

been stopped, a submarine might actually sink them with another Cutie or with a regular electric set to run at shallow depth from short range, as Bennett had done in his second attack. However, follow-up combat tests of the Cutie were not so successful. Hull, Hottel, and others went on trying to debug it and waited for later models that could hit faster targets.

The other gadget that held promise was the FM sonar. This super-sensitive device was conceived to detect mines, to prevent the tragedy that befell *Robalo* and *Flier* and probably three or four other boats off northeast Honshu. In tests conducted off the coast of California, the FM picked up dummy mines at a range of 450 yards—about a quarter of a mile. When a mine was detected on the machine, it gave off a peculiar and chilling gonging, which the submarine crews appropriately called "Hell's Bells."

One of the first FMs was mounted on *Tinosa* while she was undergoing refit in San Francisco. During that time, Richard Clark Latham, who had made one war patrol on *Perch* as a PCO, relieved Don Weiss as skipper. Latham found his crew hostile to the FM gear. It could have only one purpose, searching out enemy minefields, and few men were anxious to engage in that risky task.

Latham said later, "*Tinosa* had made seven consecutive successful war patrols under Dan Daspit and Don Weiss. The original crew was still intact . . . [reunited] with their families and loved ones again after a long time facing death. They had been promised—or had dreamed—that when *Tinosa* got back to the States, they would be transferred to refrigeration school or you-name-it, after which they would get new construction and spend a year building a sub—maybe they wouldn't have to go to war again if they were lucky."

After the refit, Latham took *Tinosa* to San Diego for more FM training with dummy minefields. The crew was less and less enthusiastic. The FM did not always perform, and many became convinced that this new inexperienced skipper would take them into a Japanese minefield and blow them all to hell. Many asked for transfers, but Latham denied these requests—at least until *Tinosa* reported to Pearl Harbor for duty. On the way out, Latham interviewed each man, learning that not less than half wanted off the boat. He sent a message to Pearl Harbor, reporting that he had never seen morale as low on any ship in the navy as *Tinosa*, and requested a rate-for-rate exchange for these men, which included some chiefs. At Pearl Harbor, Latham recalled, they didn't know whether to transfer Latham off or

the men, but in the showdown Latham stood pat. Thirty-five of *Tinosa's* crew went to other duty (many to *Shark*, on which, ironically, they were lost); thirty-five new men (many from *Shark*) were reported on board.

Latham took *Tinosa* on her first patrol to the vicinity of Okinawa in December. He did not have specific orders to investigate minefields but kept the gear operating to see what he could find. One day the crew was galvanized by Hell's Bells gonging from the FM receiver. Later Latham said, "We had no doubt but that it was a minefield. . . . *Tinosa* reported the event. . . . Lockwood was elated by the news of the first minefield detection by his pet development."

Upon receiving the news, Lockwood ordered Latham to make a complete FM survey of Okinawa. Latham closed to two miles of the beach and began this arduous and nerve-racking chore. "I don't know anyone who liked it," Latham said later. "I had a St. Christopher's medal blessed by a priest which hung on a chain in my cabin—until somebody swiped chain, medal and all. I used to go in my cabin and hold the medal and bow and pray fervently and then figure that if I kept my wits and used my brain and did the best that I possibly could under whatever circumstances I found myself, I'd done all that could be done and the rest was in the hands of fate. Talk about alert! I could feel, see, hear, smell, and taste better than an Indian or a wolf. . . . I remember thinking that if I got through the war, I would never again worry about life's little travails." Latham received a Navy Cross and high praise from Lockwood for this first FM mission.