back to the Virgin Islands. Returning too late for the fall semester, I went to Seattle, working a few weeks for renowned yacht architect William Garden, then for W. C. Nickum and Sons, returning to Ann Arbor for the spring '63 semester.

I graduated from Michigan in December of 1965, married Michigan grad Barb Shadley a few days later, and soon was at work full time at Grafton Boat.

Ed Fry (the founder's son) was now the general manager of the yard and energetically built the company. My task was to create preliminary design drawings, then work up the scantlings and select machinery and outfit so the management could estimate the cost. It was fast-paced and exhilarating work. We were reasonably successful winning government jobs; especially service craft and workboats for the US Army Corps of Engineers and the US Navy. In 1967, Ed and I gave a paper on metal boat construction at the SNAME Spring Meeting in Montreal. One of our Corps of Engineers projects led to a model tank test program of a series of fast catamarans and a subsequent paper which was published in 1972 in *Marine Technology*.

Ed and I went to Washington frequently to stay in touch with the Navy, and so became acquainted with people from other shipyards - among them Ellsworth Peterson. In April of 1972 I moved our family to Sturgeon Bay to work for Peterson Builders, a very highly-regarded builder of ships and boats in steel, wood, aluminum and fiberglass. Sturgeon Bay then had four shipyards and was the perfect place for a fledgling naval architect to learn. Not only were there hundreds of skilled craftsmen in Sturgeon Bay: shipfitters, carpenters, loftsmen and welders, there were fourteen naval architects! Peterson Builders (PBI) had just received a contract from the State of Alaska to build a 235 foot ferry designed by Phil Spaulding, whose firm had recently joined forces with W. C. Nickum and Sons, where I had worked as a student. At PBI, my small group designed and managed the smaller non-Navy projects: tugs, ferries, fireboats, patrol craft

and, most interestingly, a series of seven 225 foot tuna seiners. In 1981, already busy with Navy patrol craft and salvage tugs, PBI won a huge contract to build eleven mine countermeasures vessels - the MCM-1 class. It was apparent to me that the time had come to start my own small boat design firm: my dream and goal ever since junior high school.

I rented a room in downtown Sturgeon Bay and Barb went back to teaching to be sure we would be able to feed the kids. PBI co-workers gave me a beautiful new wooden drafting table; Dick Stearn, the dean of Great Lakes naval architects, sold me some surplus furniture, and Timothy Graul Marine Design was in business! Gary Russell awarded us our first big job: a 90 foot ferry for the route between Bayfield and Madeline Island in Lake Superior. The Madeline Island Ferry Line crew built her themselves. I earned a private pilot's license so I could more efficiently check on our projects around the Great Lakes. Business grew; we designed many ferries, small passenger vessels, crewboats, fast supply boats, workboats and research boats; at the same time surveying yachts and consulting on lengthening, repowering, tonnage and stability. In 1991, the Wisconsin Lake Schooner Education Association selected TGMD to design the 100 foot three-masted wooden-hulled schooner *DENIS SULLIVAN* - Wisconsin's Flagship and TGMD's "Mona Lisa".

Remembering my own years as a student, we always tried to hire interns. One came from Holland; one was a professor of naval architecture. Webb graduate Mark Pudlo started with me as an intern; came back after graduation, and became our Chief Naval Architect. In January 2007, Mark bought the assets and files of TGMD and started Seacraft Design LLC.

LESSONS LEARNED -

Over the courses of our careers we meet and work with many people. Some are unforgettable; others we may wish we could forget. If I were starting over, I'd do a better job of remembering each person: where I met them; what their particular interest was, and how to contact them - years later, if need be.

Not all of us speak the same language. It takes real effort to communicate clearly; even in one's native tongue. Having to speak to a client in his language taught me what I thought I was saying could be interpreted in a completely different way. Which leads to my next topic: I think it's vital for every NA to learn another language - or better yet, several. We do live in a global village, where we must always be receptive to hearing new things, and be able to understand and learn from what we hear.

Finally: *PARTICIPATE!* Get in there and work on projects; join committees, and DO things - in your profession; your company; your town; church; school system - whatever. Remember: this is not a rehearsal!