TULSA WORLD

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# **Pastimes**



A wooden submarine being built by Kay and Doug Jackson sits in their front yard at their home. Friends and family are helping the Jacksons with the project, which they plan to launch on June 26th.

# A sub-making couple use modern conveniences in their

# Homemade VOyages

**BY MATT GLEASON**World Scene Writer

ept in a Tulsa front yard ringed by metal fencing — and protected by a pup named Sam — the Argonaut Jr. submarine practically hollers at passers-by to heckle it or to stare in awe.

After all, what kind of mad man (and his wife) would create a submarine mostly out of pine, laminated plywood and epoxy glue, give it a set of wheels, load it down with five tons of lead as ballast, then expect to plunge it 20-30 feet into Lake Tenkiller's Strayhorn Landing at the end of June ... and survive? Well, that'd be Doug Jackson and his wife, Kay.

The Jacksons, by the way, assure that their Junior is very much safe and will have to pass inspections just like any other boat.

The couple's sub is an almost-replica of the original Argonaut Jr., which submarine pioneer Simon Lake created on the cheap in 1894. The New Jersey man built it to prove the viability of his submarine, including its diver lockout chamber, which allows a diver to exit beneath the vessel without sinking it.

Junior's success led to the creation of its senior version, the Argonaut. In 1898, Jules Verne himself sent a telegram to congratulate Lake after the Argonaut became the first submarine to successfully operate in open sea.

More than 110 years after that voyage, the Jacksons are nearing completion of their own Argonaut Jr.

### A 'Leagues' apart

Growing up in Brownsville, Texas, Doug was the kid who pretended to be sick just so he could skip Sunday night church to watch "20,000 Leagues Under the Sea"

Kay, too, grew up in Brownsville, but where Doug became a selfdescribed ONEOK "computer nerd," Kay became a school teacher turned children's nonfiction book author. She's published 17 books about everything from plate tectonics to, of course, submarines.

In the couple's free time, they are self-taught makers of undersea — or at least under-lake — voyagers.

Some eight months ago, the couple aimed to build Junior as an educational tool — one that could be finished quickly, relatively cheaply (about \$4,000-\$5,000) and made with ordinary tools and supplies. Eventually, Junior and Kay will be available for school visits.

Success wasn't assured, though, since the couple did not have Lake's original design plans. All they had were a few pictures of the exterior — none of the interior — and a description of the craft found in Lake's autobiography.

Imagination would have to fill in the holes in the plan.

To move the four-person sub's wheels, it will soon be fit with a hand-turned interior crankshaft like the original's. But it will have an electric motor to raise and lower its two 220-pound anchors.

Other modern flourishes will include a GPS system and digital diving computer. Its four scuba tanks will put compressed air into the cabin and will be used to blow water from the ballast tanks. Lake used boat oars to move his sub in the water, but the Jacksons prefer a small trolling motor.

By the time it's ready for launch, the Jacksons, plus a few helpers, will have put an estimated 1,000 hours into the sub.

From late June until early July, Junior will make regular dives into Lake Tenkiller. Along the way, the Jacksons aim to give area educators rides on the sub so they, too, can see what it's like to touch the bottom of Strayhorn Landing and explore with about 8-15 feet of water above the sub.

If the couple has time, they'll also give rides to curious onlookers. (To arrange one, e-mail NF4Kids@gmail.com.)

# Their rudder and sail

Before there was Junior, the Jacksons built BOB, a 9-inch tall, 13-inch-wide remote controlled vehicle, complete with infrared camera. In 2003, BOB cost about \$200-\$300 to build. Since then, many people, including school children abroad, have recreated it via free design plans on the Jacksons' website, tulsaworld.com/submarineboat.

After BOB, the Jacksons began construction on an aluminum-clad submarine dubbed Seeker in 2003. Seeker, which also sits in the Jack-



Kay and Doug Jackson pose with Junior, an almost-replica of the original Argonaut Jr. built by Simon Lake in 1894. Junior will eventually be available for school visits.

### tulsaworld.com EXCLUSIVE For a video of all things

For a video of all things submarine with the Jacksons, go to the link below. **tulsaworld.com/videos** 

sons' front yard, is a homemade ambient submarine and hybrid diesel-powered jet boat. That's a fancy way of saying that, as the Jacksons explain on their website, "the occupants are exposed to the pressure of the water surrounding the sub ... To the crew, it's still just like scuba diving, but they are warm and dry." The same concept applies to Junior.

Seeker should launch sometime next summer. By then, it will have cost about \$25,000 to finish. And, like Junior, its plans are freely available on the Jacksons' website.

Kay said of giving away the design plans, "We're doing it for fun.

It's not to make money. If other people want to make money with it, that's great, but this is just what we like to do."

Once the couple finishes Junior, then Seeker, they'll set to work on their floating retirement home, a roughly 75-foot steel-hulled sailboat they'll build in their front yard. The couple's two 20-foot gantry cranes will help pull off the job.

To get a glimpse of their future sailboat, one needs only look at the tattoos on Kay's left calf and Doug's right forearm. It's a beauty. As for the words inked just above their tattooed sailboat, both explain the success of their 29-year marriage.

"She is my rudder," Doug's tattoo declares as his sailboat navigates stormy seas. And Kay's tattoo, which finds the boat cruising under sunny skies, reads: "He is my sail."

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## KAY JACKSON