

Say the word "submarine" and most people picture big military subs such as the one used in the movie "*The Hunt for Red October*" with Sean Connery and former presidential aspirant Fred Thompson. But interestingly, the first submarine ever built was a personal sub used for the sole purpose of exploring underwater. It was back in 1620 when Dutchman Cornelius Jacobszoon Drebbel constructed an oar-propelled submersible vessel on orders from James I of England.

While the military potential of submarines quickly followed, it would be another 150 years before one would be used in a battle. The hand-propelled American Turtle was originally conceived to transport an underwater bomb to an enemy vessel. It was the brainchild of David Bushnell and Phineas Pratt who in 1775, according to the U.S. Navy, built the one-man device — America's first submarine — for the purpose of breaking the British naval blockade of New York Harbor during the American Revolution. The Turtle had an unsuccessful first mission in September 1776 when it attempted to attach its bomb to the underwater hull of HMS Eagle but failed. The Turtle was used again in 1777 on the HMS Cerberus, but despite killing several sailors, the explosion did little damage to the ship.

Military uses dominated the history of submarines for the next 200 years, but it was not until the 1954 classic film "20,000 Leagues

*Under the Sea*" when the Earth's final frontier — the undersea world — played center stage on the big screen and fueled imaginations the world over.

U.S. Navy submarine commander George Kittredge was inspired too, not so much from the film as he was from firing on a Japanese midget sub in Sydney Harbor a decade earlier and thinking: "I can build a better submarine than that!" And so he did. Kittredge was among the first to build and sell personal submarines, and for a long time his models, the K-250 and K-350, dominated the personal-use market, delivering around 50 subs and selling kit plans for another 50, many of which have been home-built. His recent book, *I Found Israel's Atom Bomb Factory*, chronicles 46 submarines that he built and the people who bought them.

The idea of scooting around beneath the ocean's surface concealed in a personal submarine is a fantasy that's accessible to both the very rich as well as ordinary Americans who have constructed their own home-built subs in their backyards and garages, like Alec Smyth of Alexandria, VA.

Smyth, who actually has two submarines, traveled to Key Biscayne, FL, a couple of summers ago in search of the higher-visibility water. Once there, he teamed up with Eddie Dziura, a former business associate who offered to help Smyth with diving the submarine. Dziura

## Alec Smyth at left, in his home-built submarine at a sub owners convention.

never imagined he'd ever be in the driver's seat of a personal submarine; but that was before he first laid eyes on Smyth's Kittredge K-250. "When I first saw the sub, I had this burning desire to learn all about it and take it down for myself," says Dziura. And after spending the day helping Smyth and learning about every switch and lever, Dziura, who is a BoatU.S. member, took a dive for himself.

"You are highly aware of the constraints of the small size of the sub until it's completely submerged," he says. "Then you become one with the machine and any claustrophobic feelings disappear and are replaced with a vast expanse."

Later the same day the men decided to take the sub for a night dive, which Dziura says he will always remember because the current was strong, the glass hatch bounced light back at the millions of bubbles; when he reached the bottom, the silence was deafening.

"My mind was awed by the sensory overload: the beauty of night sea creatures and corals being lit up for only my eyes; the stark reality of scooting along under the water miles offshore and rehearsing emergency procedures in my mind. There is a keen sense that you are definitely all alone in there," says Dziura.

Inside Smyth's submarine, there's a