



©opyright 2011 by the author of this book (Victor Appleton II - pseud. of T. Edward Fox). The book author retains sole copyright to his or her contributions to this book.

This book is a work of fan fiction. It is not claimed to be part of any previously published adventures of the main characters. It has been self-published and is not intended to supplant any authored works attributed to the pseudonymous author or to claim the rights of any legitimate publishing entity.

THE NEW TOM SWIFT INVENTION SERIES

## Tom Swift And His Oceanic SubLinator

By Victor Appleton II

Seven derelict nuclear submarines are known to lie at various locations deep under the Atlantic and Pacific oceans. All contain nuclear weapons and reactors; most disappeared over the years without warning. Only vague details hint at possible locations.

They have just been joined by the newest atomic sub in the U.S. fleet. On a training mission, she sinks with all hands on board.

While Tom Swift is able to rescue the crew, the submarine contains two working reactors, each with a nuclear core that could poison thousands of square miles of ocean. It must be saved.

Previous U.S. efforts in recovering sunken subs had met with problem arising from both the enormous depths involved as well as the almost impenetrable solidity of the water under that much pressure.

But, his search turns up more than he bargained for. A deadly secret is revealed. What can he come up with to save the day?

---

This book is dedicated to the men—and soon, the women—who ply the oceans of the world inside of fragile metal tubes, surrounded by the most beautiful yet inhospitable part of our planet. In times of peace, most of you come home. But, not all of you. To those lost at sea under mysterious circumstances, you should know that you are not forgotten. Merely lost.

## Tom Swift and His Oceanic SubLinator

### FOREWORD

By their very nature, submarines are deadly. Not only to those they hunt and attack but for those who man (or woman) them. Whether it be through inexperience or oversight, Accident or attack, a certain percentage of submarines have been lost throughout history.

Add the element of nuclear power, and a 'lost' sub can cause a lot of problems. Keep letting them pile up and the problems grow, exponentially.

The name Swift has stood for the highest expectations and standards in nuclear safety. The Citadel is a prime example. Among all of the nuclear installations around the world, it has only had one minor problem, and that led to zero leakage or release of radiation. And, no injuries.

It is no wonder that our government turns to Damon and Tom Swift in times of need. Their experience places them in the forefront of the nuclear 'experts' of the world.

This time, however, almost nothing is in their control. This time, they could easily have stepped aside and let others take the risks.

That isn't the "Swift way" to do things.

That isn't why I chronicle Tom's exploits.

I don't write about those who stand by, watching others. I write about those who step up and DO.

*Victor Appleton II*

## CHAPTER 1 /

### WE HAVE A PROBLEM

"I HAVE TO admit, Admiral Hopkins," a blond-haired, blue-eyed young man was remarking, "that the new Sea Stealth Class submarines are the most impressive subs I've ever seen."

Agreeing with his friend, Bud Barclay added, "This one, *The Salem*, is super neat!"

"Thank you, Tom. Thank you, Bud. We are very proud of the design work that went into her and her sister boats."

Tom Swift, inventor and scientist, had been involved in a portion of the new submarine design. The Department of The Navy had requested that Swift Enterprises assist them in developing both a new lightweight super strong composite structural material as well as providing the technology to make the subs totally absorb enemy sonar pulses.

"We were proud to be part of this great effort, Admiral. Even though we know we can never release information on our participation, we were glad to help."

Bud inquired, "Will we be able to go inside of her today, sir?"

"I'd really like to say 'yes' Bud, but the truth is that she's too near being fitted out, and the components inside already—including the ones that had to go in during the build process—are all Top Secret."

Tom and Bud were allowed to tour the outside of the hull. The most notable difference between this new class of sub and traditional submarines was the lack of propellers. The tail end tapered into a long point flanked by three maneuvering fins, all very thin.

After the viewing, Bud asked The Admiral about the lack of screws.

"The Navy man looked over the top of his glasses at the dark-

haired young man. In a low voice he told Bud, "I can't officially tell you anything about that, but Tom can take some credit for loaning us the idea from his Jetmarines. Perhaps, you could ask him about it, *once* you leave the Navy yard, that is."

On their way back to Fearing Island, the Swift's top secret rocket and submarine base located on a former scrub-grass island off the coast of Georgia, Bud asked Tom to remind him about the propulsion system.

"Of course, I'm guessing a bit about this, but the Jetmarines use super-heated water to jet out the back, pushing it forward."

Bud nodded remembering now the details. "But, skipper. Didn't you once tell me that you could never figure a way to make it work on anything much larger? Doesn't it get kind of noisy?"

"That's right. In something as small as a Jetmarine, even our larger cargo models, we can control the noise to some extent and then mask it with our artificial porpoise noises. But a larger version, something powerful enough to push a monster like *The Salem* through the deeps would be so noisy that anybody listening could hear her for hundreds of miles."

"Not so good," Bud stated.

Tom agreed. "I do think that they are using some of my technology for using water as the propulsion medium, I just can't believe they merely enlarged it."

They had just finished their conversation when Tom had to radio Fearing Control for permission to land.

Because the base they would be visiting had no runway or airfield, he and Bud had decided to take one of the Seacopters from Fearing for their trip to the newest Navy shipyard in the north part of Florida. It had been opened specifically to construct the latest family of fast attack submarines all to be named after state capitols.

*The Salem*, FNS-501, had been given that name when the new Secretary of The Navy had been honored by having his

home state capital picked for the first of the new Class. She would go 'down the slip' in a few weeks and begin her sea trials. The Admiral had told Tom and Bud she would be commissioned in about three months and had invited them to be there for her christening.

"Fearing approach. You're clear to come in, Tom." Tom dropped most of the forward speed and let the Seacopter settle onto the water, He taxied it up to its mooring pier and the boys were soon jeeping across the island to the small jet they had flown in on.

Back at Swift Enterprises, the sprawling four-square-mile complex of buildings, laboratories and criss-crossed with four major runways located on the outskirts of Shopton, New York, Tom and Bud headed to the administration building where Tom and his equally famous father, Damon Swift, had a shared office.

Settling into one of the comfortable leather chairs in the conversation area, Bud grinned at his best friend.

"I could hear the gears spinning all the way back, skipper," he told Tom. "You're trying to figure out what they might have done to silence your waterjet technology, right?"

"I have to admit that I'm intrigued, Bud," Tom replied truthfully.

"What have you come up with, Tom?"

"Nothing solid, yet. I have a feeling that they might just be letting on that they're using our technology as sort of a red herring for any spies. Either that or they've figured out a way to instantly cool the super-heated water keeping it from making the boiling water shooting out under pressure noises we contend with."

They were discussing the possibilities when Tom's father walked in. "Hi, Tom. Hi, Bud," he greeted them. "I hear that you went down to see the unveiling of the new Sea Stealth Class subs."

Tom told him about their trip and the seeming enigma surrounding the propulsion method.

"I really wouldn't let it bother you, son," he was advised. "The Navy folks will certainly want to keep their little secrets just that. Secret."

"So," Tom said following the older inventor's advice, "I should let sleeping dog lie?"

"Until Uncle Sam tells us and says it's okay to talk, I think it's best to just let it go."

"Would it be okay if I did a few experiments with new underwater propulsion, just in case I want to add it to our own submersibles?"

Mr. Swift felt that such "research" could be advantageous to Swift Enterprises so he gave Tom the thumbs up.

"Before you dive headlong into that, might I suggest that you give your sister and your girlfriend phone calls? I've heard through the mother-knows-best grapevine that a bit of attention is required before said young ladies find dates elsewhere."

For more than a year Tom had been dating a vivacious Pakistani girl named Bashalli Prandit. Bashalli's family had emigrated to the U.S. when the girl was just a little more than ten. She spent part of her weekdays at art school and part working for her brother at his The Glass Cat coffee house.

Bud had been dating Sandra Swift, Tom's year-younger sister for more than two years.

The foursome could be seen dating at local restaurants and places of entertainment. Not, as Sandy and Bash reminded the boys, as often as they would *like* to be seen in such places with their guys.

"Bud. You'd better give Sandy a jingle while I get in touch with Bash. Let's see if they would like to go to the beach dance at Lake Carlopa tomorrow night."

They made their calls. Both girls pretended to be aloof at first but quickly gave into laughs of excitement as the details of the dance were presented.

Hanging up, Tom smiled at his best friend. Bud made a circle from his thumb and forefinger and smiled back.

"Good thing we're practically irreplaceable to them," he remarked to Tom.

The dance began at 5:00 the next afternoon and lasted until midnight. By the end of the party, all four were exhausted from dancing and playing games of volleyball on the small beach area next to the Yacht Club.

Receiving a warm hug and a quick kiss at the door, Bashalli told Tom, "Once again, Thomas, you have pulled a very enjoyable rabbit out of a hat. I believe that you two deserve to have Sandra's and my affection and companionship for at least a few more weeks."

They both laughed.

The next morning was Sunday, but Tom had come up with a thought as he prepared for bed the previous night.

He let himself into the grounds of Enterprises and drove over to the underground hangar that housed both his first major invention, the *Sky Queen*—a giant flying lab aircraft that featured an array of lifters in its undercarriage for vertical take-offs and landings—as well as his underground lab.

He flicked on the lights in the lab and turned on his monitor. Tom was mildly startled when, just three minutes later, he received a phone call from Bud.

"Hey, Tom. I just got a call from Sandy, and she had just had a call from her friend, Daisy."

Tom inwardly groaned at the mentioning of the pleasant and slightly plump girl's name. Daisy had once been hired as a temporary assistant to Tom and had allowed herself to be wooed by a man who tricked her into stealing some of Tom's invention designs.

Although no charges had ever been pressed, and Daisy had professed herself to be “so incredibly extremely and totally sorry,” Tom still felt that a little Daisy went more than a long way.

"So, what does Daisy have to say, Bud?" he asked.

"She says she found a treasure map at the library in an old book about the area. *Essex County and its Environs* or something like that."

The map was supposed to show the approximate location of buried treasure in the area, Bud explained to Tom. It had evidently been buried there more than a hundred years ago by a group of train robbers.

"The map says it's all somewhere under the water at Lake Carlopa."

Tom knew that the lake had been greatly enlarged almost eighty years earlier when a developer had thought it would be a wonderful sales gimmick to offer waterfront property to rich people in upstate New York. The whole plan had run afoul when The Great Depression had forced the developer into bankruptcy.

"Daisy, through Sandy, wanted to know if we could lend her a submarine."

Tom was struck silent for a moment. Laughing, he replied, "A submarine, Bud?"

"Dead serious, skipper."

Tom called his sister and received pretty much the same story from her. "I think I could take her for a little excursion in one of the atomicars, Tom," she told him. "Can I borrow one for the afternoon?"

Tom agreed to let Sandy take the revolutionary car out that afternoon. It was a totally enclosed and sealed vehicle that could fly through the air, drive on the road using high-powered electric motors located in each wheel, and even be used as a boat. It was its ability to fill a set of ballast tanks with water and

to travel underwater that Sandy wished to exploit.

"Come and get it, San," he said.

When she arrived two hours later, Tom greeted her with a wry smile. "So you're going to get yourself cooped up with Daisy for a few hours, huh?"

"She's a nice girl, Tom. She just doesn't have many friends. A really vivid imagination, but no close friends. I sometimes think that I am the only one who spends any time with her."

"You're a very nice push-over, Sandy."

He tossed her the electronic key that would let her into the hangar that housed several of the atomicars. "Take the SA2. I think the SA1 is supposed to get a new instrument panel tomorrow. Have... uh... fun," he concluded.

After his sister left, Tom turned back to the design plans he had called up onto his computer screen. They were the improved Jetmarine propulsion plans. Before Sandy had arrived, he had been in the process of calculating the almost exponential increase in noise for each thrust increase of less than 30%.

"They have to be doing something else," he concluded. Tom leaned back in his chair and stared at the ceiling. He ran several different scenarios through his mind.

Mechanical drives were inherently noisy. As moving parts like propellers turned through the water they put off pressure bubbles and noise patterns called cavitation.

Among the quietest drives that had been experimented with before the development of the worm drive—a Soviet invention that Tom had partly incorporated into his Electronic Hydrolung's propulsion drive unit—had been an auger drive.

A research sub had been outfitted with two long tubes, one on each side that held a fifty-foot long continuous screw auger. This was driven by heavily insulated electric motors at each end.

The process was a modern interpretation of the Archimedes Screw. As it turned it forced water along its entire length and out through a restrictor nozzle which increased the compression of the water and allowed for steering.

But, while it could move the submarine through the water, Tom remembered that it never made better than a dozen knots or so. Nothing like modern subs required. In the end, tests showed that it would require a drive unit almost as large as the submarine to propel it at any speed.

He arrived home about the same time as Sandy did.

"Any luck, San?" he asked.

"I think I would like to slap that Daisy," she stated with frustration. "At first, she forgot the map so we had to go back to get it. Then, she had us going to the wrong end of the lake."

"How did she manage that," Tom asked.

"She had the map up side down. We finally got to the area she said the map showed to be the place and we dove down." Sandy looked like she was either going to laugh or cry.

"So?"

"So... it turns out that Daisy gets claustrophobic. We could only stay down about a half-minute before she'd start to hyperventilate. I ended up dropping her off in the little emergency life raft and going down alone. I was under almost an hour when I took a closer look at her map."

Tom could tell that his sister was resisting the urge to spew out a barrage of swear words. He waited until she composed herself.

"Know what I found?" Tom shook his head but remained silent. "I found a little notation in the corner of the map. It said, and I quote, 'This map designed for the Shopton High School annual treasure dive, 1956!'"

Tom couldn't help but laugh. While he felt his sister's pain at Daisy's foolishness, he also was quietly glad he hadn't gotten

involved.

He got up and hugged his sister. "It's okay, San. You're just too nice sometimes."

All things submersible were put on the back burner the next day when Tom was asked to attend a meeting at The Swift Construction Company.

Jake Aturian, Damon Swift's close friend and the manager of the Swift Construction Company, called the meeting to order.

In attendance were department heads from his company as well as key Enterprises managers.

Jake detailed several current projects and provided their status, asking for input on possible assistance in areas where development was lagging. One such project, and the reason why Tom was invited to attend, had to do with the design and construction of two of the modules that could be used with Tom's largest aircraft, the *Super Queen*.

Like her sibling, the *Sky Queen*, the *Super Queen* was capable of vertical flight and hovering. She was a three-story tall aircraft powered by a combination of solar, kinetic and atomic energy and propelled using Repelatron energy. The entire top surface was a high-capacity solar panel the power from which ran all ship avionics systems as kept the large bank of solar batteries at peak charge.

In times of darkness when solar was not an option, or where additional power was desired, a high-capacity turbine generator—about the size of a football—could be lowered from the fuselage.

The self-contained atomic-powered energy pod was used to create an extreme energy arc that vaporized liquid hydrogen and provided the propulsion for horizontal flight. Through this method, the *Super Queen* was capable of speeds up to mach 2.4 and could reach anywhere in the world in under ten hours.

The Repelatrons had been a new addition to all of the Swift vertical-capable aircraft. Repelatrons could be tuned to repel

any known element or grouping of elements. Many of Tom's inventions took advantage of this remarkable capability.

Where the *Super Queen* differed significantly from the original Flying Lab was that the sections on either end of the central lifter area could be removed and replaced by specialty pods. Tom had already designed cargo pods, a hospital pod that had been used in the Caribbean when a major earthquake had killed tens of thousands and left hundreds of thousands with injuries.

"What is the issue with the pods in development, Jake?" Tom asked.

"The machine shop pod is totally out of balance. We did a set of simulations and they all show that that pod would make controlling the *Super Queen* in rough weather all but impossible."

"Can't we rearrange how the equipment is oriented?"

"As it stands, unless we either take out half of the stuff, or make some of the equipment impossible to use because of lack of room, then we don't seem to be able to put everything into a single pod."

Tom offered to investigate the problem and to come up with a solution by the following week.

The other pod issue turned out to be easily handled. At least, for the time being. The U.S. Army had asked Enterprises to build a special troop-carrying module capable of holding 600 troops with equipment. "Have they completed the purchase order and set up for payment," Tom inquired.

"They say they expect everything to be 'in place' in less than sixty to ninety days."

"Then, we worry about it in sixty to ninety days," Tom told everyone. "Besides, I show that a three-story pod with twenty rows of twelve seats each would handle almost 750 people. Where's the issue?"

"The issue is that they expect that each person will have a

fully-reclinable seat that turns into a bed for longer flights. That cuts seating by half. Then, they want each pod to be detachable and able to be dropped and parachuted into battle zones!"

Tom agreed to make a call to a politician friend of his father's to see if these were intractable requirements or just pipe dreams.

One month later, everything had been ironed out with the various pods. Tom had been involved, in the meantime, with a brief adventure in space where he and Bud had been tasked with recovering and replacing the entire set of GPS satellites surrounding the Earth.

This had included some repositioning that required that Tom devise a method of tracking down and capturing more than seventy tons of space debris that might provide problems for the satellites.

A large inflatable "catcher" module had been designed to use with Tom's giant spacecraft, *The Challenger*. Folded, it fit into the spacious hangar. When moved outside and unrolled—via the use of metal strips that coiled when a negative electrical charge was applied and then straightened out with the introduction of a positive charge—it fanned out like a giant shallow cone.

As *The Challenger* moved back and forth in a search and sweep pattern, everything in a three-acre area simply fell into the collector. Debris was bundled and returned to the Earth using several Swift cargo rockets, the same type used to build Tom's outpost in space.

On one occasion it had been unavoidable and a working satellite had been "snagged." This was given an examination, a small upgrade had been installed, one repair had been made to a torn solar panel array, and it had been placed back into a safe orbit.

He was finishing his lunch one Monday when the Swifts' efficient secretary, Munford Trent, buzzed his desk.

"Yes, Trent?"

"Tom. It's Admiral Hopkins on line three."

"Thanks." Tom picked up he receiver and pressed the line button. "Hello, Admiral. How are you doing today?"

"Tom. No time to explain. Not secure, anyway. I need you down here at ComLantFleet headquarters as soon as you can get here, please."

Tom agreed to leave immediately. He flew to Norfolk, Virginia by helicopter and landed on top of the Admiral's administration building.

A Lieutenant Lt. Commander and his adjutant, a very young-looking Ensign, rushed Tom down several floors to the Admiral's offices.

Hurriedly rising and walking over to shake Tom's hand, the Admiral motioned Tom to a chair. Sitting opposite the youth, the Navy Lt. Commander got to the point of Tom's visit.

"You will remember our new submarine, *The Salem*, correct?"

Tom told him that he remembered the sub very well.

"She was completed and hit the water for her sea trials about seven weeks ago," he told Tom. "Of course you know that already. You were there. While I can't go into details of her position or her track, I can tell you that as of 0800 today we had to declare an emergency. With no trace and no communication, *the USS Salem is missing!*"