

SubCommittee-R/C Newbie Sheds His NonQual Rating: *My First Dive into R/C Subs*

by Tim Logan



The author's
U-34, Type 212-A,
is ready for sea trials.

Sea Trials

In July 2006, *U-34* (pennant number S-184), a modern German 212-A-class submarine, was first launched. The Type 212-A was the first sub to make use of Fuel Cell AIP (Air Independent Power) technology. It's one of the most advanced non-nuclear submarines in the world—capable of extreme stealth, shallow water operation, and covert missions. It was designed for the unique requirements of operation in the Baltic Sea, the Norwegian Sea, and the

Mediterranean Sea. The Corvette Captain of S-184 on that launch date was Claudia Neben, the first female officer to command a German submarine. It's difficult to imagine the incredible satisfaction she must've felt commanding one of the most sophisticated and unique submarines in the world on its first sea trial.

But, in September of 2025, another S-184 was launched, with great trepidation, on *her* first sea trial. At 32", this S-184 was 1/70th the size of Captain Neben's vessel and

was under the command of a totally inexperienced newbie to submarines—yours truly, the author. Yet this was a fully functional static-diving submarine model—meaning her dives could be proportionately controlled whether at a standstill or underway. Silently and beautifully, she performed all her maneuvers just like her full-sized sister. Never could I have imagined the satisfaction and pure joy that building and “commanding” this miniature submarine would give me. I was awestruck. I was hooked. I nose-dived down the rabbit hole and never looked back!

And that's exactly why I want to encourage all readers with even the slightest inkling of interest to go a step further and look into the world of r/c submarines. To that end, I want to share with you how I came to build S-184 through my experience with the SUBEX24 and SUBEX25 r/c submarine events—and offer you a peek at the resources available for the neophyte r/c “bubblehead.”

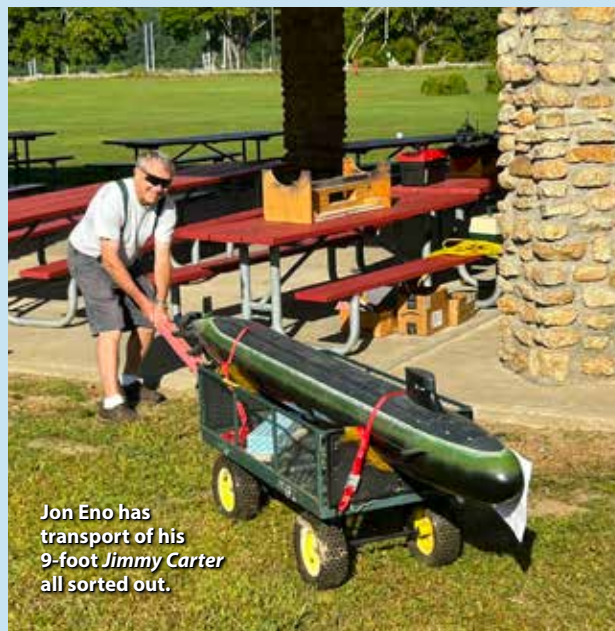


There's no doubt about it:
I'm writing this article to
entice you into the world
of r/c submarines!—Tim

SUBEX24

In the summer of 2024, fellow MMCNE (Marine Modelers Club of New England) member Jon Eno mentioned a group of submarine modelers who for decades have gathered together in Groton, CT. Jon is a highly skilled modeler of 1:48-scale U.S. Navy ships, and a remarkable student of naval history (as well as always willing to help a fellow modeler)—so when Jon shared huge praises for these sub modelers, I listened closely! The idea of seeing a group of superb craftsmen operate fully functional r/c submarines on an actual U.S. Navy submarine base captivated me. When Jon revealed that he would be taking his nine-foot 1:48-scale *Jimmy Carter* Seawolf-class model to this gathering in September, my jaw dropped and I knew I *must* attend the SUBEX24 event held on North Lake at Submarine Base New London in Groton, CT!

The author's U-34; first dive.



Jon Eno has transport of his 9-foot *Jimmy Carter* all sorted out.

The SUBEX events have a decades-long history thanks to many remarkable individuals who've worked hard to make them happen. (FYI: in their formative years, these Groton subbase r/c events were "SubRegattas" held specifically by the SubCommittee; see article on SC history on page 80.—ed.) I was only a neophyte attendee, but I'm so grateful for all those who've had the initiative, tenacity, organizational skills, and follow-through required to make such sophisticated events a reality. It's

no small task. The current folks making the event happen include Ray Mason, Joe Oliver, David Merriman, Frank Salerno, and Brian Wright. Security is currently handled by Joe Oliver. *(Because it's held on an active Navy submarine base, strict security pre-checks are required for all attendees entering the facility.—ed.)* To be kept posted about future SUBEX events, contact Ray Mason and ask to be put on his mailing list. SUBEX26 plans are now in the works. Ray's email address is: rayrpm333@aol.com. He'll be happy to hear from you!

SUBEX events generally start with a nice Friday evening dinner/meet-and-greet, then boat running on Saturday



Jon Eno handles pre-mission checks on the *Jimmy Carter*.

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and Sunday. Having completed the registration and security check, I arrived in Groton with my surface ship (yes, you can bring one—but they're known as "targets" [or mere "skimmers"—ed.] by most attendees) and zero knowledge of r/c submarines. Friday night's dinner and conversation were an eye opener—I was in a room of master craftsmen whose knowledge of real and r/c submarines was astounding. Though I didn't even know enough to ask an intelligent question, these truly remarkable modelers were willing to share their expertise in r/c subs in a most welcoming and friendly manner. Though awestruck, I was immediately at ease and on my way to learning about r/c submarines.

Early Saturday morning I found the modelers assembling under the large pavilion beside beautiful crystal-clear North Lake. I couldn't believe I was on a real submarine base with such an impressive group of individuals. And then another big surprise: arrangements had been made for a group tour inside (yes, *inside*) the *Virginia*-class attack submarine, USS *South Dakota* (SSN-790). I was ecstatic! Security circumstances can vary from year to year, so, to be clear, such a tour isn't necessarily the norm. But in 2024, I was most fortunate. I'm at a loss for words to describe my thrill over touring *South Dakota*. Suffice it to say that when I disembarked, I vowed that one day I would build a

working model of her!

Under the lakeside pavilion, I was drawn to a small, sleek, and terribly complex-looking model of a German type 212-A submarine. Her builder, Jim Butt, welcomed me to his "bench" and patiently began answering my questions. The sub was from a kit manufactured by Engel of Germany (additional info. can be found below under "resources"). Not too long after returning from SUBEX24, I began building my own Engel 212-A. Jim would eventually become my default mentor (through the wonders of Zoom) as I constructed the sub over the next several months. Jim's kind and



The pavilion at North Lake.

View of North Lake from the pavilion.



USS *South Dakota* (SSN-790).

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Jim Butt, to whom I owe a debt of gratitude, with his Engel 212-A.

jovial nature and his willingness to share and explain technical questions in a way I could understand were absolutely paramount to my successful first sea trial. Jim's been building r/c subs for many years. He's also a strong proponent of the SubCommittee Forums—one of the resources I recommend below. I'm very grateful to Jim—it was only through his help I could complete my first sub. I think the key thing for all newcomers to r/c subs or anyone sitting on the fence to know is that r/c submariners are ready and willing to help. Seek them out. They love the hobby and they love to share their expertise.

As the day went on, I noticed there was almost always a crowd around a gentleman named David Merriman III.

This is a name you'll see and hear again and again in the r/c submarine world—and for good reason. David began his U.S. Navy service as a torpedoman's mate and eventually became a hard-hat salvage diver. In the latter part of his Navy career, David began offering his services as a professional modeler—eventually creating models and effects for such films as *The Hunt for Red October*, *Crimson Tide*, *Star Trek V*, and *Star Trek: The Next Generation*. David designed and produced the first commercially available interchangeable dive systems for r/c submarines, and is hugely responsible for the



David Merriman III (on the left) sharing his expertise, wit, and humor with Fred Freketic.



Bob Martin and son Logan with their USS *Runner* refurbishment project.

growth of the r/c submarine hobby in North America. He's a meticulous craftsman willing to document and share his knowledge with wit and humor. The depth of his expertise is astounding. If you jump off the fence and begin to explore this hobby, it'll become very clear how much is owed David for the development of successful r/c submarine design and expansion of the hobby.

Others were gathered around an attendee who's now a household name to many r/c submariners: Bob Martin. If you've ever Googled r/c subs just once, you've undoubtedly come across the name of Bob Martin, aka The R/C Sub Guy, owner of Nautilus Drydocks and author of the must-have r/c sub book, *Diving Deep*. See more about Nautilus Drydocks and Bob's tremendous contribution to the hobby below under resources. (Bob's been deeply submerged in the world of r/c submarines for decades, both as a hobbyist himself and, in more recent years, as the ubiquitous proprietor of an established business. As such, Bob's also had much to do with the growth of the r/c submarine hobby in the U.S. He was our most recent past president of the SubCommittee as well.—ed.)

For SUBEX24, the ever-energetic Bob and his son Logan made the 3,500-mile drive from Spring, TX to Groton while picking up and delivering assorted subs for refurbishing along the way. In dealing with new and seasoned sub modelers for decades, Bob has seen and solved just about every sub-building problem imaginable. When you talk to Bob about a first submarine, *listen* to him. He's been there and done that and knows whereof he speaks!

I hope I'm beginning to give you a sense of the r/c sub community. I could talk on and on about each modeler at SUBEX24, but instead I'll just reiterate what I believe is so important for the prospective r/c submariner to know: this community is chock full of incredible individuals. These folks know their stuff; they love to help newcomers; and they're just plain fun—seek them out and learn from them! The r/c sub community, and events like SUBEX (*and widely scattered FunRuns and the annual SubCommittee SubRegatta—ed.*), are a big part of what'll make you enjoy this hobby. Now take a look at the amazing sub models on the following pages, just some of those at SUBEX!

The Interim

I left SUBEX24 enthralled with the idea of building my own r/c submarine. However, like many who first look into this world, I was a bit overwhelmed. Where to begin? First off, I purchased and read Bob Martin's *Diving Deep* book. Second, I purchased David Merriman's video series on converting the 1:72 Revell *Gato* static styrene kit to r/c. To my mind, these two sources will be used again and again as I dig further into the hobby. (Whether you put together a *Gato* boat or not, the building methods described by David are a true treasure trove.)



Irving Lloyd's
impressive fleetboat.



Frank Salerno with his magnificent USS Nautilus (SSN-571).

Then, after many email exchanges with Jim Butt, I made my decision: my first r/c sub would be the Engel 212-A. Note that I said "first" sub! I knew I'd eventually figure out a way to build a model of the *South Dakota* too. The 212-A would be my learning vessel though, since it's a complete and extremely well-documented kit—and Jim Butt would stand by to help with any and all questions. I wanted to get a practical, well-functioning submarine under my belt. (The *Virginia*-class *South Dakota* would not be made from a kit, and would definitely not come with instructions!) Due to a busy schedule, building the 212-A took me almost a year to complete. (*This can happen among beginners. There's just so much to learn and do.—ed.*) However, if you have an uninterrupted timespan to work with and a supportive mentor, I suspect the 212-A might be built and tested in less than a month.

SUBEX25

(I return to Groton with my new sub in hand!)

I completed my 212-A's final "bathtub" trim two days before SUBEX25. But the bathtub isn't the same as open water "sea trials," so I headed down to Groton truly not knowing how or if my model would perform. My enthusiasm for r/c subs had apparently been contagious: fellow MMCNE member Bruce Murray, a brilliant and innovative retired engineer, had decided to attend SUBEX25 too. As a result, Bruce is currently designing his own diving system and building a 1:72-scale *Skipjack*...but I digress!

Friday evening's dinner was a learning experience because this time I could actually ask a few reasonably intelligent questions. Building a first sub from a highly refined German kit with great instructions was one thing—my *Virginia*

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Ray Mason's awesome
Sword steam punk sub.



Frank Salerno's big *Seaview*.
Check out the raised deck!



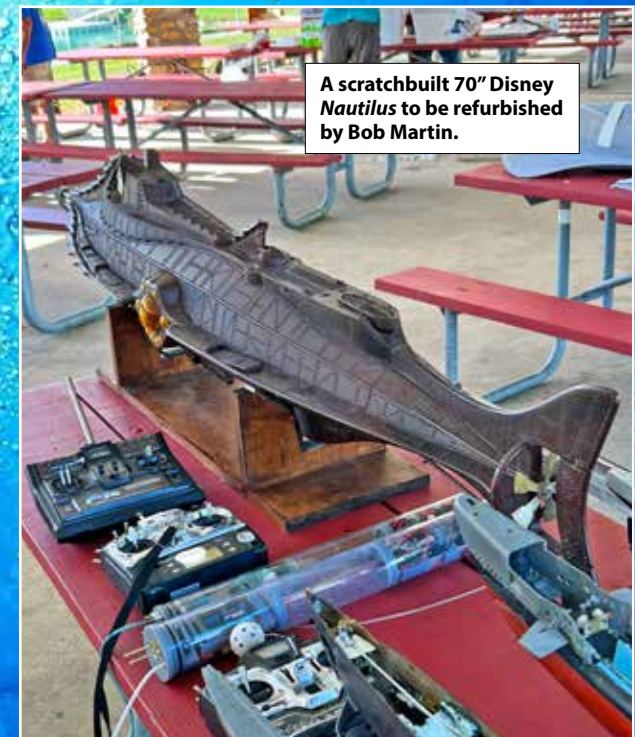
Rich Kohlbrecher
and Frank Ricucco:
such talented and
helpful modelers.



Jim Butt's
Holland VI.



Bob Gaito's
completely
scratchbuilt
Atlantis tourist sub.



A scratchbuilt 70" Disney
Nautilus to be refurbished
by Bob Martin.

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Clockwise from upper left: 1) Fun at the water's edge. 2) Rich Kohlbrecher's well-built transport box is an example of a "must have" for r/c submariners. 3) A photo of a photo: real-life submarine weathering. David Merriman brings volumes of well-organized photos in notebooks to these events, all to answer most any question posed or to help spark new interests. When you attend a SUBEX event, don't miss this golden opportunity! 4) David Merriman's own superb weathering skills. 5) Ray Mason's 1:48-scale *Skipjack*. 6) Bruce Murray learning from Steve Mayou.

David Merriman III's deadly Russian Alfa-class boat.



but did I know how to operate her? Could I dive her smoothly, or turn without rolling, et al? Nope! This was a whole new experience after so much focus on her construction. But with gentle advice from those “in the know,” I began running the most enjoyable r/c model I’ve ever operated. Piloting a marine vessel in three dimensions is challenging and an absolute blast. The 212-A is quick and agile, requiring constant focus on her every maneuver. I spent hours driving S-184, and didn’t want to stop. So, if you’re sitting on the fence about r/c subs, I urge you to look beyond the initial construction: fully operational subs are fun! Did I mention that functional torpedoes, missiles, lights, sounds, “sonar,” etc., are all possibilities? R/C sub technology is a dynamic field. There’s always something new and creative to contemplate.

project would require far more knowledge. Those around me helped me begin to understand the principles of buoyancy and aspects of weathering specific to submarines. I also learned about tools I hadn’t known existed which would be of immense help on the *Virginia*. I went to sleep that night, my head spinning with new information and more questions.

Saturday morning, S-184 had her sea trial. By luck and the kind guidance of Jim Butt, she operated flawlessly. Jim could not make it to SUBEX25, but when I soon shared a video with him, I think he was just as happy as I was!

There was one “small” thing I hadn’t thought about though: maybe the sub could function correctly,

Frank Salerno's USS Nautilus (SSN-571).





Excellent detail
on a Type XXIII.
(Builder unknown.)



Richie Kohlbrecher's *Seawolf*-class USS *Connecticut* (SSN-22).



Ken Druze's popular USS *Marlin*, seen at many events.

Resources

Perhaps I should say "Resources to find More Resources." I mention this because I'm still new to r/c subs. I advise you to start with these resources since they'll offer links to *additional* resources. In my opinion, you should explore the world of r/c submarines by initially taking these four steps:

- Join the SubCommittee—a non-profit organization created in the early '90s which can help with all aspects of



r/c submarine modeling. Here you'll find the *SubCommittee Report*, a wide-ranging publication for the true submarine enthusiast. Currently published three times a year, *SCRs* are beautifully done, indexed, and offer an absolute wealth of information. In addition, the SC has a very fine online forum (<https://www.subcommittee.com/>), and is also a good source for info. on upcoming events. Please note in particular that every August the SubCommittee (in conjunction with the Indianapolis Admirals modeling group) sponsors one of the most spectacular sub events in the country in Carmel, Indiana. It's a must-see at an outstanding reflecting pond venue. More on this can be found on the SC website or in the *SCR*. I'm looking forward to attending myself in 2026. (*The SubCommittee has been on the model sub scene since 1990, covering all things submarine*

and catering to sub aficionados of every stripe: fans of r/c and static sub modeling, yes, but also sub history, gaming, books, movies, collecting and more. Becoming a member will better connect you to this widespread hobby community and its history, plus offer opportunities and resources galore.—ed.)

- Visit Nautilus Drydocks (<https://www.r/c-submarine.com/>). I could stop here because Bob Martin's Nautilus Drydocks is a gateway to almost every other r/c submarine resource. Nautilus Drydocks itself sells submarine kits, accessories and electronics, and tracks upcoming events. It's currently the "go to" place in the U.S. for r/c subs.

- Buy *Diving Deep*—Bob Martin's indispensable book. (<https://www.r/c-submarine.com/product-page/diving-deep-how-to-build-and-operate-an-r/c-submarine-pdf>)

- Join the Dive Tribe Forum—anything and everything you

need to know about r/c submarines can be found here.
(<https://www.r/c-submarine.com/dive-tribe>)

There are also assorted vendors of r/c sub kits, accessories, watertight cylinders, hulls, electrical components, etc., in North America, Europe, and Australia. But again, if you first look at the resources I suggest above, they'll lead you to all of these fascinating bubblehead sites. However, since I mentioned my own first sub came from Engel, I'll provide

that link for you here: <https://engel-modellbau.eu>

My intent with this article is to encourage anyone thinking about trying the r/c submarine hobby to take that leap. I hope I've succeeded. Explore the resources I recommend above. And most of all, attend a SUBEX event—or any of the other great r/c sub gatherings around the country. Meet the people who comprise this wonderful community. And have fun!

P.S.: Remember I mentioned my second sub would be the USS *South Dakota*? Well, I'm now pleased to announce her build is underway! The 1:72-scale 51" hull has been started, as has locating and sorting her internal components. I'll conclude with a peek of her progress, shown below. Watch for more reports of my dive into this hobby in future SCRs!

Till then,

—Tim 

