

## **"Death Was Their Escort, and Glory Passed Them By:" Life in the Marine Convoys of World War II'**

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Second World War merchant seafarers generally have been overlooked by scholars. Indeed, even contemporary journalism focused primarily on those whose experiences were sensational or at least out of the ordinary. Moreover, the fact that these mariners served without the formality of uniforms rendered them virtually invisible to the general public, even in port. When a convoy was attacked, merchant seamen briefly commanded public attention, but soon receded into anonymity.

If the experiences of merchant seafarers were largely overlooked by the populace, what kind of self-conception did these men develop? On the one hand, the answer appears to be that their views about themselves and their work had altered little from what might be considered peacetime norms. Indeed, since they were doing the same job as before the outbreak of hostilities, mariners spent surprisingly little time thinking about the war, except when they were under attack or when their routine was significantly altered. But at the same time, some of the tasks they were asked to perform had no peacetime equivalents. The truth of this generalization may be seen by examining the testimonies of surviving merchant seamen who served during the conflict. As well, the material in these interviews provides a good deal of rich detail about the day-to-day lives of men who performed a vital function during the century's most pervasive conflict.

One thing that was different about wartime seafaring was the need to sail in convoys. Merchant mariners discovered at the outset that they were not professional station-keepers. Most had no experience in convoy sailing, and even the best training was not always sufficient. The Royal Navy's concept of convoy was designed to suit its own ships, which were easier to keep on course in bad weather than merchantmen, which had to cope with such complications as shifting cargoes. Yet despite the ingrained sense of superiority of naval officers, Capt. Paul Brick felt the Navy was as "green" as the merchant marine. "When you have bacon and eggs," he said, "the chicken was involved, but the pig was committed. We [merchant seamen] were the pig." One example of this occurred when a coastal convoy was bombarded by huge shells from a "friendly" battleship during target practice (the warship was out of sight and the target was being towed near the convoy course). Although no one was hit, the incident caused understandable concern.<sup>2</sup> In short, keeping position was a major worry. A ship could be on station at sundown and at sunrise be somewhere entirely different. In fog a vessel could lose its

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companions entirely. When his forty-ship convoy ran into thick fog, Capt. Frank Waters found his ship alone the following morning.<sup>3</sup>

Intricate manoeuvres were often required of navigators and wheelmen. Oblique turns had to be made on signal, rather like today's aerial "Snowbirds." It was embarrassingly easy to err, but since most crews were too young fully to appreciate the hazards, the experience seemed exciting rather than dangerous. Engineers adjusted speed by one or two revolutions per minute as directed from the bridge, a task as hard as navigation since the engines were unsuited to such fine tuning. On many ships, RPMs were calibrated by the clock and altered one revolution at a time. The painstaking task of altering rpms for periods of two weeks or more was nerve-wracking: "[N]o two ships...travel at the same speed, no matter how they adjust revolutions," remembered one mariner. "[S]o you'd turn around and...here comes another ship slowly moving up on you."<sup>4</sup>

Consider some of the problems. Coal-burners, "pulling their fires" at the change of watches, required their navigators and wheelmen to be alert not to hit the craft ahead. Similarly, it was all too easy to lose position. For example, when a ship's burners were changed to conserve fuel, maintaining a full head of steam was almost impossible. If a convoy were required to increase speed, the vessel had to drop out, change back to larger burners, and try to catch up. Ships generally had governors, but when one convoy "scarpered," these were removed, allowing a vessel to do eighteen knots when it could normally do only twelve. The most obvious side effect was increased vibrations, which could actually loosen engine mounts. It sometimes took a week in port to bolt them down securely again.<sup>5</sup>

Stability and manoeuvrability, both of which depended upon stowage, were also problems. Station-keeping, hard enough in bad weather, was even more difficult when in ballast, particularly for Liberty ships. Empty, they were "like a balloon on the water, and you had to watch out when they fell away to prevent them landing on top of you." Still, they were sometimes credited with having won the war, carrying nearly seventy-five percent of essential cargoes across the oceans.<sup>6</sup>

Other mariners remembered related problems. "When you're lookout," said one, "you have to notify the bridge whether you're gaining or losing on the ship ahead just by looking at the little blue light on their [*sic*] stern." The towed arrow-shaped marker had a light that shone straight aft, and another was under the stern railing just above the waterline. The fog buoy, called an "anchor" because of its shape, sent a "rooster tail" of water through the fluke part that could be heard as well as seen. Position-keeping was easiest in the middle of a big convoy.<sup>7</sup> Another man remembered that "[t]he worst part was the apprehension, especially at night." It was particularly eerie in fog, surrounded by ships that could not be seen. Capt. Richard Connelly, then an ordinary seaman, recalled "the boredom of day-to-day routine and the fearful anticipation of disaster." His "fondest" memories were of cold and miserable weather. "There were days of routine, and then attack and fifteen minutes of sheer fright." Too young at the time to grasp the situation, he saw only the prospect of getting into port and meeting girls. "Well, yeah, you *were* constantly worried...but [when] you're that young you don't appreciate the fear...I'd be more scared now than I was then, looking back." Long waits were hardest to bear. RCN HF-DF operator Dick Aldhelm-White said the continual "pinging," standing by waiting

for something to happen, exacted a heavy toll. Despite the monotony, the men had to stay alert every second.<sup>8</sup>

No convoy voyage was truly "uneventful." Greenhorns were indifferent until they saw how uneasy more experienced men were, working so close to other ships.<sup>9</sup> As one said:

for the first two years it was...an adventure until I begin to realise [that] I was in a situation which could be very frightening. For the first few voyages, I didn't realise how serious [a] situation I was in. It was a novelty until...I suppose I begin to realise what could happen to me — what was happenin' to other people...[But] when you're that young you don't worry too much.<sup>10</sup>

Though Alan Peter was "not interested in being blown up," he tried to repress his anxiety. While he and the others occasionally thought about being torpedoed, they rejected shore jobs and almost never thought of death. "You always had the feeling that you were gonna get there, just the same," Fred Williams said. Generally undermanned, they took double-watches when things were "hot." In retrospect, most were simply too tired to be scared. "Every time Churchill said things were getting better, they seemed to get worse, and you were in each locality.""

Submarines, which usually attacked at dusk or dawn, were a special danger. Men who had been torpedoed previously often paced the decks at such times. But as Capt. E.S. Wagner said, "You're young — eighteen. You wouldn't do this if you were fifty-eight. You're ignorant. We were down below decks where the torpedoes would have struck, painting our own cabins. Youth is heedless. You think, 'it won't be me; it'll be the other fellow.'"

In the engine room there was constant tension. Mines scraped the sides of the ship.<sup>12</sup> "You were vulnerable twenty feet or more below sea level...If you did think about it, it would worry you...but we never used to think about it and...we got the impression she was a lucky ship...For instance, we didn't used to take our lifejackets down the engine room...or anything like that."<sup>13</sup> There was often so much noise that the men could only hear depth charges — a huge clang on the side of the ship "as if somebody's whopping it with a hammer" — and possibly manoeuvres on the engine room telegraph. Deck crew were more aware that it was wartime, but below they just "kept oiling, greasing, cleaning."<sup>14</sup>

One cure for boredom was watching flag hoists, trying to anticipate and relay messages almost simultaneously. At night coloured lights replaced the flags on a "Christmas tree" signal mast above the monkey island, so as not to be mistaken for navigation lights.<sup>15</sup> Sometimes the lights could signal the start of an adventure. When *Empire Stewart*, returning from Canada in convoy, suddenly refused the helm and started to turn in a circle, Tony Wrench quickly put two red lights on the "Christmas tree" to alert its convoy mates that it was "not under command." Several ships repeated the signal. The ship had several close shaves before the rudder control was jury-rigged and daylight arrived. Once underway, the vessel reached the Clyde in three days, beating the convoy.<sup>16</sup>

In 1945, again homeward bound, with torpedo nets on sixty-foot booms, the same ship was on the outside row of a convoy. It usually avoided streaming the nets, but this time the Commodore was adamant. The ship entered the Channel in the column nearest the English coast, following the fog buoy of the ship ahead. Third Mate Tony Wrench had just turned in when the Second Mate shouted from the bridge "Hard aport!" and the vessel heeled over. It had met a down-Channel convoy, and the starboard booms had raked the decks of a Liberty ship going in the opposite direction, thus sweeping everything into the sea. The boom, broken off the samson post and now in the water, was still attached to the ship by the net — in effect they were "at anchor." Curley lifebuoys fell into the sea on impact, their carbide lamps surrounding the ship with "floating fairy lights" and clearing the fog somewhat, making the vessel visible to both convoys and preventing collisions. Finally freed from the net, the vessel steered through the Straits of Dover to London. The convoy on which the steering gear went had its problem on 1 April 1944, while the other ran into trouble on 1 April 1945! Though neither incident was a prank, it was enough to inaugurate a superstition: do not sail with Tony Wrench on April Fools' Day. For better or worse, he did not sign on for April 1946.<sup>17</sup>

On another occasion, a ship's telemotor gears were jammed by a seaman's sweater, and the vessel lost its steering just as the Commodore blew a turning blast. In the next few moments, the fast convoy turned to port, but this particular ship, which was on the extreme port side of the formation, did not. Somehow it crossed the entire convoy without hitting anything — or seeing anything in the thick fog — while the TBS screamed "Three-two, what are you doing?"<sup>18</sup> But nothing could be done until the wool was out of the telemotor and the trick wheel aft was functioning. When the fog lifted the ship was on the starboard side of the convoy. Another incident involved a man who fell asleep at the wheel; his ship did a U-turn and went back through the whole convoy. All the Captain said was: "I don't mind if you write your name in the ocean; I just don't want you going back to dot the i's." In a third incident, which occurred on a clear night, a cadet saw the stars begin to swing across the mast and realised his ship was out of control. This time the wheel had fallen off. Fortunately, the Master was on the bridge, and the twin-screw vessel was able to avoid the rest. They replaced the wheel and reported a steering defect; while nothing more was said, it was "nasty."<sup>19</sup>

Mistakes were all too easy to make while sailing in blackout. On one ship, power was needed for winches to shore up the deckload, but when a hand threw the switch, nothing happened. It transpired that the main circuit breaker in the engine room had been shut off. Electrician Harry Kilmon routed power to the proper masthouse, but the deckhand had kept flipping switches when the first did not work, and had not turned them off. Some were for cargo lights in the rigging, and when Kilmon hit the circuit breaker, everyone hit the panic button. The Commodore's TBS spluttered, "Get that light out or we're gonna shoot it out right now!" Meanwhile, Kilmon was blissfully unaware. Ordered to "get those switches off," he did so forthwith. When the Chief later investigated, Kilmon was let off the hook, but it was traumatic.<sup>20</sup>

Men slept "all standing" in their clothes, removing only their shoes. Doors were kept open on hooks or were fitted with kick panels. Lifejackets were routine. Most lifeboats were swung out, ready to launch, but there were different viewpoints even on such simple actions. Some felt a boat that was over the side when a ship was hit would

be smashed. Blackout with deadlights down provided no ventilation; seaman's papers were kept in a special wallet chained to one's person and there were constant reminders that "a slip of the lip can sink a ship."<sup>21</sup>

The black gang "blew" the boilers nightly with a steam hose. It was done in darkness, to prevent enemy discovery. One ex-fireman reported that when he sees smoking diesel trucks on the highway today, he remembers that if a ship made smoke, it got sunk. Refuse disposal was curtailed and empty tins were landed after short trips. Careless dumping could put thousands of lives at risk. Floating lettuce leaves could betray a location, but waste dumped at dusk could not be seen until daylight, giving time to elude pursuers.<sup>22</sup>

Many wartime seamen felt that most of their time was spent "worrying about your skin and a buck to buy a beer." The vast majority, though, seldom considered their vulnerability except in actual combat, and even then were too concerned with routine to give hazards (or abstracts like "heroism" or "cowardice") much thought. They went about tasks almost automatically, but often recalled later the routine that differentiated wartime from peacetime seafaring.<sup>23</sup>

The first enemy was the U-boat and the second the weather, which forced many convoys to disperse. When bad weather hit, escorts would rush about, herding the ships back together, and masters would be given rendezvous points for every couple of days. The sea was especially intriguing when violent. David Grover pronounced North Atlantic gales "worst (or best)," and his most vivid memories were of furious storms and wild weather. Despite fear, discomfort and misery, it was awesome. He also recalled the first sight of land after a long crossing, and other sensory stigma — sights, sounds, and smells — impossible to duplicate, even by artists. With different compass errors, ships would close on each other, then slowly work back to position again. At night it was almost as if the convoy were breathing.<sup>24</sup>

A tremendous thump in the middle of the night could signal a depth charge from an escort. If this happened in the daylight, a column of water could be seen. In a U-boat attack, "[t]here was a great shlemozzle amongst the escorts and an old 'whoop-whoop-whoop-whoop' [of sirens] as they went chasin' after." Another former seaman described this as "such an exciting sound, like a pack of dogs, y'know?"<sup>25</sup>

Not all auditory memories were sounds of combat. A fast convoy of small shuttle troopers regularly left Durban for Port Tewfik. In the middle was a battleship or heavy cruiser which, on Sunday mornings in good weather, would steam ahead and drop back between columns one and two, the Marine band on deck playing patriotic songs as the troops cheered and sang along. One seaman remembered that "[y]ou could hear them half over the Indian Ocean." Once astern of the convoy, the ship would steam between columns two and three, then drop back again between three and four, constantly playing martial airs. "Boy, it was something to behold. I don't know if I've ever heard anything quite as stirring."<sup>26</sup>

One Newfoundlander had a bizarre experience aboard a blacked-out troopship at night. He could hear people saying "yes, b'y" and "no b'y." He continued:

I thought golly, this fellow['s] got to be from Newfoundland, no doubt about that...So I listened for a time and I went over. I said, 'You fellas

gotta be from Newfoundland or you speak that Newfoundland lingo, y'know.' 'Yes, b'y!'"

From near his home, the men knew his sister and her husband well. They chatted all the way through the Red Sea, but he never learned their identities. Faces were obscured by the blackout and asking names would have breached security.<sup>27</sup>

Rumour, both logical and illogical, was part of life in the convoys. For example, the "*Gesundheit*" mine supposedly rose to the surface beside a target, releasing a cloud of ground pepper. If the response to the sneezes was "God bless you," it sank back to the sea floor, but if it was *gesundheit*, the mine detonated and the vessel was destroyed.<sup>28</sup> World War II convoy stories range from such foolishness to horror stories of explosion, fire, sharks, and frostbite. One of my informants described twenty-five troopships, luxury liners, carrying perhaps 10,000 at speeds up to thirty-one knots:

[we were] the commodore ship. We had all the brains that be, I suppose, to give the orders if anything went wrong and to put it right. So we all assembled.... You didn't stop, but you slowed, for to get the convoy into position. And [big] liners must sail a half a mile apart in case of something going wrong. And you got to zigzag...And all ships had to do it the same time [or] you'd probably be right up against someone before you knew it. We were a twenty-four knot convoy.<sup>29</sup>

A twenty-four knot convoy would almost seem to have flown across the North Atlantic! Zigzagging in convoy formation at such a speed courted disaster. In this case all survived, their human cargoes intact.

Convoy procedures were often "a screwed up mess...Anything that can go wrong aboard will — multiplied by two or three sometimes." A ship moving properly might run into one making mistakes. Mates often stood on the wing of the bridge, "cussing each other out." Many men professed to be unsure whether more ships would have been lost with or without convoys. Yet despite the proximity of the other vessels, every ship was "a town of its own."<sup>30</sup> Nonetheless, the Commodore controlled "the whole shebang."<sup>31</sup> He set the speed, charted the basic course, and conveyed decisions by ship-to-ship signals, correcting those who were out of position or who jeopardised group security. The efficiency and discipline of the entire group rested upon his shoulders.

Convoys varied from over 250 freighters to tiny "island hoppers." Large ones could be overwhelming: one of the first sixty-ship convoys was six sea miles across and two in depth.<sup>32</sup> Edges of a larger convoy could be five or six miles from the centre, with only visual or direct voice communication.<sup>33</sup> When vessels were destroyed, the men might hear a bang and see a black cloud of smoke, but not know who was gone. In bad visibility, they would hardly know anything had happened at all.<sup>34</sup> As one man put it, "you were in the company of other ships, which itself was unusual for a merchant ship...with the escorts, y'know, like sheepdogs keeping control of the flock almost. And of course, signals backwards and forwards...from the naval escorts and so on, all very intriguing."<sup>35</sup> Still, "I s'pose you did get some feeling of security, of course. The black

flag was flown when an attack was in progress. Then you got the 'crump' of the depth charges."<sup>36</sup>

Printed works imply that World War II merchantmen always sailed in convoy and that unescorted ships were sitting ducks. Many were slow, so it might be sheer luck that a man who sailed in twenty-three separate convoys, and spent months "chugging around" unescorted, saw no action except air raids in port. Men had "a lot of blind faith" and most ships were fortunate. Another man was torpedoed sailing independently, bombed in harbour, and mined in group manoeuvre. He felt safer in convoy, where "nothing of interest" happened. One ship dropped out for repairs, then ran independently at sixteen and one-half knots, beating the fourteen-knot convoy it had lost. But the ship had difficulty identifying itself in New York, because a lone "straggler" from an unarrived convoy was treated as incredible. "Convoys will probably never happen again, but they were a tribute to man's ingenuity."<sup>37</sup>

Rescuing survivors was the escorts' job, but despite the risk, sometimes a merchantman was designated. A British vessel had trouble finding lifeboats in the dark in dense fog. The Captain mustered the crew on the foredeck and told them to "imagine it was a football match and shout — ROAR!" Eventually this hailing was answered by the survivors, who had sensibly tied their boats together.<sup>38</sup>

Capt. Tom Goodyear summed up the general experience eloquently:

From September 1943 to May 1945, we [ran] between St. John's and New York. [T]hreaded our way through torpedo nets in the Narrows of St. John's [we'd go] through a channel swept for mines to a [buoy] offshore [and] form a small convoy, travelling fast on a zigzag course and be in Halifax in two or three days. [Other times] we would [go] south and east several hundred miles [to] join a slow convoy to North America. [With] fifty or more ships in ballast [and] difficult to handle in bad weather, it was nerve-wracking to keep station on a dark stormy night. It was fine when [the Captain] was on the bridge but at the end of his endurance, [he] would crash on the chartroom settee [and] it would then take a depth charge to awaken him. One such night [when] I relieve[d] Chief Officer John O'Hara for dinner...[h]e told me the Old Man was passed out on the settee and if I had trouble to call him [O'Hara]. He waited until I "had my eyes" [and] could see the form of the ship ahead, about half a mile away and the ship on each side. [He then] gave me the course steered and the engine speed and departed. Shortly thereafter I lost sight of the ship ahead, as did the lookout. I increased speed three revolutions per minute...After an eternity (five or six minutes) I increased three more rpm and altered course two degrees to port to correct what I perceived to be an out-of-line position. I was in a state of near panic [since] I had lost sight of the ship[s] ahead and on the beam; we were going faster than the convoy and left of the convoy course. There were fifty or more ships within several miles and I couldn't see one. In a flash it occurred to me — fog! — reduce speed six rpm and come back [on] course...Almost immediately there boomed out on our

starboard side...on the ship's whistle — in the Morse Code — the number of the ship ahead. God, what a relief! By the time O'Hara came back I had the ship in position and the fog had lifted. I turned the ship over to him as though nothing had happened. Deep inside I knew this as one of the worst experiences of six years of war at sea. A valuable lesson.<sup>39</sup>

He continued:

[Frequently we would form a small convoy of *Fort Amherst...Lady Rodney* and the SS *Cabot Strait*. [This] was a pleasure...We knew the ships and their people. In time we devised tactics, such as knowing the length of the *Lady Rodney*...standing at the engine-room telegraph on the bridge, she was just framed in the window of the bridge cab...if she fitted in the window, you were in the right position. If she did not fit into the frame we were too close and if she fitted with space to spare we were too far apart, [and] minor course adjustments were made.<sup>40</sup>

Primordial nature strikes a chord in many seamen's souls. The most enduring memory of many seagoing lives was the vastness of the sea, the sky, and Creation in general, and the feelings of awe and insignificance it inspired. A significant number claimed the middle watch (12-4 am) as their favourite, citing solitude and the feeling of being in complete control of the ship's destiny and their own as definitive aspects of that choice.<sup>41</sup> On the other hand, Capt. H.G. "Screamin' Skull" Skelly glorified the 4-8 am watch, saying "[i]f anything can make you religious, it's to be in the South Atlantic and watch the dawn come in over a calm sea, without many clouds — to watch the constellations going out and the sun coming up. All that did not just happen; it had to have been created by divine movement somewhere."<sup>42</sup> But the most touchingly emotive statement came from a tough hard-bitten old rating: "Standing watch at night, when it's calm gives you a stupid spiritual feeling. Wonderful! You can't explain the sensation with the bow wave in front and the wake behind. This is what draws a man back to the sea. It's best at evening."<sup>43</sup>

## NOTES

\* Morgiana P. Halley, who considers herself a maritime labour ethnographer, holds an MA from Memorial University of Newfoundland and a doctorate from the University of Sheffield. The material for this article was drawn from her doctoral thesis, which was based on interviews with 125 veteran seafarers in North America and the United Kingdom.

1. An earlier version of this paper was presented at the annual meeting of the Canadian Nautical Research Society in Kingston, ON, in May 1996.

I would like to thank all those whose testimonies contributed to the paper. Although space does not permit me to mention each by name, I have cited as many as possible. All interview material was collected by me unless otherwise noted. The tapes in the Halley Maritime Collection (HMC) are archived at the Centre for English Cultural Tradition and Language (CECTAL) at the University of Sheffield. Copies of all 1989 and 1990 interviews are also at the Harry Lundeberg School of Seamanship in Piney Point, MD, and at the Northeast Folklife Center at the University of Maine at

Orono. Originals of Newfoundland interviews are in the Memorial University of Newfoundland Folklore and Language Archive in St. John's. Because of space restrictions, many men's experiences have been encapsulated, and sometimes a single statement has been constructed from several similar testimonies.

2. CECTAL, HMC 92-38, 90-69, and 92-5. These numbers indicate the location of the data on the interview tapes. HMC 92-38 is thus the 38th interview tape of 1992. The interviewee stated that the warship was either HMS *Rodney* or HMS *Nelson*.
3. CECTAL, HMC 90-54, 92-30, 90-5, and 90-1.
4. CECTAL, HMC 90-48, 90-50, 90-24, 90-41, and 90-1; "Forgotten Heroes," *Timewatch* series, BBC2, 12 January 1994.
5. CECTAL, HMC 89-1, 92-40, and 92-56.
6. CECTAL, HMC 92-5, 92-40, and 90-5.
7. CECTAL, HMC 90-15, 89-5B, and 90-10.
8. CECTAL, HMC 90-45, 89-5B, 90-29, 92-57, 90-69, 90-70, and 92-13.
9. CECTAL, HMC 92-40 and 92-25.
10. CECTAL, HMC 92-50.
11. CECTAL, HMC 92-34, 92-38, and 92-51.
12. CECTAL, HMC 92-5, 90-71, 92-51, and 90-44.
13. CECTAL, HMC 92-70.
14. CECTAL, HMC 92-49, 92-66, and 92-69.
15. CECTAL, HMC 92-40. A "monkey island" is a raised platform above the flying bridge.
16. CECTAL, HMC 92-26.
17. CECTAL, HMC 92-26.
18. TBS stands for "Talk Between Ships" direct voice radio communication, which was so short-range that it was considered safe even under conditions of radio silence.
19. CECTAL, HMC 90-68, 90-15, and 92-40.
20. CECTAL, HMC 90-72.
21. CECTAL, HMC 90-7, 92-2, 90-69, 92-70, and 89-2.
22. CECTAL, HMC 90-35 and 92-57.
23. CECTAL, HMC 90-14.
24. CECTAL, HMC 92-5, HMC 90-5, HMC 90-3, and 92-40.
25. CECTAL, HMC 92-38, 92-52, and 91-10.
26. CECTAL, HMC 91-4.
27. CECTAL, HMC 91-7.
28. Peter J. Crowther of Manchester, England. This anecdote was often repeated by his grandfather.
29. CECTAL, HMC 91-7, Thomas E. Burton, "Interview."
30. CECTAL, HMC 90-17 and 90-70.
31. CECTAL, HMC 90-70.
32. Vice-Admiral Sir Peter Gretton, *Crisis Convoy: The Story of HX231* (London, 1974), 25.
33. Communication could be by flag hoise, light signals on the "Christmas tree," TBS, or loud-hailer.
34. CECTAL, HMC 92-35.
35. CECTAL, HMC 92-63.
36. CECTAL, HMC 92-61.
37. CECTAL, HMC 92-70, 92-2, and 90-48.
38. CECTAL, HMC 92-47.
39. CECTAL, HMC 91-4, Capt. Thomas Good-year, "Interview."

40. *Ibid.* Both of the quotes from Captain Goodyear have been significantly edited by the author. The captain read aloud from his own manuscript and added additional verbal comments as he went along.

41. "Middle watch" was both midnight to 4 am and Noon to 4 pm, while the "four-to-eight watch" covered the times 4-8 am and 4-8 pm.

42. CECTAL, HMC 92-39.

43. CECTAL, HMC 92-7.