



Safety At Sea Studies

CASE HISTORIES OF CREW OVERBOARD

Case 1. It was a gray, rainy winter Puget Sound day. Gale warnings had been up since early morning. The race committee set their starting line, and the fleet worked to windward against a freshening southwest wind. One of the smaller competitors was a 26-foot Thunderbird crewed by a man and wife. It fell behind its competitors and was soon sailing alone.

The Thunderbird was beginning to be overpowered, and the couple decided to reduce sail. The man went forward to muzzle the jib; in the process it blew back up the forestay. He lurched for it and slipped over the side. Immediately, he grabbed the lee shrouds. His wife had experience steering the boat but never in an emergent situation. She maintained course; he could not pull himself aboard, and gradually weakening, slipped away. The woman, panic stricken, continued her course right into the surf at Jefferson Head and into the beach. One week later, the man's float coat was found eight miles north. He was never seen again.

Case 2. It was a Labor Day weekend. A couple and their daughter were sailing a 26 foot sloop off Shilshole Bay, Puget Sound. A dark squall blew over them. The husband clipped a harness to the rail as he went forward to lower the jib; he slipped and went overboard. His wife maintained course. The tether to the man's lifeline was over six feet long, just enough to tow him over six knots in the quarter wave. The husband was unable to release himself or climb aboard and drowned within two minutes.

Case 3. A crew of four on a 30 foot boat racing downwind on Puget Sound in a storm force wind in November. No one was snapped on. The boat broached and spilled two of the four crew over the stanchions and into the water. They did not survive. Neither wore a life jacket. A footnote on the boat is that the stanchions were inclined about 10 degrees outboard, which is the shape of the hull, so that they could be recessed into deep sockets. With the boat flat on her side at about 90 degrees, the stanchions offered no resistance to prevent the crew from sliding out of the cockpit. The surviving co-owner was quoted as stating that it never occurred to him to wear a life jacket, but with the benefit of hindsight, he would have worn a harness.

"Tragedy at Hat Island", 48 North, November/December 1981.

Case 4. During a Foulweather Bluff race on Puget Sound. A Cal 36 was rounding Scachett Head Buoy in a 30 knot southerly when, due to a mistake on the foredeck, a spinnaker got in the water during the take down. Three men leaned over the lifelines in an attempt to retrieve the spinnaker, which was now under the boat. The pelican hook on the lifeline let go and all three went overboard. The skipper was left aboard with two crew and drifted rapidly away with the main still up. The engine was engaged and the propeller fouled by a sheet. Fortunately a committee boat was standing by the mark and all three men in the water had life jackets on. They were picked up in 15 minutes and showed visible affects of hypothermia

Case 5. A 27 foot racing sloop reaching from Port Madison with essentially a full crew aboard. One of the crew went forward and slipped over the side. The boat was gybed immediately, returned on a reciprocal course, headed into the wind and approached the victim close aboard within two or three minutes. The man in the water was not a strong swimmer and was weakening immediately. He was unable to hang onto a line thrown to him as the boat drifted away. Another approach was made within five minutes, and this time a closer approach enabled the crew aboard to actually grab him and haul him aboard. However, he had already drowned.

Case 6. During the Transpacific race of 1951. On one boat a crewmember was standing on the end of the main boom (he had no business being there), when the boom slatted and shook him loose into the water.

The boat was only making about 5 knots and, as he drifted astern, he was able to grab the taffrail log, which held him. In those days, international orange and yellow ring buoys were not common, and a white ring buoy was thrown over immediately. Since the taffrail log pin held, the crew was able to pull him close aboard simply by retrieving the logline. However, an effort was made to retrieve the ring buoy and, after tacking back and forth for about an hour and a half with a man at the masthead, the ring buoy could not be located. It was impossible to pick it out from the white flecked sea.

Case 7. During the 1951 Transpac. On another boat, the "L'Apache", running with the spinnaker, Ted Sirks went over the side, grabbed the taffrail log, but this time the pin did not hold. A similar life ring was thrown to him, which he was able to use. Although the boat doused her spinnaker and made an effort to search for more than a day, he was not located for almost 28 hours and then only by a Navy destroyer. Fortunately the water was 85 degrees Fahrenheit temperature and he survived.

Case 8. Case 8 involved a man overboard on a cruising sailboat in the vicinity of Cattle Pass, San Juan Islands, Washington. There was a severe, choppy tiderip in the area and little wind, so the effort was made to pick him up under power. The boat was maneuvered stern-to, but the severe chop forced the stern down on him and he was fatally injured by the propeller.

Case 9. Case 9 occurred during the SORC in 1979. It illustrates many of the problems encountered. A crewmember on a 46-foot sloop was relieving himself at the stern while his boat was beating in 30 knots of wind. He wore no harness but did have a float coat. He was 35 years old, a professional seaman, reported to be a strong swimmer and not prone to seasickness, although he had said that he was not feeling well. The water temperature was 78 degrees. Within two minutes the boat was brought head to wind and maneuvered under main alone to within about 20 feet from the victim. The crewmember had removed his float coat and was unable to grab a line thrown within reach. His only words were "Better Hurry".

The boat took another pass within two minutes, this time under engine and main. Several lines were thrown across him, but he made no effort to grab them. The boat made a third pass, again within two minutes, a crew member went over the side, reached the victim, but was unable to bring him to the boat before he disappeared. At some point, a line got around the propeller and there was difficulty in rehoisting the main. The second crewman was recovered, but the first was never seen again. In summary, the victim was able bodied and a strong swimmer in water too warm to produce sudden hypothermia. Nevertheless, he succumbed within six minutes.

Sail, April 1979

Case 10. Case 10 involved a crab boat fishing in the vicinity of Kodiak Island, Alaska in November. The boat capsized after a long period of gradually worsening stability. Due to a panic situation aboard, and the inexperience of the crew, there was no effort to either don survival suits or inflate the life raft. Three crewmembers ended up in the water alongside, hanging onto flotsam. Two of them became hysterical and swam off into the darkness. After 15 to 20 minutes, the third crewmember managed to crawl aboard the stern section of the vessel and wedge himself in between the rudder and the propeller. He spent the rest of the night there and was picked up in the morning. Even though soaking wet, he was out of the water and was able to survive the effects of hypothermia. None of his shipmates survived.

Epic v Hiner (W.D. Wash. 1981)

Case 11. Case 10 involved a crab boat that broke up in heavy seas in Unimak Pass in a December blizzard of about 75 knots. The only survivor of a crew of five managed to swim ashore through the breakers. His last recollection was crawling up out of the surf line onto the beach. He passed out face down in the snow, soaking wet, and was not found by the Coast Guard until 24 hours later. He was heavily dressed in wool clothing and survived although hospitalized for over a month.

Northern Fishing and Trading v. Grabowski, 1973 A.M.C. 1283 (9th Circuit, 1973)

Case 12. Case 12 involved the master of a tugboat who was thrown over the side in heavily ground swells on the Oregon coast in January. There was no skilled boat handler remaining aboard, and the chief engineer, who attempted the pickup maneuver, rammed his barge under tow on his first pass. The captain managed to grab a chain lashing hanging down over the side of the barge, and the ground swell was so heavy that it would totally immerse him on the down roll and pull him clear of the water on the reverse roll. It was estimated that somewhere between 15 and 40 minutes passed before anyone got to

him. To accomplish this, two more crewmembers went into the water. The first man to him found him already drowned and with a death grip on the chain that had to be pried loose. Both crewmembers who had gone into the water after him had extreme difficulty with the cold water and they also had to be rescued.

Davidson v. Tug Starcrescent (D. Oregon 1987)

Case 13. Case 13 involved a Coronado 27, crewed by a couple, which was sailing in late September in Lake Washington in a fresh breeze of about 20 knots when it came upon a capsized sailboat and two young people in the water. They were bobbing up and down in two to three foot waves. The rescuers put a five rung boarding ladder over the side, but those in the water were too weak to even climb on the first two rungs under the water. The rescuers also had considerable difficulty in holding the ladder steady due to wave action. Finally, a pick up was effected with assist from the genoa winch and a sling. By the time the rescue was completed, all four persons were exhausted after a forty five minute operation.

Case 14. Case 14 involved a couple who were sailing at dusk in August in the Southern Strait of Georgia, BC, Canada. The man went forward to tie down the jib; the main was set and the boat under power with the dinghy trailing astern. The man was thrown overboard attempting to muzzle the jib. The woman sailed around him in circles but was unable to bring the dinghy close enough to him. She did manage to get a child's life jacket to him which he used to hold his head up. After about three passes, a line overside got in the propeller, and he watched the boat drift away. He managed to swim for about four hours against a foul tide and got to land two miles away. He credited his life to a heavy wool sweater, a windbreaker (a marginally effective wet suit), and the child's life jacket.* In the meantime the woman left the sailboat in the dinghy, rowed ashore to get help and the sailboat was found the next day tacking down the shore of Texada Island.

*He is probably right. See Hayward, "Man in Cold Water: Cooling Rate in Heavy Winter Clothing." University of Victoria.

Case 15. Case 15 involved Rob James who was a world-class single and double handed sailor. On March 20, 1983, James went overboard from his 60 foot trimaran in 18-20 knot wind and eight foot seas in the English Channel. The crew threw over a horseshoe, but attempts to get a line to him and retrieval by another crew member going over after him both proved unsuccessful. James drifted away, and his body was recovered almost two hours after he had first entered the water. An inquest reported the cause of death as "drowning due to hypothermia."

Sail, "James Death Ruled Accidental," July, 1983,
Editorial, Yachting World, May 1983

Case 17. Case 17 involved a family which was sailing a small centerboard boat on Hood Canal, Washington, on a summer evening. A gust caught the boat and capsized it. A young daughter was helped aboard the upturned bottom where she held on. Her family remained in the water holding the boat. One by one her family members gradually succumbed to hypothermia, drifted away from the boat, and perished. The young girl was picked up at daylight and later released after medical examination. Compare to case number 10.

1982 13th United States Coast Guard District Case Report

Case 18. Case 18 involved a college student who was pulled by rescuers from a frozen pond in Michigan in which he had been submerged for 38 minutes. As the rescuers were placing him into a hearse they heard him give a slight belch. He had no pulse, his breathing had stopped, and his eyes were in a fixed, dilated state. After two hours of CPR and 13 hours of breathing assistance, he regained consciousness. He not only had no brain damage, but he returned to college and maintained a 3.2 grade average.

"New Hope for Cold Water Drowning Victims" Naui News, December 1979. The article reports the results of 11 other similar resuscitations under a study by Dr. Martin J. Nemiroff under NOAA's Sea Grant Program.

Case 19 Case 19 occurred aboard the 73 foot Maxi ULDB "Meridian" off Cape Flattery on October 18, 1984. The boat was under charter heading for California. Aboard were a very experienced delivery skipper and an inexperienced crew. Late at night the skipper came on deck and slipped overboard. He was not wearing a harness or PFD. In the panic that ensued, the engine was started and a line wound so

tightly around the propeller shaft that it disengaged the shaft from the coupling key way. The crew affixed a set of vice grips to the shaft to keep from losing it out the stern tube. The skipper was not recovered.

Latitude 38, Vol. 90, P.110 and Vol. 91, p. 61

Case 20. On October 15, 1984, a family was sailing the Strait of Juan de Fuca. The husband/father fell overboard. The wife and daughters were able to get him alongside but could not get him aboard. A call to the United States Coast Guard resulted in a response that was about an hour away. However, Canadian Coast Guard was able to arrive on the scene in about 12 minutes. The man was still tied alongside and was successfully hauled aboard.

Seattle Post Intelligencer, October 16, 1984

Case 21. On September 6, 1984, a 38 foot Hans Christian ketch was sailing off Santa Cruz, California. The skipper fell overboard in darkness. He was wearing a PFD with a strobe. The crew managed to locate him and get him alongside. They then attempted to lift him aboard with a boathook. However, the boathook pulled his PFD off, he drifted away, and the crew lost sight of him. A Coast Guard helicopter recovered the body two hours later.

Longitude 122, September 11, 1984

Case 22. On November 25, 1983, a 28-foot Catskill sloop was sailing off Monterey, California, in fresh wind of about 20 knots and eight-foot seas. Estimated water temperature was 58 degrees Fahrenheit. The skipper was the only experienced sailor aboard. When the jib halyard broke, he went forward to retrieve the jib. He was wearing a type 1 PFD and a Forespar harness with a six foot tether. He was washed overboard in a large swell but managed to hang on to the lower starboard lifeline. He was still made fast with his harness safety line which was connected to the mast. He was too heavy for one crew member to lift. Two crew members then tried to lift him with his harness as he reached up for the upper lifeline. As the two crewmen pulled on his harness shoulder straps, the skipper lost his grip on the upper lifeline and slid out of the harness. He was able to grab the rail. The crew got a ladder over the side. He tried to climb aboard several times on the ladder over the side. He tried to climb aboard several times on the ladder with help from the crew but could not get good footing on the rungs. Finally, stating that he was getting weak, he let go, fell from the ladder, and the boat drifted away. At this point, one of the crew threw a line to him which he caught and they began to pull him in. However, another crew member started the engine and commenced to back down, fouling the line in the propeller. More lines and a life ring were thrown, which the skipper could not grasp. The boat drifted away and the crew lost sight of him. Two hours later the unconscious skipper was located and recovered from the water. He never regained consciousness.

Coast Guard Investigation Report 15782, March 1984

Case 23. At 38 degrees north and 51 degrees west in later October, the yacht "Sunstone" was reeling off better than 200 miles a day, running wing and wing. A crew member was lost overboard during a gybe. The overboard pole and life ring were released. The boat was put on a reaching course, her course and log noted and tacked some minutes later. The "Sunstone" engaged in a search pattern and gradually increasing concentric squares. The overboard pole and life ring were first located but were too far away for the man overboard to swim for them. He was, however, located nearby and saved. Water temperature 78 degrees.

Sailing, September 1984

Case 24. On November 2, 1984, the 42 foot cutter "Night Runner" was about to gybe at the leeward mark in the Seattle Yacht Club Grand Prix regatta. The wind was 25 to 30 knots, seas three to four feet. The boat had just recovered from a spreaders in the water broach when the spinnaker guy fouled during takedown. Crew member Thor Thorson fell over the side while gybing the main. Fortunately, he was wearing a PFD and had been a "victim" in the previous weeks Lifesling tests. The skipper and two of the crew had also been trained in Lifesling use. The "Night Runner" made a quick stop by going head to wind, the Lifesling was deployed, and Thorson got the sling on the first pass. The boat hove to with jib down, and main vanged out, and helm down, and Thorson was hauled aboard manually in the sling. The jib was hoisted and the boat was back in the race having lost less than five minutes. She finished in the upper third of her class. Because the crew knew what to do, everything went smoothly.

Case 25. On February 12, 1983, off Chincoteague Virginia, the tanker "Marine Electric" capsized and sank in the North Atlantic. Thirty four crew members were thrown into the water. The water temperature was 39 degrees Fahrenheit, air temperature 29 degrees Fahrenheit. Of those, one managed to get into a life boat and another into a life raft. Four other crew members made it to the edge of the raft but were too weak to climb over the side even though the raft was equipped with a rope ladder. Likewise, the survivor in the raft was too weak to help them. Those four, along with 27 others in the water, perished. The chief mate in a flooded lifeboat, an AB in the raft and even a third mate in the water survived after immersion of about 65 minutes. The survivors were obese and all wore heavy clothing, thermal underwear, hats, gloves, and PFD's. The Coast Guard table for expected hypothermia survival at 39 degrees Fahrenheit water gives a span of 15 to 30 minutes before consciousness is lost.

The surviving AB in the raft described his efforts to get the second mate aboard: "I was trying to get the second mate in, and even with him, with that ladder we couldn't get it in. He couldn't grab on top.....I told him to get a foot hold, see if he could get a foot hold on the ladder. He said he couldn't do it.....He was the first one to drift away.....and then they all started to drift away."

(It has been suggested by Wayne Williams of the National Transportation Safety Association that perforating or cutting a life raft compartment may be necessary to allow access to the raft.)

NTSB, Marine Accident Report, January 1984

Case 26. On July 24, 1985, a couple on a custom 33' John Alden sloop elected to leave Port Townsend, Washington, on a trip to Friday Harbor in late afternoon. Forecast was for light to moderate westerlies. The boat was not equipped with lifelines. In the vicinity of Partridge Bank a light westerly suddenly increased to 20 knots. The owner (man) went forward to lower the jib and it blew back up the forestay. The wind increased to 30 knots westerly and seas to 6-8 feet. The man then dropped the main, and the gooseneck collar fell allowing the mainsail to run off the track and blow violently into the cockpit. The boat was now rolling in the trough. The woman in the cockpit was either struck by the mainsail, or falling in violent rolling, fell overboard. She was not wearing a harness or PFD. The man got the mainsail under control and started back toward the woman in the water. He made several circular type passes but could only get it 15' from the victim. After 4-5 minutes he had made 3 circles and she was on her back. He circled again, she was then face down. On the fifth and last circle she was sinking. Coast Guard was notified. The body was not recovered after SAR search into the evening.

The owner had not heard of the Lifesling, but seemed to recall reading something about circling with trailing lines.

Coast Guard Unit Case No. PA 209

Case 27. In Mid-August, a large, old style trunk cabin power yacht had just been taken off dry dock at Lake Union Yacht Works (Dunato Bros. in Seattle). The yacht had narrow walkways on each side and no railings. The husband and wife owners had consumed one or two drinks of alcoholic beverages while waiting at the yard to determine if any leaks existed. They then got underway with the husband at the controls and the wife out on the narrow walkway. She was engaged in throwing the fenders on top of the cabin.

From the pilot seat there was no rear view from which the husband could see aft. When the boat was about 200' out of the slip he noticed his wife in the water about 200' away near the shore. He maneuvered nearby, threw a life ring and started to holler. She was not a good swimmer and made no effort to retrieve the life ring. A workman on shore jumped in and pulled her to shore. With assistance and great difficulty he and another workman pulled her out. She had died of drowning.

Case 28. On December 13, 1973, a 52' steel ketch grounded on the Oregon Coast. The yacht was on a winter voyage from San Pedro, California to North Bend, Oregon. Aboard were a man and his wife. The boat had been without engine, stove or any heat for 2 1/2 days. The couple had been wet and cold and without any hot food for the entire period.

After grounding they attempted to launch their life raft which was blown away. The breakers rolled the boat over as the couple, wearing PFD's, jumped into the surf. A Coast Guard rescue team waiting on the beach recovered them after 3 to 5 minutes in the water. They were immediately hospitalized for hypothermia treatment. The husband's body temperature was in the low 90's, the woman's 88 degrees

Fahrenheit. The long period of exposure to cold air had lowered the body temperature to the point where a very short immersion in cold sea water had brought them to the brink of death.

Case 29. Case 29 involved a wrongful death lawsuit where the defendant attempted to shift responsibility to a third party for failure to have a "proper" man overboard rescue system designed and available. The case is *Kaskoski v. Getty Marine Corporation*, 1985 AMC 1730 (D. Del. 1983). The action arose out of the death of a customs inspector who fell from a pilot's ladder while attempting to disembark a tanker on Delaware bay. The date was January 13, 1978. The wind was 35-40 knots and air temperature just freezing and water temperature 41 degrees Fahrenheit. The decedent weighed 235 lbs. and was 51 years of age. He had fallen into the water in the vicinity of a pilot boat whose crew were able to get him alongside in the lee of the tanker where the seas were 3 to 4 feet high. The two man crew was able to get a life ring over the inspectors head and under one arm. But when they pulled on the life ring to keep his head out of the water, the life ring started to come off. Efforts to keep his head up by holding on to his jacket were likewise unavailing as the jacket would not stay on when they pulled on it. The freeboard of the pilot boat was high enough to make it very difficult for the rescuers to lean over and lift the inspector who was swallowing water and weakening. During the process the pilot boat drifted out of the lee of the tanker into seas of 6 to 10 feet where the crew could no longer hold the inspector and he drifted away. His body was recovered five months later. Getty Marine, the owner of the pilot ladder (which the Court found defective) attempted to shift responsibility to the pilot boat. It presented testimony through an expert witness to the effect that the pilot boat was unseaworthy since it did not have a proper man overboard rescue system. Such a system, Getty contended, should have consisted of a (1) lifebelt to be worn by the rescuer so he could lean over the side with both hands free. (2) a recovery net to fish the victim out of the water and (3) a davit rigged to lift the victim out.

The Court accurately analyzed the inherent problem in a man overboard rescue: "The fundamental problem confronting the rescuers in this situation was getting some piece of equipment around Kaskoski in a secure enough manner to allow him to be pulled from the water."

The Court found that in the state of the art in 1978, no such rescue devices were shown to be either feasible or have actually been tried. The Court also found that it was not shown that the complete system could have saved the inspector before he either drowned or died from hypothermia.

Case 30. In February 1985, an 87 foot Holland sloop was on a voyage from the Canaries to Antigua. The yacht was motor sailing at 10 knots on auto-pilot, with main, number one genoa, and both engines (twin screw) assisting. Wind was 9 knots, seas 5 feet. The yacht's professional skipper went forward of the shrouds and stood outside the genoa sheet. The genoa sheet slacked on a roll, then fishailed and catapulted the skipper overboard. The watch deployed the overboard pole and ring, stationed one person to watch the skipper, disengaged the auto-pilot and went head to wind. The yacht was several hundred feet away from the skipper by the time it was on a reciprocal course. The pole assisted in locating the skipper although he had not been able to swim to the ring. The yacht carried a Lifesling (a gift from a guest crew member) which was deployed. Unfortunately, the skipper had shown no previous interest in safety procedures, man overboard recovery, or the Lifesling. He had also struck his head and shoulder while falling overboard, and was not thinking clearly. The yacht deployed the Lifesling on 200' of trailing line but it took three passes before the skipper could be talked into taking the gear. In his state of shock and unfamiliarity with the gear, he thought it was "broken" because of the three sections. Once in the Lifesling, he was promptly recovered. His body temperature was down 5 degrees and he spent 3 1/2 days in bed. The crew felt that prior familiarization with the gear would have simplified rescue considerably.

Case 31. On August 1, 1986, the 80 mile coastal race to King Harbor, California started off Santa Barbara with a fleet of 150 boats. At 20:35 after the fleet had rounded Anacapa Island in 8-12 knots of wind, a crew member of a Catalina 27 fell overboard. The skipper reported that he tried to come about but was not able to reach the victim. The Catalina lost sight of the victim and called the Coast Guard. A cutter arrived at 2200 hours and conducted a 16 hour 50 square mile search without results.

Waterfront, September, 1986.

Case 32. In October, 1986, a well known sailor/artist/shipwright fell overboard from a 40' sloop at the start of a PHRF coastal race off Newport Beach, California. The victim had been struck in the back of the head by the boom and he hit the water unconscious. During the attempted rescue, (1) no one had notified the race committee so the start proceeded, (2) other boats in the area were called off by the 40' sloop (3)

after several unsuccessful maneuvers a second man was put in the water with the unconscious victim (4) the sloop, now under power got a sheet in the propeller. Eventually the second man in the water tired and could not longer keep the victim afloat. The harbor patrol and lifeguard boats were finally summoned and effected a rescue by which time the victim was dead from drowning, not head injuries.

Case 33. In May, 1987, at about 2100 hours during the Swiftsure Race in the vicinity of Clallam Bay in the Strait of Juan deFuca a 25 foot trimaran disintegrated, the aft cross-beam fractured, mast came down holing the main hull and the port sponson fractured. The boat quickly filled up and capsized. The crew of three climbed to the upturned bottom. The wind was then 12-14 knots, seas four feet (it had been 20-25 knots earlier). Four other racing yachts stopped to assist, and all three crew members were rescued. One of the rescuing yachts, Tantrum, employed a Lifesling to lift a crew member who had only partially donned a survival suit. The victims suit had filled with water and it was estimated that he weighed over 400 lbs. Tantrum's crew had prior experience in practice with their Lifesling and felt the recovery of this extra heavy victim would have been very difficult without it.

48 North, July, 1987.

Case 34. During July, 1987, five persons were overboard off the California coast. Four of them were lost off racing sailboats and were rescued, one person overboard from a couple-crewed cruising sailboat was lost. The surviving husband declined to comment as to the details. Of the successful rescues, a few facts are worth mentioning. Two were overboard simultaneously from an ultralight Foley 32 which rounded down in hard spinnaker-running conditions. The Foley was 150 yards away before the crew doused the spinnaker to return. One crew was overboard from an Olsen 40 in similar conditions. He credited his survival to wearing a float coat. He was in the water 20 minutes and, was still swimming for the overboard pole when rescued. The fourth racer fell overboard from "Merlin" on her way to Hawaii. The helmsman immediately went into a quick stop with the spinnaker flogging in 20 knots of wind. The man overboard pole and the horseshoe did not deploy well with the boat laid over, it would not come out of the stern tube. They attempted to throw a line to the man overboard but could not throw it to windward. The crew delayed taking the spinnaker down until they realized that even in a broach the boat drifted faster than the victim could swim. When they did get the spinnaker down, it fouled, first the halyard snagged, then the chute was caught around the keel and rudder. By the time the chute was down "Merlin" was 400 feet away from the victim. "Merlin" was then sailed back under main alone and stopped 15 feet to leeward of the victim who swam alongside to be lifted aboard. Total elapsed time estimated at 8 minutes to rescue, water temperature about 80 degrees Fahrenheit.

Latitude 38, August 1987.

Case 35. On March 21, 1987, off Point Hueme, California, a Ranger 22 had just rounded a mark when a "rogue wave" hit the boat, and a crewman slipped overboard. The boat righted, the crew doused the sails and maneuvered back under power. Wind was 8-10 knots 6-8 foot seas. On one of the passes at rescue, the crew was able to hold the victim and pull him two-thirds of the way into the boat when he slipped from their hands. They made another pass but could not hold him. The crewman disappeared from sight ten feet from a life ring. The boat ran out of gas, then attracted the attention of the tugboat which relayed a "May Day" and an unsuccessful Coast Guard search ensued.

Soundings, June, 1987.

Case 36. At about 2000 hours, six hours after the start of the 1984 South China Sea Race and an hour and a half after sunset, aboard Rapid Transit, a 63 foot ketch, the genoa split from the foot up. As the crew was getting it in a gust of wind blew it back over the side carrying one crew member with it. The helmsman tacked (he considered gybing) and headed the boat back to the general area where the man overboard had gone over. At that point, a horseshoe and strobe light were ejected. The wind was at 25 knots, seas 8 to 9 feet. The victim fortunately had air trapped in his foulweather coat aiding in his flotation. (no PFD). The foulweather coat was white and when Rapid Transit passed by the strobe his coat was spotted against the sea in the beam. The helmsman sailed the boat up slightly to leeward of the victim and he was thrown a line which he managed to hold. He was pulled to the stern ladder where he was too weak to climb aboard, but the crew managed to haul him out manually. He had only been in the water about five minutes.

Sail, January, 1986.

Case 37. On April 11, 1987, a couple, and their son were sailing their 42' ketch "Antares" in 8-10 foot seas five miles off Santa Cruz when they spotted four persons atop a small overturned sailboat. They had been in that position for four hours. They were too weak to support their own weight. The "Antares" came alongside and pulled them aboard using a Lifesling. The "Antares" then learned that another crewman wearing a life jacket had left the boat in an attempt to swim 4 1/2 miles to shore. The "Antares" estimated the approximate direction the swimmer would have taken, got under way, and after two miles located an empty life jacket. The "Antares" heard a faint muffled, headed in that direction and found the swimmer. He was in a extreme state of hypothermia and his legs completely paralyzed. He was pulled aboard in the Lifesling.

Santa Cruz Sentinel, April 17, 1987.

Case 38. On October 19, 1985, the Thunderbird "Redwing" departed Shilshole Bay, Seattle, to start in the Puget Sound sailing Championships. The wind was 20 knots and the crew wore life jackets. A decision was made to change headsails before the start of the race. The genoa got away from the foredeck crew, went over the side and up the headstay. One crew went overboard in the process. Thereafter a J-24 sailed by and threw a horseshoe to the man overboard but he could not get to it. Fortunately he was floating high with the PFD and air trapped in his clothing. "Redwing" by that time was under control and made a pass, the crew threw a line but it too was out of reach. Then "Redwing" on another pass threw a horseshoe, light and drogue. The horseshoe was out of reach, but the man overboard managed to snag the drogue and pulled the horseshoe to him. The man overboard got into the horseshoe, now floating very high, but was by this time exhausted. "Redwing" made another approach, came alongside and two crew grabbed the man overboard and pulled him part way into the boat. The man overboard was so weak at this point that he could not help at all. He was hanging on the rail with the crew struggling to get him aboard when the J-24, still trying to help, collided with "Redwing" and tangled masts. The boats cleared and the victim was hauled into "Redwing's" cockpit after being in the water about 15 minutes. It was all two crew members could do to get aboard over the 23 inch freeboard of the boat.

Nor'westing, January, 1986.

Case 39. During the 1987 DeGuidand Bowl Races (French Admiral's Cup), the Hustler 36 "Sting" was working under shortened sail in the channel toward Portland Bill. Wind was at 30 (having moderated) when "Sting" took a breaking sea and rolled her mast in. The skipper/helmsman Justin Smith was not snapped in and was washed out of the cockpit, fortunately taking the horseshoe buoys with him. Sting made two passes; the first was too far away; the second too fast. Another boat in the area, "Stradivarius" also made two passes, missing Smith the first time, and running over him the second. Smith, dragging the buoys, "walked" down the hull head down and came up to leeward. He was able to crawl across the transomless stern and into the cockpit of "Stradivarius"

Seahorse, July, 1987

Case 40. The time was 0115 hours, September, off the mid-California coast. A 38-foot sloop well equipped for offshore cruising was under power southward. Wind was 14-17 knots, there was a steep chop on top of a 3 foot swell. The boat was on auto-pilot and proceeding at 6 1/2 knots. A crewmember joined the skipper in the cockpit; he was wearing warm clothing, sea boots, and a harness equipped with a four foot tether and strobe. The crewmember sat down on the edge of the cockpit, snapped his tether into the lifeline and leaned back. Just then a swage parted in the lifeline spilling the crewmember over the side into the water. The skipper reacted instantly and dove to the tether as it slipped off the lifeline. He grabbed it and strained against the immense weight and pull of the man being dragged at over six knots (very dangerous for drowning). He couldn't reach either the auto-pilot or the throttle to slow the boat down. The skipper cried for help but before another crew member could joint him he lost his grip and the victim fell away into the wake. The auto-pilot was then disengaged and the boat circled back. Several passes were made in the rough water before the boat was brought alongside the victim (apparently they located him from the strobe). The crew leaned over the side and attempted to haul him aboard, however the boat was rolling heavily, and the victim was unable to help. In the process of trying to drag him aboard the crew pulled the victim's harness over his head and he sank beneath the surface and disappeared. A May Day brought the Coast Guard and a helicopter recovered the victim at 0319. He was dead on arrival at the hospital. Cause of death: drowning.

Santana, November, 1987

Case 41. Five days after Case 40 and a few miles to the north a crew of three were sailing a Santa Cruz 27 in a 25 knot wind with seas of 8 feet. All of the crew wore PFD's but no harnesses or tethers. The boat took a broaching wave abeam and was knocked down to 90 degrees. One crew man was knocked face down in the cockpit, the second was able to hang on, but the skipper was thrown out into the sea. As the boat righted, the skipper was spotted about eight feet away. The crew attempted to come about but experienced difficulty turning back to weather. They decided to strike the sails and effect rescue under power. By the time the sails were down and the boat under way the skipper was over 100 feet distant. According to the crew he was conscious and his head was above the water. The crew said they got back within sixty feet and saw the skipper rise on a steep sea and then disappear behind it.

Although he was wearing a bright red life jacket, this was the last they ever saw of him. Further searching lasted only 10-15 minutes when the crew abandoned it because of the heavy seas and fear of capsizing. Faulty radio equipment delayed notice to the Coast Guard until a fishing boat was sighted an hour later. The Coast Guard responded but the victim was never found.

Santana, November, 1987.

Case 42. On May 14, 1986, the topsail schooner "Pride of Baltimore" was hove down in a sudden squall off St. Johns Virgin Islands. Several of the crew on deck wearing harnesses were snapped onto the jackline which went underwater. The harnesses were not equipped with a hook at the harness end, let alone a quick release. The mate cut his tether line and the tethers of two to three crew members around him. Two life rafts were inflated as the schooner filled and sank. The rafts were inflated, but then deflated due to a lack of proper seal on the valves. One raft was then inflated by mouth and in it eight crew members survived. After a lengthy Coast Guard investigation, it was determined that the cause of the life raft malfunction was improper servicing at the last certification.

Newswave, Winter 1987, 1988 quoting NTSB report and findings.

Case 43. In the spring of 1986, during the Canadian Silva Bay Layover Race, a crew member fell off "Radiant" during blustery winds. "Radiant" deployed a heaving line and horseshoe without success. The "Carronade," a Tartan 41, was on the scene shortly. "Carronade" deployed a Lifesling and plucked the victim from the Strait of Georgia Waters. The victim was unfamiliar with the Lifesling and when it was towed to him, at first tried to pull himself alongside with the line.

Pacific Yachting, July, 1986.

Case 44. On March 24, 1986, a 15 year old girl was sailing with her family in the early morning hours at 0730 on a 32 foot sloop in the vicinity of Kingston, Puget Sound. The wind was about 35 knots, seas three to four feet. She was struck by the main boom and knocked into the water. Fortunately she was wearing a PFD. The crew deployed a pole and horseshoe buoy. The pole and the horseshoe drifted away from her and were of no assistance in the rescue. The crew on the sailboat attempted to drop sail, but reported a "sail jammed" and they became disabled. The Kingston Ferry coming out of the slip sighted the emergency, launched a life raft and rescued the girl after she had been in the water for forty minutes. She was hospitalized and survived. Water temperature was about 48 degrees Fahrenheit.

Case 45. In the third week of July, 1987, the forty foot sloop "White Lightning" was reaching along the New Jersey shore with an off shore northwest wind of 20 to 25 knots. The "White Lightning" was equipped with a Lifesling but no one had ever practiced its use. Aboard were a crew of three. They sighted a woman alone in an inflatable boat drifting downwind at about 2 knots away from a man swimming furiously after it. The inflatable and the couple were blowing off shore in toward Bermuda. The "White Lightning" deployed its Lifesling, dropped its jib and circled the man. The MOB was able to grasp the Lifesling on the first pass and was hauled alongside the sloop. He found it easier to be towed if he turned his back toward the boat. Once alongside he was able to climb aboard using the boarding ladder. His wife was then picked up from the inflatable.

Case 46. In April, 1982, during the Doublehanded Farallone Islands race a number of boats and lives were lost when a severe southeast gale blew out of the Golden Gate. A cruising boat with several crew had collided with a freighter in the vicinity of Stinson Beach. The crew was forced to abandon ship in life jackets. The skipper had managed to swim over a mile to shore and called the Coast Guard. Later that

night an Ericson 35 was beating her way home with a triple reefed main and no head sail. The wind was about 40 knots southeast and seas running to 20 feet. The Ericson sighted a light on the surface and maneuvered to investigate. They came upon one survivor from the cruising boat; he was in his life jacket and tied to another man, also in a life jacket, who was face down in the water. The Ericson doublehanders skillfully maneuvered their boat right alongside the conscious man and grasped his arms. However, the sea was so rough and the man so heavily clothed, that they simply could not get him aboard. He was estimated to weigh 185 pounds. The skipper of the Ericson, John Waite, reported that though both he and his companion were strong and willing, they were just not able to handle the weight. The victim had been in the 55 degree water for five hours. He was still alive but seriously hypothermic and not able to help himself. Only the many layers of clothing had saved him thus far. Waite and crew held onto the victim for about 15 minutes. Finally John said "we just can't do it." John said he would never forget the look in the victim's eyes. At that point a Coast Guard boat arrived. Waite let the victim go but he tangled in lines trailing in the water and was possibly dragged under. The Coast Guard had a very difficult time, but two men in the water and retrieved the victim after another 20 minutes. However, both were dead.

Case 47. On March 5, 1988, a Santa Cruz 40 was sailing in Thatcher Pass, San Juan Islands, Washington. She was carrying her 1.5 ounce spinnaker in winds of 30 to 35 knots. The boat rounded up, then down burying the pole. Two men were swept over the lifelines. Neither wore life jackets or harnesses. When they surfaced they were 3 boat lengths away. The crew on board cleared the main off the runner, gybed, released the spinnaker behind the main. They had to cut the spinnaker halyard. Under main they tacked and headed towards the men overboard. The engine was started and engaged, immediately becoming fouled in a spinnaker sheet. The boat motor sailed back to the MOB's. When the boat stopped alongside, it was blown down wind. The boat approached a second time, this time throwing life jackets and a line. Neither fell close enough to either man and the boat was again blown away. The crew then dropped a pair of horseshoes and poles. The horseshoes had built in drogues but drifted away faster than either MOB could swim toward them. By now 10 minutes had elapsed. The skipper now elected to use the boats Lifesling. It had not been previously considered. The Lifesling was deployed and one MOB was retrieved. The other MOB had in the meantime been picked up by a passing powerboat with a low railing. In reporting the accident, the Santa Cruz skipper believed he could not have effected rescue without the Lifesling.

Case 48. In mid-April, 1983, two quarter ton yachts were engaged in an overnight race off Sydney, Australia. The weather was strong gale force. Both boats capsized and sank in seconds. A total of four crew members were lost. Three members from one boat failed to get their safety harnesses unclipped as the boat sank. They were pulled under and not recovered.

News from North Summer, 1983.

Case 49. In March, 1988, the steel 78 foot fishing vessel "Norska" was engaged in the tanner crab fishery in southeastern Alaskan waters. She was pulling her 700 lb. pots on buoyed lines. The wind was 20 to 30 knots, and the seas were steep and rough in heavy tide rips. A deckhand standing amidships reached over to grab a crab buoy as the boat rolled heavily away carrying the crew member overboard with the buoy and under the surface. The skipper had participated as a volunteer the previous winter on Lifesling drills on the Yaquina Bay bar at Newport, Oregon. Those drills had included maneuvering with the traditional Williamson, Race Track, and Anderson (circle) turns. At the conclusion of those drills he had been given a Lifesling. The skipper immediately put the Norska into a quick stop and then a slow turn, a crew member standing amidships threw the Lifesling which got to the MOB as he was coming to the surface for the second time. The MOB got into the sling and was quickly brought aboard with the boat's power crab block. Both skipper and victim reported that the rescue would not have been successful without the Lifesling.

Case 50. Fastnet Summary.

A total of fifteen lives were lost in the August 1979 Fastnet Race. These casualties inspired an inquiry by the RYA and RORC. The report summarizes the following:

a). Three were lost after the capsize and disintegration of their life raft. The crew had abandoned their boat instinctively after two severe knockdowns. The yacht was subsequently recovered. The buoyancy

compartments were torn apart. The crew remained in the lower half of the raft. An hour later two of the survivors were washed out of the raft and lost. The raft was capsized again, and the buoyancy chambers were completely separated. A third crew member was lost climbing to the upper buoyancy chamber.

b). Three were lost trying to climb the pilot ladder of a coaster. Five crew members had abandoned their yacht to a life raft. (This yacht was also later recovered) A local coaster responded to flares, approached the crew members and lowered a pilot ladder. Two young crew climbed up the ladder but two others who managed to get hold of the ladder were unable to climb, fell back into the sea. A fifth man lost hold of the raft and fell under the stern of the coaster.

c). One lost in a capsized raft. During an abandoning ship effort, a raft capsized while a crew member was stowing gear from a yacht. The raft's painter line snapped, the raft and crew member swept away.

d). Two were lost trapped in the cockpit of an inverted yacht. A yacht was rolled through 180 degrees and remained inverted for three to five minutes. The crew had to extricate the skipper by cutting his harness. He was then swept away and lost. Another crewmember who had remained in the cockpit throughout the capsize died some time later.

e). Six were lost after being washed overboard. (i) Two men were washed out of the cockpit of a yacht by a large breaching wave. The harness of one held but the line on the harness of his companion broke. His yacht attempted an unsuccessful search. (ii) A yacht capsized then righted, the empty harness of the skipper was found still snapped to the boat. (iii) Three men were washed overboard. Of these, one man's safety harness held and he was recovered, the safety line of one parted, and the third was clipped on to a lifeline which also parted. (iv) Another man was washed overboard and came adrift when his harness came undone. The yacht maneuvered back to within a few yards of him but could not come alongside. A man went in the water tied to the yacht by a long line but missed by several yards to contact the victim. Several more attempts were made to recover the MOB without success. Efforts were abandoned when there was no further sign of life.

RYA, RORC Report. See also "Fastnet Force 10" by John Rousmaniere.

Case 51. In early January, 1989, a 49 foot commercial fishing boat was in heavy seas on Cortez Bank off Southern California approximately 90 miles West of San Diego. There were two crew members aboard, father aged 70 years and son aged 50 years. They were working on deck securing the vessel for heavy weather when the elder fisherman was washed over the side by a heavy sea. His son managed to grab the father alongside, but was unable to pull him aboard. It was not reported how long the two struggled, but the son eventually was exhausted and had to let go. He returned to port in a state of shock, and reported that his father, weighed down by heavy clothing and sea boots, was simply too heavy for him. The father was given up for lost. Father and son had fished together for 30 years.

San Diego Union, January 17, 1989.

Case 52. In May, 1989, an Etchells 22 was racing on San Francisco Bay in 20 to 25 knots of wind. The boat was on a tight spinnaker reach, barely under control, with a crew of three. The middleman lost his grip on the spinnaker sheet, tumbled over the side and in doing so, grabbed the bowman taking him over also. The skipper, now alone, quickly went head to wind, and dropped the spinnaker in the water, then returned to the two crew in the water. The crew managed to grab the side of the boat but the skipper could not drop the main because of a halyard lock. The boat continued to make some way, but neither crewman over the side could get back aboard. Finally, a crew from another Etchells jumped in the water, swam alongside, climbed aboard the first Etchells. He and the skipper hauled one of the victims aboard. It then took all three to haul aboard the 58 year old, 200 pound middle man. Without the extra help and despite the low Etchells freeboard, the skipper reported that he could not get either man aboard by himself.

Latitude 38, June, 1989.

Case 53. On June 28, 1989, the Tartan 10 "Arete" was beating toward the weather mark in a race near Chicago. Winds were north at 25 knots, seas running at 5 feet. Arete was on starboard and approaching the Tumblaren class "Viking" which was on port tack. "Viking" tacked to stay clear. Her skipper Clark Pellet slid across the boat breaking off the tiller and falling overboard. "Viking" was disabled and lowered her sails. "Arete" saw the emergency, made a quick stop and deployed her Lifesling. Pellet had the Lifesling in hand in two minutes, and although he had never seen one before, he was able to figure out how to put

it on. "Arete" rigged a tackle from the spinnaker halyard and hoisted Pellet aboard. Within 5 minutes of going overboard, Pellet was back on deck, albeit, a different boat than he had started from. "Arete's" crew had practiced with the Lifesling earlier in the year. During the emergency, "Arete's" crew was concerned that they were drifting away too rapidly from Pellet while he was trying to figure out how to get into the Lifesling. They started the engine and backed down briefly to take tension off the trailing line. When Pellet was in the Lifesling, the engine was shut down.

Great Lakes Scanner, September, 1989.

Case 54. On August 8, 1989, just before midnight, the yacht "Haley's Dream" was heading toward Fastnet Rock at 8.5 knots in 25 knots of wind. The boat took a knockdown and crew member John West was pitched onto the lee side and rolled through the guardrails. (He was in the act of going below when the boat was knocked down.) West was wearing a life jacket, but carried no strobe light. The boat tacked, sailed back on a reciprocal course and put out a May Day. Within a short time, West's voice was heard and another boat in the vicinity put up a flare. The "Haley's Dream" deployed her Lifesling, which was rigged with a drogue. (When the Lifesling was first listed in ORC regulations, a typographical error required the attachment of a drogue. This has since been corrected.) The drogue was of sufficient size to affect boat maneuverability at low speed and to straighten out the Lifesling tether line, rendering it virtually useless. "Haley's Dream" dropped sails and started the engine. Four parachute flares were used to light the area and a Danbuoy dropped near West. On the fourth pass, a genoa sheet was passed to him and he was winched aboard on a halyard. Simultaneously, the Lifesling line caught on the propeller.

RORC Report to USYRU, August 25, 1989.

Case 55. On January 26, 1988, the 158' crab fishing vessel "Pacific Apollo" was 50 miles west of Pribilof Islands in the Bering Sea. The sea was rough, seas at 10 to 12 feet and wind at force five and rising. The victim, Tyler Bricker, was inside a crab pot on the launcher working on the tunnels. The launcher was accidentally activated throwing Bricker, inside the pot, into the sea. The crew yelled "man overboard" and the skipper turned the boat immediately back to where a crew member was pointing. The skipper maneuvered the boat smartly in a circle and alongside Bricker, who had come out of the pot and was now on the surface. The crew tried to get a life ring to Bricker and then a grappling hook. This was difficult because of the wind and sea, and Bricker was weakening and could not grab either. Another crew member, Ron Naughton, went over the side. Bricker was now on his back with salt water coming out of his nose and mouth. Ron got hold of Bricker and also was holding a line, but the rest of the crew could not pull the two men over the rail. Then the crew took the picking boom hook and hooked it into the collar of Bricker's hood. He was lifted part way out of the water before the hood tore off. Then they put the hook in a life ring and Ron put one arm through it and one arm around Bricker. The boom operator lifted the life ring, but Ron could not hold Bricker as he was too heavy with water soaked clothing. Bricker now appeared to be unconscious. Bricker slipped out of his grasp and sank out of sight. He was not seen again. Ron was lifted back aboard with the assistance of the life ring. The whole episode took 10 to 15 minutes.

Alaska Department of Safety Report, number 8805455.

Case 56. This is the story of a successful rescue with the Lifesling. It might also show how good fortune may favor those who are most prepared and experienced.

The boat involved was "Xanadu", a Rawson 30, well rigged for offshore sailing. The boat had been sailed to Hawaii and back. She was captained and owned by Randy Williams, and his crew, and victim, was Paul Weston. They have been best friends for years. Randy Williams has been sailing "All my life." He has been in the US Coast Guard for 16 years, and has been involved in Coast Guard Operations in Alaska and the Northwest. Paul Weston is also a very experienced boater and scuba diver.

"Xanadu" was off Cape Beale, on the west coast of Vancouver Island, Canada, near Barkley Sound. The wind was blowing about 25 knots, the seas were 6 to 8 feet and "sloppy". Paul, wearing a PFD and Lirakis safety harness, clipped into a jack line, went forward to lower the jib. The main was up and the boat was driving on a reach. After the jib was on deck, Paul went to the bow to secure the sail and halyard. He clipped the harness directly into a pad eye on deck, and reached up to get the shackle on the halyard. He had a hand on the pulpit, when the bow fell off a wave. As the boat dropped, Paul's hand slipped off the pulpit, and he came up short and hard on the harness's tether. The pad eye, a standard brand tack

welded item, broke at the weld, allowing Paul Weston to fall overboard; although it was the boat which actually dropped out from underneath him.

Randy Williams immediately tossed overboard a horseshoe buoy and pole. The horseshoe landed close to Paul who grabbed it. Paul also had on a good PFD, tight fitting foul weather gear and superior quality long underwear. He kept his feet at the surface to prevent the boots from filling with water. Randy depowered the mainsail, started the engine, made sure no lines were trailing in the water alongside "Xanadu", and then motored close to Paul. He deployed the Lifesling, put the engine in neutral and circled Paul. Paul got the Lifesling and put it on. Randy hauled him in to the stern of the boat where Paul was easily able to climb aboard on the stern ladder. He had only been in the water for 5 to 6 minutes and "was not really wet at all." They continued into Bamfield where Randy bought Paul dinner.

Of the Lifesling, Randy Williams said: "I think it is a great product. I'll never have a boat without one." He and his wife, who knows how to sail and how to make the Lifesling work, now live on a Young Sun 43 and are planning a voyage offshore. Paul Weston has fulfilled a long spoken of dream and moved to the Florida Keys where the water is warm.

Case 57. REFERENCE CASE NUMBER 65, JAPAN GUAM RACE OF 1992.

"Taka" was a 47 foot ULDB designed to the IMS rule with a stability index of 108 degrees (the angle of heel at which the positive righting arm disappears. US Sailing recommends a minimum index of 120 degrees for off shore events.) On December 29, "Taka" capsized while running under number 3 jib and furled main in a quartering sea of 15 to 22 feet. Wind was 32-48 knots. "Taka" remained upside down with three men trapped in the cockpit and four in the cabin. The four in the cabin escaped to the outside through the main hatch. One of the men in the cockpit had drowned. After 45 minutes, "Taka" rolled and righted itself. The six survivors were able to launch the life raft. Waves capsized the raft and the emergency bag which was not lashed spilled its contents which were lost. The survivors were able to get back into the raft and drifted for 26 days. The rescue transmitter failed to work due to either breakdown or improper handling. Of the six life raft survivors, five died prior to location by a freighter on January 25th. The post race search which included 52 aircraft and 11 patrol boats had been abandoned on January 16th. The raft had drifted almost 500 miles.

Preliminary Report, Japan-Guam Yacht Race 1992, Nippon Ocean Racing Club.

Case 58. Stephen D. King, of Deerfield, Illinois, gave this report of an incident which occurred on October 4, 1992: "We were racing a J-30 on Lake Michigan five miles off Chicago in 15-18 knot southeast winds, clear skies and unlimited visibility. Waves were one to three feet in a chop left over from stronger winds earlier in the day. We had rounded the windward mark, set the chute on a port jibe and were in the process of hauling down the number 2 genoa when our bowman went overboard. He was leaning against the lifelines with one hand reaching for the sail and the other holding onto the top lifeline when his boot slipped on the deck and he went over the top. Of the six of us left aboard the boat, I was the only one to see him go. I hauled on the helm to harden up, yelled "man overboard" and instructed the crew to drop the chute and deploy the Lifesling. For about ten seconds, the crew were frozen in place. (Afterwards, they told me that their first reaction was "Why is he doing a man-overboard drill in the middle of the race, particularly when we are comfortably ahead of most of the fleet?") Then they got the spinnaker down below and cleaned up the lines while the jib trimmer trailed the Lifesling. While we were sailing upwind, I would see that our bowman was floating high with his vest fully inflated. The vest literally glowed in the water, he was that easy to spot. I tacked the boat when I was upwind of him, came close aboard, and then made one more circle before the Lifesling reached him. As he got into the Lifesling, we brought the boat head to wind with sails luffing, and pulled him to the stern where he was able to get a foot onto the stern ladder, and with assistance from two crew, climbed aboard."

Case 59. Phyllis Neuman of Pt. Richmond, CA, gave this report of an incident which occurred on May 3, 1992: "On May 3rd, we were sailing our Perry 47 near the Golden Gate Bridge. Typical for this time of year, winds were gusting over 20 knots and dozens of sailboarders were having the time of their lives playing among the whitecaps.

One sailboarder came close and told us that one of his mates was down and in need of help. We immediately went into action. Since we were broad reaching with the 150% up, we had to turn the boat

into the wind to douse the sails. This was not an easy task to do quickly, even with three guys working at it. At least five minutes elapsed before all the sails were down.

We then immediately fired up the motor and rushed over to the sailboarder. He board had been dismasted and he was floating beside it while a buddy stood by. He was chilled, but because he had a wetsuite, he was still able to get around.

We quickly pulled our Lifesling out of its case, only to find that it needed untangling. Once it was untangled, we threw it quickly to the sailboarder and began making tighter circles around him, paying out more line until he was able to grab it. Instead of putting the Lifesling over his head as it is intended, he held onto it with one arm. He seemed to be having trouble hanging onto the sailboard at the same time, so he finally let go of it. We may have been going too fast for him to hang on.

The next time around we yelled for him to put his arms through the Lifesling, which he did. Unfortunately, he still didn't hear us tell him to buckle it. We dropped our boarding ladder, turned off the motor, and reeled him and his sailboard in. He was seriously chilled and dazed, but not hurt.

Case 60. On a dark and moonless night in the 1990 Bermuda race, the S & S 61 "War Baby" was sailing on a starboard tack in 35 knot winds with a number 3 jib and 3 reefs in the main. A crew member had gone forward to check a loose spinnaker pole. A wave washed him over the side as his harness tether either broke or came loose from the stanchion base. An inflatable man overboard pole was released by the helmsman after a 20 second delay. (The helmsman was also trying to gybe the boat.) The pole did not inflate properly and lay on its side some distance from the man overboard. (about 300 feet.) However, "War Baby" could see the light, went head to wind, dropped the jib and returned under power to the vicinity of the light. A high intensity light was used and spotted the man overboard, who was not a strong swimmer and who was not wearing a life jacket. A Lifesling was deployed, but the trailing line was tangled. Another crew member jumped over the side, and took a line with him- the line was too short to reach the man overboard. Finally, "War Baby" drifted down on both swimmers, and they were retrieved manually by the crew on deck.

Report of Warren A. Brown, owner of "War Baby", October 13, 1990.

Subsequent investigation by the Safety at Sea Committee of the Sailing Foundation indicates that the Lifesling trailing line had not been properly stuffed in the bag, although efforts to interview the mate, who had allegedly packed the bag, were unsuccessful.

Case 61. This incident occurred in the July 1992 Bristol Bay fishery. Dan Hennick was skipper of a 32 foot gillnet boat. The fishing period had ended at 2300 hours and Hennick was bound toward Egegik with a "good load" They arrived alongside the tender after midnight. The night was dark and fog was rolling in. Hennick maneuvered alongside the tender in a strong current and surge. His crew was inexperienced. The bowman threw a line that fell short and the crew member on the stern threw a line which also fell short, sank and was sucked into the propeller. The bowman made another cast and fell overboard. The bowman (Ralph) swam alongside where Hennick caught hold of his wrist and held him alongside. The bowman seemed dazed, said he was dying and told Hennick to just let him go. At this point, the other deck hand, Tim came forward and also fell overboard. By this time Ralph was almost unconscious and again asked Dan to let him go. Hennick could not pull Ralph aboard and Tim could not get himself back aboard. Minutes, perhaps seconds, were left, before at least one crew was to die. The tender alerted two other gillnetters to the emergency and they came alongside Hennick's boat. With three hands, both Ralph and Tim survived.

Pacific Fishing, December, 1992.

Case 62. This incident happened in the Bermuda Race of 1960. The ketch "Seylla" was reaching at night in gale force winds closely reefed. Crew member Jack Weston had just unsnapped his harness and was starting down the companionway when a rogue wave came aboard. Somehow Weston was ejected from the companionway and hurtled to the lee side where he went overboard. The boat was held on course by the crew while they determined a reciprocal course. A rescue light and ring were released but fouled on the mizzen sheet and was dragged along in the wake. A second rescue light was then released. The crew then had difficulty starting the engine and when they did found the propeller was out of the water much of the time, so the mizzen was set as well as a number four jib. On returning to the overboard light (a strobe) Weston was located nearby. He had been able to swim to the strobe. (The water temperature was 80

degrees Fahrenheit.) Once nearby the crew of "Seylla" threw a spare spinnaker pole at Weston - it just missed. The helmsman somehow managed to bring the "Seylla" alongside Weston and two crew members rolled him over the rail as the boat surged in the trough. At that moment, the overboard spinnaker sheet wound around the propeller shaft and stopped the engine.

Cruising Club of America, December 1992.

Case 63. In the 1992 Bermuda Race, the Frers 66 "Kodiak" was reaching on a black night about to enter the Gulf Stream. It was 2307 hours, 200 miles off Newport, Rhode Island. Brad Dimeo had gone forward to attach a short line to the genoa for an outboard lead. Suddenly he was overboard. Three flashlights were spotted on Dimeo who was holding the genoa sheet which had been released. It did not seem appropriate to change helmsman even though Ken Reed, who was at the wheel, had not been at the wheel during the crew's previous overboard practice sessions. (which had been "in-depth"). Nevertheless, Ken went into the textbook recovery as the Lifesling was deployed, gybing and going head to wind again as Dimeo reached the Lifesling. "Kodiak" stopped head to wind as the jib was doused and Dimeo hauled over the transom by several crew members. The skippers report contained several recommendations which included:

1. Keep at least two separate lights on the MOB
2. Stop the boat as fast as possible.
3. Do not start the engine unless it is to slow the boat.
4. Do not change helmsmen unless it is absolutely necessary.
5. Have available a strong beam light in case the MOB is lost from view of the flashlight.
6. The Lifesling is much more effective than a heaving line, he would recommend two Lifeslings, and a heaving line.
7. Practice man overboard drills with all helmsmen and practice at night.

Cruising Club of America News, December, 1992.

Case 64. US SAILING RESCUE MEDAL SYNOPSIS, 1991-1992.

US Sailing awarded seventeen rescue medals for successful MOB recoveries in 1991-1992. Five rescues employed Lifeslings, five heaving lines, one swim ladder, and six apparently manually retrieved. In six situations, the engine was used in the rescue effort and in one of those the propeller fouled a line. Included were case 63 and another rescue in the 1992 Bermuda Race. John Ahrens, skipper of the "Lively" went overboard from the foredeck while putting a sail through the hatch. A wave caused him to lose balance and go over the leeward rail. The crew was alerted, the Quick Stop performed and the "Lively" pulled alongside Ahrens. A Lifesling was deployed and the skipper retrieved manually in a reported 30 to 45 seconds allowing the boat to continue racing in less than one minute.

Case 65. Of nine yachts entered in the Japan Guam race of 1992, four retired, one dismasted, and two sank. Fourteen died. The race started at Koajiro Bay on December 26, 1991. Wind was NNE at 14. On December 27, the wind suddenly shifted to the SE at 20 to 30. Yacht "Kitty" dismasted and "Contessa X" retired after blowing a mainsail. In the afternoon the wind became SW 32-48 knots. Crew member Ishikowa fell overboard from "Marine Marine" at about 27 miles east of Aogashima Island. "Marine Marine" was a 35 foot IOR design which had completed many offshore races including the Hawaii Japan race. Se was of fiberglass construction. Ichikowa was trying to untangle a running backstay from the SSB antenna. He was not wearing a harness. A life ring and automatic light were thrown over. "Marine Marine's" crew hauled down all sails, started the engine and commenced a search under power. The search continued from the time of the accident at 1540 until after dark without locating either Ishikowa or the light and ring. "Marine Marine", after receiving a storm warning, proceeded under engine and sail. On December 29, the yacht's engine stopped when the propeller was fouled by a preventer line. That afternoon the patrol boat "Mizuko" encountered "Marine Marine" and attempted to tow, the line parted and "Mizuko" stood by. Wind was then 26-40 knots, seas 12-20 feet; that night the wind increased to 32-48 knots, seas 15 to 20 feet. During darkness the early morning of December 30, "Mizuko" lost sight of "Marine Marine". At 0530 "Marine Marine" lost her keel and turned bottom up. The cause of the lost keel was later determined to be the fatigue and sheer stress on the fiberglass hull. Three crew members of

"Marine Marine" escaped from the cabin. At 0700 the "Mizuko" discovered the empty life raft of "Marine Marine", and at 1030 located the yacht and recovered the sole survivor. One body was recovered from the companionway and two from the cabin. Four others who had escaped the cabin were swept away. At 2330 the boat sank. While these events took place, another tragedy took place on the "Taka".

Case 66. On the night of January 16, 1993, the fishing vessel "Massacre Bay" rammed a rock and rolled over in Alitak Bay, Kodiak Island. The capsize took place only about 250 yards from shore. The four crew members donned survival suits, but three of them had not pulled on their hoods. The crew left the life rafts on the boat expecting them to automatically inflate and deploy. It is believed one did but it was not visible in the darkness. The crew climbed onto the keel and then jumped into the water. They clung together for about 5 minutes, then the three without hoods gradually swam or drifted off and died as hypothermia set in. The lone survivor, Matthew Corriere, swam ashore. Corriere reported that the crew had never had an emergency practice. "If we had a drill, we might have all been alive. We had talked about it that night at dinner."

North Pacific Fishing Vessels Owners Assoc. Issue No. 5, Winter 1993

Kodiak Mirror, January 18, 1993.

Case 67. Sunday, March 21, 1993, a no-race day, Bill Boyeson and two of his crew were practicing on Puget Sound near Seattle, WA. The weather was 10 to 12 knots, overcast with showers, a little lumpy. South of Meadow Point, they noticed two men and a young boy waving from an open fishing boat as if for assistance. They dropped their sails and headed for the boat in distress. Before they arrived the boat swamped and capsized. In a few minutes, "Sassy" came alongside and the boy was quickly muscled aboard. The two men, in life jackets, were together at the bow of the overturned boat. "Sassy" had a Lifesling with the hoisting tackle stowed in the bag. The tackle was rigged; one man then the other was brought aboard. The whole affair from first notice to all aboard took about fifteen minutes. Another large sailboat took the overturned boat in tow and in due course delivered it to the launching ramp. The three fisherman had lost everything except their boat and their lives.

CYC Leadline, May 1993.

Case 68. In September, 1993, a couple were sailing from San Francisco north to Drake's Bay in 18-20 knots of wind. The boat was a Pretorian 35 and was carrying a 150% headsail. The wind increased to about 30 and the man went forward to change down to a smaller headsail. He uncleated the halyard and went to the lee side and disappeared from his companion's view. She remained at the steering station. With the engine running and in gear, she attempted to hold the bow into the wind. Because of the flogging headsail, which had now ripped its leach from head to clew on the radar mount, the man continued to be out of sight. He was wearing a fanny pack inflatable and had his harness clipped to a jackline. The woman heard the man cry out and determined that he had fallen overboard. She ran forward and found him tied to the boat with his harness but low in the water because the fanny pack had not inflated. She then dropped the mainsail and returned to where her companion was still tied to the boat and found him unconscious. By this time a Boston Whaler, which had been fishing in the area, had come alongside and one of the fisherman climbed aboard the Pretorian. He found it impossible to pull the victim aboard the sloop or into the whaler. They stated they could not attach either a rope or a Lifesling. Finally a Coast Guard helicopter arrived and airlifted the victim to a hospital where he was pronounced dead on arrival. There was no attempt to use the Lifesling while the victim was still conscious and once he had passed out those on board reported they could not get it around him.

Latitude 38, October, 1993.

(While there are not enough details from this report, it seems that the rescuers may have been reluctant to cut the harness line which would have been necessary to place the unconscious victim in the Lifesling - Editor.)

Case 69. On May 11, 1993, the 61 foot fishing vessel "Lihue II" was 30 miles off the entrance to the Columbia River. A crashing wave swept a 44 year old fisherman over the side. A 29 year old fisherman who had been working on deck with him when the wave hit jumped into the eight foot seas to swim him back to the boat. Both were hauled on board by the remaining crew after an estimated 10 minutes in the water. By the time he was taken back on board, the younger man suffered a heart attack which proved fatal.

Professional Mariner, October 1993.

Case 70. In 1992 the Brewer 44 cutter "Sea Bass" had departed Puerto Rico on a trans-Atlantic voyage to the Azores. Aboard were its owners, Joe and Pam Bass. At 1700 hours and about 300 miles north of Puerto Rico, the "Sea Bass" was beam reaching to 7 knots in 20 to 25 knots of wind and 7 foot seas under control of the autopilot. Joe was alone on deck and Pam off watch asleep in her berth. Joe went forward to wipe an oil spot on deck. He clutched the lifeline for support as the boat rolled heavily in a sea. A cotter pin failed, or was missing, the lifeline parted, and Joe was overboard. Pam heard his call for help and came on deck to see Joe's head rise in the sea some distance astern. Pam's only prior experience in man overboard recovery had been limited to retrieving cushions on calm days. Pam let the sheets go, checked that there were no lines overboard, started the engine and powered back into the wind with sails flogging. Pam deployed the Lifesling only to notice that the trailing line was still seized around the coil. (It is apparent that Joe and Pam had never unpacked the Lifesling, cut the seizing and stuffed it into the containment bag as per instructions.) Pam found a knife, retrieved the line and cut the seizing. The Lifesling was then trailed astern and Pam circled Joe and delivered the line to him. After Joe made contact with the line he seized and donned the Lifesling. Pam pulled Joe to the stern where he was able to climb up the boarding ladder in spite of the stern heaving in the sea. (This was not per-instruction nor a classic Lifesling recovery. However, Pam and Joe were aided by the warm water and as an experienced sailor, Pam was successful - Editor.)

Sail, December, 1993.

Case 71. On September 12, 1992, during the Jackson Park Yacht Club Lutz Regatta, two yachts "Esta Es" and "Apparition" were running with spinnakers in 30 to 35 knots of wind. "Apparition" was overpowered and gybe broached to windward putting the mast in the water and fully exposing the keel and rudder. A crew member was thrown overboard. "Apparition" launched her man overboard module. As "Esta Es" passed "Apparition" she spotted the man overboard and rounded head to wind. The victim was then seen to go under and not come up. "Esta Es" dropped the spinnaker, started her engine, and powered to windward of the victim's last known position. "Esta Es" then bore off slightly and stopped the engine. The victim's head popped out of the water and "Esta Es" threw a horseshoe which missed and was carried away by wind and waves. By this time, "Esta Es" was dead in the water and about eight feet away from the victim. The Lifesling was thrown, missed by a few feet, lifted by the crew and flown like a kite to drop right on top of the victim. Four crew members lifted the victim from the water. He had swallowed some water, was shivering uncontrollably, had severe leg cramps and was exhausted. He had been in the water about four minutes wearing foul weather gear and no flotation. Skipper and crew of "Esta Es" received the US Sailing Rescue Medal.

American Sailor, December, 1993.

Case 72. On December 22, 1993, the fishing vessel "Brenda Anne" was heading out to port to avoid an oncoming storm off the Oregon coast. About 1 1/2 miles east of Cape Elizabeth the "Brenda Anne" broached. Her two man crew was able to get off a May Day and don survival suits before their boat filled and rolled bottom up. The Portland Pilot Boat was about 2 miles away preparing to take a pilot off an ocean bound tender. The ship heard the May Day and reported it to the Pilot Boat which was able to then locate the "Brenda Anne." The fisherman swam about 50 feet to alongside of the Pilot Boat. Only two men were on the Pilot Boat, one was driving while the other winched the fisherman aboard with a Lifesling.

Oregonian, December 23, 1993.

Case 73. On a clear, fresh, fall day in October, 1992, a 40 foot pilothouse cutter was bound from New Bedford to Newport, Rhode Island, with a seasoned skipper and a crew of three relatively inexperienced colleagues. While tacking into 6 to 8 foot seas in 25 to 30 knot winds, the skipper was thrown overboard when he fell against a lifeline which parted in a severe roll.

Responding to skipper's instructions (given while calmly treading water in 55 degree Fahrenheit water) the crew put the bow into the wind, secured the headsail, and then deployed the Lifesling before executing a 180 degree turn downwind past the MOB. Coming up on the windward side of the MOB, they quickly pulled him aboard using the Lifesling and the ladder mounted on the stern.

The elapsed time was approximately 12 to 15 minutes despite steep seas and a strong ebb tide which set the boat well to windward during the initial phase of the operation.

Case 74. On December 27, 1993, at about 1900 hours, the J-35 "Mem" was beating in 40 knots of wind in the Sydney Hobart Race. The yacht was carrying a storm jib alone and sailing at about 7 knots. The wind increased, gusting to 50, and the seas were estimated at 13 feet. "Mem" was knocked down in a heavy sea, and several crew (all tethered with harnesses) washed from the deck. "Mem's" skipper John Quinn broke his harness and watched "Mem" drift away. "Mem's" life rings were tangled and could not be deployed and she had lost her man overboard pole some time earlier. Water temperature was over 65 degrees Fahrenheit. Quinn was wearing thermal underwear, a fleecy vest and Musto foul weather gear. He had no strobe and no PFD but did have a buoyancy vest underneath and unzipped from his foul weather gear top. Quinn discarded his foul weather gear top and boots because he felt they were weighing him down. Quinn reported that he dove into the oncoming breaking seas much like a body surfer would on the way out from the beach. A large tanker that had been alerted proceeded to the area where Quinn had been reported overboard and began to sweep the sea with a Searchlight. Quinn was located and his position reported to "Atara", a yacht standing by in the area. "Atara" located Quinn and came alongside. Quinn was too heavy to life aboard amidships and a tackle or halyard could not be used since "Atara" had been dismasted. Quinn was pulled to the open transom and manually heaved aboard. Two other "Atara" crew members went overboard in the rescue effort, but were recovered. Quinn had been in the water about five hours when rescued. He was treated for hypothermia and said he was feeling normal after about 8 hours.

Sailing World, May 1994.

Case 75. Case 75 occurred at Big Boat Series, Sept. 17, 1994 in San Francisco Bay. Larry Klein, Rolex Yachtsman of the Year in 1989 was skippering an experimental boat called "Twin Flyer 38", designed by Alberto Calderon. The boat has no keel for lateral stability. All life comes from the skegs, trim tabs and hull shape once the boat is underway. The boat has permanent fiberglass racks which allow the entire crew to act as ballast. The wind was 18 knots, and the seas were 4 feet. The boat hit a particularly rough set of waves, and suddenly the rack failed, dropping seven of the crew, including the skipper Larry Klein, into the water. Some of the crew, after being in the water, eight to ten minutes, were struggling to stay afloat. None had PFD's on. Larry Klein said that he didn't think he could make it any longer. Chuck Riley took him in a life saving hold with his left arm, trying to keep him afloat. About this time, a small cruising boat passed by close enough to see the people in the water, but did not stop to help. A large wave washed over three of the people in the water. At about the same time, the racing boat "X-Dream", skippered by Steen Moller, arrived on the scene. Meanwhile, one of the crew had managed to swim to "Twin Flyer" and make it on board. The crew of "X-Dream" had noticed something wrong and altered course to investigate. They dropped their sails and came to a stop next to the people in the water. They got the people in the water onto the deck of "X-Dream", having great difficulty with the skipper, Larry Klein. They started CPR immediately, which was continued by the paramedics. Larry Klein was pronounced dead at the hospital.

Latitude 38, October, 1994.

Case 76. Case 76 happened on June 15, 1991. Six persons departed Des Moines Marina, Washington State, aboard a J-22 for a day sail on Puget Sound. The weather forecast was for moderate southerlies as a low weakened. The trip was sponsored by a singles club and most of those aboard had met recently and had little experience. The skipper was Kathy Rall who had had some prior experience in teaching sailing. Conditions at first were light, but late in the afternoon a squall line was noticed coming out of the south. Rall decided to head back north to Des Moines and started the outboard. The squall line approached and the boat was knocked down throwing one of the passengers, Marie Richards, into the water. There was confusion on board, the outboard stopped, and some did not notice that Richards had gone over. Rall handed out lifejackets-none had been donned before that time. It took some time to get the boat under control, the engine restarted and the sails down. The J-22 was about 1/3 of a mile away from Richards when those aboard lost sight of her. Rall set off some flares, which attracted the Coast Guard. Richards was recovered after an hour in the water but pronounced dead on arrival at the hospital due to drowning.

Case 77. On February 12, 1994, the Puget Sound Cruising Club held a Lifesling Clinic off Shilshole Bay in Seattle. In charge of the Clinic was Gail Borling of the Tacoma Women's Sailing Association. Borling had run many such clinics over the last several years. One of the boats in the clinic was Jim Sargent's 37

foot schooner "Ericil". Aboard the schooner were Surgent, his wife Devon, Barbara Sacerdote, Steve and Veronica Spencer, and Maarten Dons, an experienced coach. Also aboard was Steve Voorhies.

The Clinic was to follow a basic format including the rescue of a live "victim" who was to be recovered from the water. Usually the victim is attired in a wet suit or survival suit. Previous clinics had included the rescue of several hundred victims without incident and had trained a large number of Puget Sound sailors in man overboard recoveries. Student at these clinics had later successfully rescued a number of "real life" victims in boating incidents.

Originally, Steve Spencer was to be the victim for Surgent's schooner. But due to some rib soreness, he begged off that day, and Voorhies volunteered in his place. Voorhies, age 50, had a prior history of epilepsy and heart disease, but this was not known or revealed to anyone on the schooner. He was reported to be a swimmer. There were two survival suits on board, Voorhies chose an Imperial Model bought in 1979 by Steve Hultziger and loaned for this occasion. The suit was somewhat small for Voorhies and although this would not have affected flotation, it may have restricted his movements slightly. Voorhies removed the high rider from the suit.

The schooner proceeded to the area north of Meadow Point, a location out of the traffic pattern and frequently used for clinics. The wind was southerly 15 to 20 knots with a light chop. Prior clinics had been run in that area in winds up to 35 knots with no difficulty. A practice circle was made prior to the planned recovery.

Voorhies donned the suit and was seen to close the facial flap over his mouth. He jumped overboard in such a manner as not to go head under water. The schooner was carrying a foresail and a jib. On the first pass, the Lifesling passed within four feet of Voorhies. The witnesses indicated that the long-keeled schooner had a wide turning radius. Voorhies looked all right. It was noticed by Devon Surgent that Voorhies covered his face twice with his hands, then put his hands down while waiting for the Lifesling. Recollection varied on how many passes were required to make contact; the Spencers said 3 passes, Dons reported 1-1/2 passes. In any event, Voorhies made contact with the Lifesling trailing line and he started to pull the Lifesling toward himself facing the waves. After he had pulled in 15 to 20 feet of line, he let it go. Dons reported Voorhies appeared to be disoriented and that he started to swim away from the Lifesling. Shortly thereafter, Voorhies appeared to roll face down. Captain Paul Russell, USCG Retired, who has worked with survival suite a great deal, reports that these suits are primarily a hypothermia protective device and will not roll a person head up; the person will normally remain in essentially the position of the last exertion.

The crew on the schooner realized Voorhies was in trouble. At first, they tried to power up wind to Voorhies, but the engine was small and the boat could make only very slow headway. Next, they launched a dinghy and retrieved Voorhies who was then unconscious with froth coming out of his nose. When the dinghy came alongside Voorhies, he was on his back, apparently unconscious. The unzipped his suit and found him dry. They administered CPR and got him to an aid car on return to Shilshole. Voorhies died that night.

Doug Fryer, Kathie Fryer, Paul Russell and Jerry Sabel debriefed the Surgents, and the Spencers on March 2, 1994. Also in attendance was Steve Hultziger, the owner of the survival suit. Maarten Dons was debriefed on February 13. Jerry Sabel interviewed the coroner.

Case 78. In February, 1994, at 2200 hours, ship pilot Mike Dillon fell from the pilot ladder of the 42,000 ton Korean car carrier "HYUNDAI 106" at the Columbia River entrance. Winds were over 50 knots and seas 18 feet. Dillon was attempting to board the 95 foot pilot boat when its fenders caught the ladder in the swell. Dillon's strobe light failed to work and his portable VHF was water soaked. The pilot boat made a couple of passes unsuccessfully and lost sight of him. Dillon kept swimming to avoid the breaking seas and is estimated to have drifted one mile to the northwest. A Coast Guard helicopter was launched in very dangerous conditions from the nearest station and engaged in a search pattern beginning from the position where Dillon had fallen. A reflection in the helicopter's searchlight located Dillon when it hit a small piece of reflective tape. The helicopter launched a rescue swimmer who was guided by Dillon with a pen light. Both Dillon and the rescue swimmer were retrieved. Dillon was in the water for about 40 minutes. He credits his life to his Mustang float coat.

The Ocean Navigator, July, 1994.

Case 79. In May 1994, the 30 foot sloop "Dawn Treader" was hoisting sail on San Francisco Bay in 30-40 knots of wind. Aboard were Ben Wells a six year circumnavigator and Pattianne Parker. Pattianne held the bow into the wind with the engine as Ben raised the main. Ben stepped aft and was struck on the head by the main boom, knocking him into the water. Ben was not wearing a life jacket nor harness nor was there any PFD on deck,. Pattianne maneuvered the "Dawn Treader" back and forth in Ben's vicinity. They were sighted by another boat, "Sea Adler" which stood by but made no effort to effect rescue.

A third boat, a 50 foot wooden yawl, "Xanadu", with a double reefed main and staysail sailed by Ben and stopped deploying a horseshoe. The horseshoe was tied to a flag pole which became tangled in its canvas sleeve but was finally deployed. Wells thought the horseshoe was a great help. "Xanadu" passed a line to Wells and asked him to tie a bowline around himself. Wells was weakening by this time and was unable to do so. He did manage to hold onto the line, however, and pulled alongside "Xanadu" whose skipper tied the bowline and used it to heave Wells aboard by swaying on it. "Xanadu" had no lifelines and when Wells got partially out of the water he sat a leg over the rail and was manually rolled aboard. Although cold, Wells, was able to return to his boat after he had changed to dry clothes.

Cruising World, November.

Case 80. On July 29, 1994, the sloop "Rainbow" was 150 miles south of Nantucket returning from Newport-Bermuda Race in fresh westerlies, of over 30 knots and seas of 15 feet. The owner, Ben Detrich was at the helm and the professional skipper, Daren Chew, went forward to make a sail change. He wore a harness but was not clipped in. A wave knocked him overboard. At the time the only other crew aboard were below: an inexperienced cook-deckhand and an injured woman sailor from Annapolis who could not leave her bunk.

The owner attempted but failed to start the engine. He then attempted to take down the main sail unsuccessfully. He was unable to turn the boat around to search for Chew. He immediately then called the Coast Guard. A coast Guard cutter placed a crew of two aboard "Rainbow" to sail her back to port while other cutters and planes searched for Chew. The Coast Guard crew managed to sail the "Rainbow" to Woods Hole in 26 hours but Chew was never found.

Case 81. On December 3, 1994, "Night Runner" was participating in the Vashon Island Race, Puget Sound. Winds were Northerly 25-35, gusty and unpredictable. It was very cold and seas were 3-5 feet. The fleet rounded the windward mark and bore off for the downwind leg. Few boats set spinnakers and there were many broaches and control problems. As "Night Runner" was blasting downwind with spinnaker maintaining sustained speeds of 9 1/2 to 12 knots, a person in the water wearing a red hat was spotted to the port side about 200 yards off amidships.

"Dream Speaker" had lost the victim overboard as well as (3) other members of the crew (they were attached to the boat with tethers or caught in the lower lifeline) in a broach-submarine incident that occurred when they attempted to set a spinnaker and take down their jib. "Night Runner" promptly went quickly head to wind, stopped the boat and got the spinnaker on deck. Under main and power, as "Night Runner's" foredeck was too filled with sails to get a jib up, she performed the Lifesling circle, and again stopped the boat head to wind with the Lifesling in the victims grasp. The victim had never seen the Lifesling before and "Night Runner" crew Mark Mannard talked her into the Lifesling. She was brought along side and it took (5) strong people (3) "pulls" to bring her aboard manually. From time of sighting the pick-up was slightly less than 9 minutes. She had probably been in the water 3-5 minutes before being sighted by the "Night Runner". She was immediately taken below and treated for hypothermia by the (3) medical professionals aboard the "Night Runner." She was scared and cold and exhibited signs of hypothermia. The "Night Runner" crew gave her lots of nurturing to help her get over her terror. Crew member Carol Kus, an Occupational Therapist, snuggled up with her under (5) or (6) blankets to warm and talk to her, and that probably was as important psychologically as it was medically. She was wearing a yellow lifejacket and red hat, which along with the timely recover, saved her life. The "Night Runner" crew did an excellent job of sail handling to effect the rescue. Without the Lifesling, "Night Runner" would never have been able to get her back.

Important points of the rescue include:

1. She was wearing flotation and red and yellow gear which could be seen. The lifejacket kept her afloat and saved her life.

2. In cold Puget Sound waters, (10) minutes usually leads to the onset of hypothermia symptoms. The "Quick Stop" is critical to accomplishing recovery within the (10) to (15) minute window.

3. The engine was used because the "Night Runner" needed the power to get to windward of the victim and was not able to get a jib up quick enough. In most of the case histories that used an engine in an emergency situation, a line wrapped around the prop. "Night Runner" verified the lines were aboard before starting the engine, and disengaged the engine once they were to windward of the victim and could do the circle under the main.

4. The victim was not familiar with the Lifesling. Because Mark Mannard talked to her calmly and clearly and explained the Lifesling and what she needed to do, she was able to get into the Lifesling on the first pass. Had she not understood the Lifesling, and a second pass may have been required, she might well have had more significant hypothermia symptoms and "Night Runner" might have had to send someone in the water to get her into the Lifesling.

5. The "Quick Stop" maneuver under spinnaker is essentially the very same "Quick Stop" that is utilized with a jib. It is easy to learn. You must know your boat and her performance characteristics and bring her quickly into the eye of the wind but not through the eye of the wind, and releasing the halyard which basically dumps the spinnaker onto the foredeck. IT IS ESSENTIAL TO STOP THE BOAT CLOSE TO THE VICTIM. Whether a well executed "Quick Stop" stopping the boat, or by broaching it, you must stay close to the victim. In this case, even though "Night Runner" went immediately head to wind, most of the recovery time was engaged in getting back to windward of the victim. In several of the case histories, the boats that were going downwind and lost people were simply unable to get back to them.

Case 82. This case history is told by Lois Smith, the individual who rescued her husband Rick Smith.

On February 18, 1995 at about 8:30 AM Rick and Lois Smith set sail for Oak Harbor, WA from Everett, WA. The wind was about 15 knots out of the East, with occasional gusts. They had hoisted the mainsail while motoring out of the river. Once around the piling, Rick installed the Autohelm and went about getting the jib on deck. Lois had just stepped out of the cabin and noticed that the boat was not on course. Rick was in the process of carrying the jib sail bag back to the cockpit, and, before she could grab the tiller, the main gybed. The boom hit Rick in the back throwing him overboard. He attempted to grab the lifeline with his left leg, but his momentum prevented him from hanging on. He yelled for Lois to throw a bumper, but she was unable to get it near him. (They were going 6 knots under main alone.) Lois gybed the boat, but she didn't feel confident that she could sail the boat up to Rick, so she started the engine, tripped the main halyard, and began feeding the Lifesling and line. Fortunately, Rick was able to grab the Lifesling on the first pass. As soon as Rick was in the Lifesling, Lois put the engine in neutral and began pulling him toward the boat. It took about 8 minutes to get Rick alongside from the time he had gone over. Once at the boat, Lois wrapped the Lifesling around a cleat, grabbed the main halyard and started winching Rick up. Lois got his head and chest out of the water and then could only make a fraction of an inch headway with each stroke of the winch handle. Out of desperation she transferred the line to another winch to get better leverage but again was unable to hoist Rick any higher. All this time Rick was trying to help her by telling her what she should be trying. Lois then put the halyard thorough a fairlead and around a 2 speed primary winch but could only get one wrap. Rick was worried that the Lifesling was cutting off his circulation to his arms and afraid that he might slip through the Lifesling. Lois even tried pulling him onto the boat, but of course that was just wasted effort. Luckily for them, Jim Ross on "Danran" saw their situation and tossed her a block and tackle. Rick was weakening rapidly, but was still able to tell Lois how to rig the block and tackle to the spinnaker pole mast car and fairlead the tackle. Once everything was in place, Lois gave one pull, and to her relief, saw that Rick had actually come up about half way. Lois gave one more pull which put her on her back on the foredeck, but Rick was on the boat. His skin color was dark and gray and he couldn't walk. Lois helped him crawl towards the cockpit and cabin. Immediately, she undressed him and covered him with all the sleeping bags on board. At that time, all she wanted to do was get hooked up to shore power and get Rick warm. He was very weak but coherent. Jim followed them back to the marina. It took 20 minutes for Rick to warm up enough to stop shivering and shaking. Once in the river, Lois knew Rick would be fine when he told her to slow down and put out fenders on "Blue J's" side and not worry about the dock side. Lois managed to dock the boat, and she had never docked the boat without Rick on deck. Lois warmed the boat, got Rick some hot soup to drink and helped him warm up, and then finally stop shaking. It was 10:00 AM. It scares her to think that their carelessness could have resulted in tragedy. They have had Lifeslings on all three of their boats, but they have never

participated in a Lifesling Clinic, and they almost never wear life jackets on the boat except in heavy weather, and Lois never took the initiative to learn how to handle the boat in an emergency by herself. Lois would like their experience to motivate others to learn proper safety and emergency techniques. They like everyone else, believed that nothing could happen to them: only to others. In Lois's words: "Well, not always!"

Rick comments further that the Lifesling system saved his life.

Commentary from Lois and Rick Smith, S/V "Pee Wee Magic" dated February 21, 1995, faxed from Charlie Bond at Ralson Cunningham, Bellevue WA.

Case 83. Tragedy struck this year's Vallejo Race, San Francisco Bay area, on Sunday, May 7, 1995, 20 year old Victoria Taylor fell off a boat crewed by, among others, her mother and stepfather. Despite help from tow other good Samaritan boats, Victoria drown.

Conditions on Sunday were gnarly, in stark contrast to the warm, spring weather of the Saturday run up to Vallejo, Sunday saw the fleet pounding uphill through steep, 5-foot chop and 20-25 knots of wind. In the words of one competitor, "It was more like a white water rafting trip than a sailboat race."

Victoria was on the rail of the Merit 25 "Pink Panther" with five other people. Her mother, Shellie, was driving. Near Point Pinole, the "Panther" tacked, Victoria missed her footing changing sides and in a heartbeat, she had gone through the lifelines and into the water. She was not wearing a lifejacket.

She managed to grab a stanchion momentarily, but the rough water tore the boat from her grip, and the distance between them increased rapidly.

Aboard "Pink Panther" everyone sprang into action. People were screaming "Man overboard!" and pointing. A life ring was thrown, but the wind caught it and blew it away. Shellie tacked the boat and tried to maneuver so that they could come up to Victoria from downwind, but the combination of wind, current and wave conspired to keep them at a distance. The decision was made to drop the sails and start the boat's outboard, but the prop was fouled almost immediately.

The crew aboard Lee Roberts' Catalina 30 "Alexandra" saw the commotion and diverted to the scene. Also choosing to drop their sails and maneuver under power, they deployed their Lifesling and circled Victoria, shouting at her to grab the line. This she did--but, significantly, she was not able to slip the Lifesling under her armpits. Holding onto the line, she quickly hauled to the stern of the boat where eager hands grabbed her foulie jacket.

Victoria was near the edge of consciousness by the time she came alongside "Alexandra", completely unable to help herself any longer. "Alexandra's" crew had rigged a tackle arrangement to hoist her aboard, but without the Lifesling in position, it wasn't going to work. The crew tried vainly to lift her out of the water, but to everyone's horror, she simply slipped out of the jacket and drifted away again. When "Alexandra" was thrown into gear to try and retrieve her, the foulie jacket wrapped in their prop.

By that time, another boat had arrived on the scene, Vern Zvoless' Tartan Ten "Lady Hawk", "We saw "Alexandra" circle Victoria and haul her in on their Lifesling line, so we stood by, circling slowly. The next thing we saw was a man jumping off "Pink Panther", " said Zvoless, "We started to head toward him, and as we got closer we looked over and saw her, face up, about 6 inches underwater.

The man who had dived in was Joe Chew, Victoria's stepfather. He grabbed her and the "Lady Hawk" crew grabbed him. They rigged their own Lifesling under Joe's armpits, but again were unable to get either of them aboard (This time partially do the fact that Joe would not let go of Victoria). In the end, all Zvoless's could do was hold on the arms, legs, clothes--anything that would keep Joe and Victoria's heads above water.

That's how thing stayed for the next 25 minutes until the Coast Guard arrived

The Coasties got Victoria aboard their boat and, after assurances that Joe was okay, started CPR and rushed her ashore. Joe transferred to the San Rafael Police boat, which had also arrived on the scene. The boat also towed "Pink Panther" into San Rafael, where Shellie and Joe were given the news that Victoria had died.

One of the ways Shellie dealt with the loss was through cyberspace. An avid cruiser of the Internet, she posted an account of the incident that to date has resulted more than 500 responses from all over the

world. Many responses had to do with her plea for everyone to wear lifejackets, which almost certainly would have saved Victoria's life.

"When one crewman was below and someone asked if we wanted him to get PFD's while he was down there, everybody shook their heads," she wrote. "Drowning happens fast. Victoria was a strong swimmer. We all thought we knew enough to rescue someone in time. We didn't, and we didn't. Please, please wear your PFD's."

Vern Zvoless is a believer. "I'm never sailing again where everybody doesn't have life jackets on," he says. He also noted the extreme difficulty of trying to get someone out of the water who could not help themselves. "Until you've dealt with it, you can't believe how hard it is. You're just not going to get somebody out of the water who's unconscious."

From Latitude 38, Volume 216, June 1995.

Case 84. August 21, 1992. Fran Corrington, Lee Cobb, Tom Burzyck rescued Richard Corrington.

Cruise from Charlevoix to Beaver Island, 16 kts. 5' seas.

Mr. & Mrs. Corrington were sailing when a large wave hit the boat, causing Mr., Corrington to fall overboard under the single life line. Mrs. Corrington threw him the Lifesling, lowered the sails and pulled him next to the boat so she could winch him in with the main halyard. At the same time, Cobb and Burzyck were passing on a commercial ferry and saw what was happening. They jumped into the water to assist Mrs. Corrington in getting her husband back on board. First aid was administered and Mr. Corrington was taken to a hospital where he was treated for hypothermia and shock, but later released with no complications

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 85. July 28, 1991. Tom Ciura, SUMMERTIME DREAM

20 kts, high seas.

Ciura and his family were heading home, in their power boat, in deteriorating weather when he spotted objects floating in the water. Upon closer examination, he saw it was six people, none with PFD's. He called the USCG and began to manually pull all six out of the water with the help of his family

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 86. July 6, 1991. Michael Filler, SPRING TIDE

20-25 kts, 3'-4' seas.

Upon returning to Montrose Harbor, Filler encountered a woman, with a PFD in the water. She was hauled into the boat and advised there were two others also in the water at some distance. They recovered the two males, one with a PFD, who had been in the water for over half an hour. Shortly after that, they found the power boat these people had jumped off of to rescue a baseball cap and then each other and returned them to the boat. One woman was on board but could not find the key to start the engine.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 87. July 7, 1990. David Brown, THE ARK

Cleveland Race Week on Lake Erie, 10 – 15 kts.

Near the end of the race an unusually large wave swamped an Ensign, leaving the crew in the water, without PFD's. Brown, who was on the committee boat and saw the incident, abandoned the race and brought all four sailors aboard his boat.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 88. Wyn Cooper, WANDER rescued Harry Levack.

20+ kts, 5'-6' seas.

Levack was correcting a problem in the cockpit when a large wave hit and he was thrown overboard without PFD. His crew had difficulty maneuvering the boat under sail, but Cooper was nearby and had

seen what happened. He dropped his sails, started the engine and picked Levack out of the water within 5 minutes.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 89. June 20, 1992. Ken Read, KODIAK rescued crew Brad Dimeo.

Newport to Bermuda Race, 11PM, 5-15 kts, gusty with rain squalls.

Dimeo was moving the genoa sheet and preparing to attach a new shackle when a violent wave hit, causing the genoa to snap full, launching Dimeo over the lifeline. A crew member located Dimeo with a flash light while Read tacked and slowed the boat. The bowman doused the genoa, and another crew took a GPS reading. A Lifesling was deployed to Dimeo who was always within visual and shouting range, so he was able to alert the crew he was alright. Read jibed the boat within three lengths Dimeo, performed a Quick Stop and pilled Dimeo out of the water with the entire rescue taking less than three minutes to accomplish.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 90. June 1992. Alex DelCastillo, LIVELY rescued John Ahrens (skipper)

Newport to Bermuda Race

Ahrens was on the foredeck, putting a sail through the hatch when the boat hit a wave and he lost his balance, falling backwards over the leeward rail. The crew was alerted, the Quick Stop performed and they pulled next to Ahrens. The Lifesling was deployed and with some effort, he was manually brought aboard by DelCastillo, who left the helm to help assist in bringing Ahrens aboard. The entire incident took about 30 —45 seconds allowing them to continue racing in under one minute.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 91. August 12, 1992. Robert Sellers, SNOW GOOSE rescued Jim & Carol Stoecklin.

Thistle cruising on Grand Traverse Bay, 24+ kts.

Sellers was cruising with friends when he saw a Thistle being sailed by a couple in their 60's. Due to the weather and the fact that they were traveling in the same direction, sellers kept an eye on them. About 3 miles from Newport, the Thistle capsized and turtled, leaving the couple clinging to the bow. Both had PFD's, but Mrs. Stoecklin didn't swim. Sellers returned to the Thistle and assisted the two cold people on board without incident in less than ten minutes.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 92. February 1992. Morgan Stinemetz rescued Bruce Kestin

Racing in Sarasota Bay, FL.

Kestin went through the lifelines while leaning on a winch which moved. Stinemetz performed a Quick Stop, turned the boat back to Kestin, who was able to climb the swim ladder and they resumed racing.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 93. August 1989. Jack Klang

Traverse Bay – instructor

Klang was instructing on Traverse Bay when a squall hit, bringing 40 kt winds, rough seas and torrential rain. They took sails down and started the engine. Half a mile away they noticed an overturned catamaran with 3 people in PFD's in the water. They arrived within 15 minutes, threw a heaving line, which one caught and was hauled aboard over the stern. The other two were removed from the water in the same manner. All three were treated for hypothermia on board and shortly after, when they reached the marina. No hospitalization required.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 94. August 1992. Dan Spigel

Lake Texoma in Texas – morning

Heading out for a sail with his engine on, Spigel noticed objects in the water at a distance. He motored over and saw an overturned dingy with two men and two boys in PFD's in the 45 degree water. Spigel threw a Lifesling and a homemade lifeline. Each person was brought manually over the stern and treated for hypothermia on board and then by waiting paramedics on the dock as soon as they arrived. The paramedics said that if the boys had stayed in the water for 5 more minutes, they would not have lived.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 95. August 28 1992. Barry Schultz rescued skipper John Spadaro

HYRA Cat. Honolulu to Molokai Race (2400) 25 kts, 8' – 10' seas.

Spadaro was sitting on the leeward cockpit combing, in full foul weather gear (no PFD), monitoring the GPS when a wave washed him silently over. Schultz noticed he was missing and went over to him. Mrs. Spadaro put PFD's in the water after calling the USCG for help. They furled the jib, started the engine and headed back to Spadaro, but he was 400' – 500' away and hard to find in the waves. As the boat neared, Spadaro was able to yell out directions that were relayed to Schultz. Mrs. Spadaro mistakenly threw over all the PFD's so there were none to pass to him. The Quick Stop maneuver was used on the second pass. A crew member threw a line which was caught by Spadaro who pulled himself to the side of the boat. He was manually pulled to aboard by Schultz and another crew. The incident took 6-8 minutes.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 96. July 21, 1992. William Lawler SAN DAD rescued crew of Peter Dorenbos' MOONRAKER

MORF – Chicago. Noon, 15 – 18 kts, rainy and blustery.

22' MOONRAKER was hit by a sharp, strong gust and three big waves in succession, causing her to capsize then turn turtle when her keel folded up. Despite efforts to right her, she took on water and sunk, leaving five in the water, only one with PFD. Lawler dropped sails upon seeing the accident and powered over. By use of a line he had three aboard within 5 minutes while the other two got out by grabbing onto the boat and being pulled aboard.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 97. May 31, 1992. Phil Graf, XANADU rescued Ben Wells, DAWNTREADER

San Francisco Bay, afternoon sail, 30 kts – gusting 40 kts.

Wells who was wearing no PFD was struck unconscious by the boom and tossed into the water. He awoke a few minutes later and swam toward the boat. All life rings and flotation cushions were stored below, out of reach of crew member Ms. Parker. Graf noticed Wells in the water, brought XANADU alongside him, his crew Ms. Drotleff, threw a horseshoe buoy and they lifted him out of the water. No injuries.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 98. July 26, 1992. George Erich, KOALA FLYER rescued crew member.

Morning of the Chicago-Mackinaw Race, light winds.

An accidental jibe during a watch change threw over a crew member who had no PFD and no harness. Erich got a Loran fix, tacked the boat, threw a line over and started the engine. The victim reached the line and was pulled aboard by two other crew members. Entire incident was less than five minutes.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 99. June 2, 1992. George Petkovic, ZOT rescued Cindy Sims; Richard Gruntsen, VOODOO rescued John Poast.

Chicago-Waukegan Race, 22 kts, 6' waves.

Sims, who was not wearing a PFD or harness, was thrown over when a rogue wave caused an accidental tack. Petkovic performed the Quick Stop after throwing a line and horseshoe to her, but the waves took the line and they sailed past her too quickly. Poast, who had a PFD but no tether, jumped in to help keep Sims' head above water. On ZOT's second pass, Sims was pulled aboard by 4 crew members, but Poast lost his grip on the boat. They tried to start the engine, but the first line thrown had gotten fouled. Before

they could start the rescue, VOODOO already had Poast aboard. They had seen the events, started their engine, and reversed course with sails up. They dropped the jib and main, pulling up slowly, and threw a heaving line which Poast caught on the second try. He was pulled to the transom and heaved aboard annually. No injuries.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 100. August 3, 1991. Jim Gronseth ACTIVE rescued crew Rick Valerga

AM during cruise from Annapolis to Newport. 17-20 kts. 4'-5' seas

ACTIVE came off it's heading to reef #1 main. During the reefing, the wind shifted causing the boom to swing across and knock off Valerga. Gronseth turned into the wind to perform the practiced Quick Stop. Also, the Seattle sling was deployed over the stern pulpit. The engine was started to speed the rescue. The sling encircled the MOB during the turn. Main and jib were dropped. Valerga swam a stroke to reach the sling and was hoisted aboard by the stbd. Spin. Halyard. It all took less than four minutes.

Source: US Sailing memo from Chip Barber to Siobhan re: Rescue Medal recipients 1993.

Case 101. July 1993. Joe Cutcher, CHEAP SHOT.

MORC International Championship, Lake Erie . Up to 60 kts. 6' seas.

Around 5:00 PM, while racing in the 27-foot sloop NITRO caught a rogue wave and dove 30 degrees into the lake, losing steerage and then rolling onto its side pitching two crew members (Comer & Modrowski) into the water. Both were wearing PFD's. NITRO righted itself and the crew hauled down the sails. One of the lines wrapped around the prop so the skipper (Fred Hibbert) dove in to untangle it.

CHEAP SHOT skippered by Cutcher was racing nearby and noticed the two sailors in the water. CHEAP SHOT's crew immediately threw over a horseshoe buoy , a flashing strobe light and man-over-board pole, then started the motor. After circling the two a few times, they were able to throw Modrowski a line and heave him aboard. They made a few more passes and did the same with Comer.

NITRO's crew in the meantime had lost sight of the two victims and did not know they had been rescued until CHEAP SHOT came along side them about 15 minutes later.

US Sailing press release October 8, 1998.

Case 102. July 17, 1993. John Callahan rescues Craig Heff.

PICYA Big Lipton Trophy Regatta, San Francisco Bay, 30 kts.

Heff caught a glancing blow to the side of the head by the boom while grinding the pedestal which during the race aboard SWIFTSURE. The blow tossed him over the side without a life jacket. Callahan was windsurfing behind SWIFTSURE and had been watching the race. Within 15 second of the incident, Callahan coasted up to Heff who was alert enough to grab the sailboard firmly.

It took SWIFTSURE about 5 minutes to get back to pick up Heff, but without a life jacket, 30 knots of wind and being dazed by the blow to the head, it was fortunate Callahan was there.

US Sailing press release October 8, 1998

Case 103. September 1993. USNA FROLIC

Chesapeake Bay.

FROLIC was traveling north past Chesapeake Bay Bridge when a power boat passed them at a high rate of speed. The boat cut across the bow of FROLIC and then hit a large wake, and broke apart as it landed. 3 of the 5 occupants fell off the boat when it landed, two more were still aboard the sinking vessel. Ensign Kurt Muller showed the plebes how to use the jib and spinnaker lines to winch the people aboard. Another powerboat had helped the two remaining occupants of the sinking vessel and had radioed the USCG for further assistance.

US Sailing press release October 6, 1998.

Case 104. May 24, 1996. Geiger Cove, Catalina Island

Don went over the side in "lumpy" seas while trying to clear the main halyard. He was wearing an inflatable life jacket, which he inflated by pulling the lanyard. Margie promptly deployed the Lifesling and circled the victim (still under power. Unable to use the winch Margie pulled Don to the boat hand-over-hand. And then Don rebounded the vessel using the boarding ladder.

Source: Santana/July 1996 (Magazine article).

Case 105. June 13, 1998 London, England 22-27 kts.

Eric Tabarly was lost at sea after being knocked over the side by either the boom or the gaff of his yacht Pen Duick I. He was sailing to Ireland from France, with four crewmembers. At 1:00 AM he went up on deck to reduce sail. Throughout his sailing career he never wore either life jackets or harnesses. A crewmember apparently saw Tabarly go over the side and threw a life jacket. The crew attempted unsuccessfully to turn the boat and find the MOB. They were later joined in their search by the British Coast Guard, but Tabarly was never found.

Source: NW Yachting July 1998