NOAA Ship Albatross IV

Introduction

by Linda Despres
Fishery Biologist, Woods Hole, MA

Why is Albatross IV important to the history of Woods Hole? In 1885, construction of the first permanent US marine laboratory for conservation and environmental research was completed in Woods Hole.

This laboratory allowed the largest research vessel at the time, the 234’ US Fish Commission Steamer Albatross, to periodically use its docking facilities as a home base. Since that time, until Albatross IV was decommissioned on November 20, 2008, there was an Albatross vessel associated with the US government’s research facility in Woods Hole. Albatross IV plied the waters off New England down to North Carolina for 46 years conducting research on various fish, marine mammals, sharks, plankton and many other species.

It was home (permanent or temporary) to hundreds of local crew members and thousands of local scientists and volunteers. The vessel profoundly affected their lives and some of their stories have been compiled into a booklet about Albatross IV to commemorate its decommissioning. The full text and illustrations can be found at http://www.nefsc.noaa.gov/press_release/2008/SciSpot/ssalbatross/

The booklet that accompanied the decommissioning ceremony also includes the speeches of the honorary guests and has this eloquent tribute from the vessel’s last ensign:
The End of an Era

Ensign Jonathan R. Heesch, NOAA

For forty-six years the name *Albatross IV* has been synonymous with fisheries research on the Atlantic seaboard. From Hatteras to Halifax many have found the semiannual appearance of this ship a familiar and welcome sight off of their coast. The internationally known *Albatross IV* has collected the largest and longest set of data on various fish and invertebrate species along the East Coast of the United States. This data is the basis of a multitude of scientific papers and is one of the data sets used as a basis for fisheries regulations in the Northeast.

*Albatross IV* was the first purpose-built research stern trawler in the world, and when commissioned in 1963, she was the premier fisheries survey vessel. Built specifically for the Bureau of Commercial Fisheries by the Southern Shipbuilding Corporation of Slidell, Louisiana, in 1962 she was sailed by her first master, Captain Walter Beattay, from Louisiana to Woods Hole, Massachusetts.

Through the years there have been changes. The Bureau of Commercial Fisheries became the National Marine Fisheries Service. NMFS fell under the overarching umbrella of environmental stewardship that is now the National Oceanic & Atmospheric Administration (NOAA.) The Woods Hole laboratory is now known as the Northeast Fisheries Science Center and is a division of NOAA.

*Albatross IV* has taken multiple trips to the yards to receive a number of physical modifications. These modifications enhanced the ship's ability to complete her mission, and also provided a more welcoming and hospitable environment for both scientists and crew. The largest modification was the enclosure of the upper deck and winch controls in the mid-1970s. This change led to the creation of today's computer room, electronics technician shop, ship's office and
eight years and three weeks ago [1920] she was decommissioned at the same location where the heir to her name, Albatross IV, will undergo the same ceremony today.

The Early Days: Skeptics, Bureaucrats and the Cold War

George Kelly, retired Fishery Biologist, Woods Hole:

Thanksgiving Day morning, 1962, was a red-letter day for everyone at the Woods Hole Fisheries Lab - the new research ship Albatross IV was scheduled to arrive for research service in the North Atlantic Ocean to replace the venerable Albatross III that was removed from fishery research service in 1959.

We, the staff at the Woods Hole Fisheries Lab, had been directed to compile lists of equipment and capabilities required for the proposed Albatross IV to perform as a first class research platform. The officers of the bridge, staff of the engine room and electronics

lounge. Albatross IV has supported many different NEFSC missions, but her bread and butter has always been the Bottom Trawl Survey.

Now, after two years of preparation and calibration work, the survey is ready to be turned over to NOAA Ship Henry B. Bigelow. Thus ends a long and illustrious line of ships that have carried the name Albatross. In 1883 when US Fish Commission Steamer Albatross was launched, she too was on the cutting edge of technology in both nautical and scientific frontiers. She sailed not only along the East Coast of the US, but down the entire coast of South America, through the Strait of Magellan, and north towards the Galapagos. She continued her survey around the Pacific with stops in San Francisco, Anchorage, Honolulu, and throughout the Philippines and Japan. After a brief stint in the Navy during the Spanish-American War, she returned to Woods Hole to sail in the service of fisheries science where eighty-

Research Vessel Albatross III (originally named Harvard and later Bellefonte when it was lengthened from 140 to 179 feet.) Courtesy NOAA Fisheries Service, Woods Hole, MA.
department, fishermen, water chemistry scientists, galley and dining facilities chef, and all collectors of biological samples were required to submit lists of any new ideas or equipment that should be considered as vital to the successful operation of the new ship. Once these lists were compiled and passed along through channels, the responsibility for further action was passed to the bureaucrats in the Gloucester, MA, Fisheries Regional Office and the Central Fisheries Office of the Department of Interior in Washington, DC.

After the money for construction of the ship was in sight, it became time for the politicians, high-ranking bureaucrats, boat building facilities and many other interested parties to join in determining where and when the new ship would be built. We at Woods Hole were used to hearing ship building names like Bath Iron Works in Maine; Quincy’s Fore River shipyard; Bayonne, NJ; Norfolk, VA; and names around the Great Lakes. Instead, we now heard Pascagoula, MS; Morgan City, LA; Slidell, LA; New Orleans and several others that required our checking the atlas to determine where they were located. There were also rumors such as: “Not really a shipyard,” “They build very good shrimp boats.” “They build them upside down in a field next to a bayou and when the welded hull is completed, they flip them over then slide them into the bayou where they do most of the finishing work.” “By the way, the fellow who is boss in one of the yards is dressed in a cowboy hat, khaki shorts and cowboy boots.” [Ed Note: Mr. Cunningham, Slidell Shipyard Superintendent.] After weeks of dickering between New England and Gulf Coast politicians, it was decided that the contract to build Albatross IV would be awarded to the boatyard in Slidell, LA, and the man in charge would be the cowboy!

Woods Hole Fisheries Lab Director Herbert W. Graham naturally was deeply involved in assuring that the ship project would go well. He appointed Arthur Posgay, our sea scallop expert, who had previous engineering experience elsewhere, to be our Clerk of the Works to keep an eye on the progress of construction for Dr. Graham. Similarly, Jim Crossen, our Electronics Engineer, who had served aboard
Albatross III in that capacity for several years, was directed to observe the electronic installations going into the ship. This meant that as the months passed, both Art and Jim spent a lot of time at the shipyard with the new ship.

When it came time for the 187-foot welded steel hull to be turned over, Graham, Posgay, and Crossen were on hand to watch the delicate process. To their horror, in the middle of the flip-over, the machine operators lost control and the whole load crashed to the ground! All was not lost however, because any damage to the huge eggshell hull was readily fixed.

As work progressed on the ship, the crew was assembled and each department was activated, so soon the Albatross IV was livable. She was moved from the bayou into a nearby dredged ship canal to be ready for her first sea trials. The bow-thruster and kort nozzle (the propeller-rudder assembly) were both new to Captain Walter Beattiey, but were marvelous tools in the hands of the trial skipper, the 6'2", rangy and relaxed "cowboy."

Art Posgay, who was aboard for the sea trials told me, "The cowboy ducked into the pilot house. Dressed in his usual attire, he perched himself on one leg at the helm and signaled to the engine room for the power he wanted. With the bow-thruster and kort nozzle working perfectly, he eased the ship away from the dock as smoothly as I have ever seen. I never saw anyone master Albatross IV the way the cowboy did!"

Jim Crossen,
retired Electronics Engineer, Woods Hole, MA:

In October, 1962, a meeting was held aboard Albatross IV at the Southern Shipyard Corp. The meeting was for the purpose of discussing a list of deficiencies prior to acceptance of the vessel. Just as the meeting
Arrival in Woods Hole

George Kelly,
retired Fishery Biologist, Woods Hole:

Now with all of these events behind us, we were once again on the Woods Hole Fisheries dock watching the first arrival of a new ship, Albatross IV. Dr. Graham and Art Posgay had gone out earlier in the small runabout, Merlu, to board the ship and were now in Vineyard Sound preparing to pass between Nobska Point and Nonamesset Island into Woods Hole Harbor. At this point the sky was cloudy, but it was not raining. The ship looked beautiful against the darkening water and sky, and her distinctive profile stood out majestically. The ship turned into Woods Hole passage and Captain Walter Beattey, without the cowboy at his side, began his slow and tentative move towards Woods Hole. At this point, the skies opened and it started to rain. The closer the ship came towards the dock, the harder it rained, and even those of us in foul weather gear were getting damp. As the weather worsened, the crowd on the

ended, a telephone call came in from Washington: Senator Stennis of Mississippi had intervened. We were ordered to accept the ship, as is, and to make preparations to sail to Woods Hole.

Things were heating up in Cuba at this time. Mr. Gharrett [from the Fisheries Regional Office in Gloucester, MA] told Arthur Posgay and Jim Crossen to fly back to Boston with him although they had planned to sail back with Albatross IV. Jim had been assigned as the Radiological Defense Officer for the Department of the Interior in Region 1 (New England.) There was a plan in the event of a national disaster to implement the use of Geiger counters in all fishery labs. On October 18, 1962, conversations were ongoing between President Kennedy and Soviet Foreign Minister Gromyko. On October 27, 1962, President Khrushchev proposed a trade-off: if the US would dismantle its missiles in Turkey, the Soviet Union would not install missiles in Cuba. On Cape Cod, the US Air Force was tracking Russian ships sailing down the East Coast to Cuba with supplies. Permission was given to allow Albatross IV safe passage around the Florida coast and up the East Coast to Woods Hole.
dock began to thin out. By the time Albatross IV laid alongside the dock, almost all of the ship celebrants had retreated to their cars and many with wet and cranky children had set off for home.

**Stalled at the Dock**

*Pat Towhig,*

retired Electronics Engineer, Woods Hole, MA:

*Albatross IV* had quite a few problems with it when it first arrived in Woods Hole (she stayed tied to the dock for the first 6 months.) It was once suggested that the ship's side be painted so that it looked like Penzance Point and no one would notice that it was at the dock! When *Albatross IV* finally started to go out, the ship's crew had a little jingle that they would

First Officer Robert Cusick showing Secretary of Interior Stuart Udall the bridge equipment during a tour of *Albatross IV.* Courtesy NOAA Fisheries Service, Woods Hole, MA.

sing on their way back to port, “Call Perkins, Fay and Quinn...the *Albatross* is coming in.” (Perkins was the Caterpillar representative, Fay was the plumber and Quinn was the electrician).

**Commissioned in Washington, DC**

*Robert Cusick,*

*former First Officer, Albatross IV:*

We arrived at the dock on Thanksgiving day, 1962. In late May, 1963, they sent us to the Anacostia Navy Yard in Washington, DC, to show off the new vessel. It was a great affair, and it went on all day. We had strung up a net, and had many exhibits, and the crew explained to the visitors what we would do. Many Washington officials, senators, and members
of the House of Representatives came and feasted on the best fish meals that you'd ever tasted. The NMFS had a corps of cooks who concocted recipes for a magazine that was put out by the service, and they set up tables in many places throughout the ship – they were a great bunch. When Stuart Udall came aboard, I spent a lot of time showing him the ship and the gear. He asked me, as he had several children, if he could bring them down to see the ship when things quieted down, and I told him, “sure.” Later on he came back with them, and they had a great time. Some of them were holy terrors (typical boys) – they were even climbing the mast! Now, in the fall of 2008, I was watching the Jim Lehrer show on PBS, and they were interviewing three newly elected Senators – one of them was Mark Udall. I believe he was one of the Udall boys who came on the ship. He’s the spitting image of Stuart!

“**This is Real Science**”

*Don Flesher, retired Fishery Biologist, Woods Hole, MA:*

There were dogfish catches, maxing out at 25,000 pounds. Trawl liners were shredding, winches straining. Years earlier there were large catches of cod and haddock. The replacement of dogfish for cod and haddock (biomass flip) over a series of years was something I witnessed...dramatic and sad. I recall a 12,000 pound catch of sea robins. There were some species we tried to keep from killing: sturgeons and striped bass. I recall one large catch of striped bass. I believe we got them all weighed, measured and
thrown over before any died. Whales: even after decades of going to sea, I never failed to be highly impressed at seeing them...magnificent life forms.

Linda Despres,
Fishery Biologist, Woods Hole, MA:

When I first came aboard Albatross IV, it was only 10 years old but it already looked like it had had a hard life. Although I didn't take many inside shots, my mind's eye still can recall what certain spaces looked like. Starting on the port side and stepping into the wet lab, it pretty much was always a wet lab. At one time in the late 70s, we tried to do all of our weighing, measuring and dissections inside this room, so we set up a sloping conveyor system with metal rollers on it so we would push or pull the wire baskets of fish up the sloped ramp and immediately the baskets would land on top of a giant circular scale that was on a pedestal. The baskets would then be pushed along a horizontal ramp of metal rollers and the cutting would take place in various corners of the room and next to the sink. There was also a large multi-shelf stainless steel rack where all of the empty and full stomach jars were stored. We called it the 'bread rack.'

This attempt to work inside didn't work out well since people needed more fresh air. Plus the inside decks got slippery with the gurry and blood (we didn't have non-skid decking back then.) Also when whole fish came in, pieces and parts of fish had to go out the double doors which sometimes caused a basket traffic control problem on the ramps.

Remember those rusty metal baskets that we used to hang from a hanging strap with S-hooks that one (if you were Andy Thoms) or two people could hoist up to a suspended and moving metal beam balance scale? You would carefully move the balance weight to record to the nearest whole pound as the whole beam balance (with its three-foot arm) and pendulum-like basket was swaying to and fro in rough seas. The trick was to catch everything on the downswing and lift the hanging strap and basket off the scale without getting hit in the head (or other
Then there's the fun of being out on deck, standing in a spread eagle position, with buckets and baskets of fish floating by or bumping in between your legs while you have a knife in one hand, holding on to the fish and measuring board with the other, or with your whole body - and let's just add that the wind is howling, your nose is dripping, and your fingers (& a few toes) are also frozen digits. On top of all of this, you've lost a few people who are trying to find a dry place to quietly heave (or die) or as we, in the business like to say, "chum" their last meal. This is REAL science and life at sea! Who would ever choose to work a 9-5 job on land? This old vessel with its unique personality and movement has certainly had its share of ups and downs (and side to sides.) It has provided countless stories and endless hours of entertainment to thousands of us at sea and on shore. This one has come through every storm and has brought us all home safely for the last 46 years.

Nancy McHugh, Fishery Biologist, Woods Hole, MA:
Creating a 'chain gang' to move boxes from the scientific freezer in the winch room to the main deck.... who made those boxes so heavy?!...before the days of the flash freezer, we had to lug samples down below after every station...leaning up against the stack in the wet lab to warm up...getting attacked by the slimy body parts) as the balance weight would fall to one end and become a living baseball bat. And those circular scales too...if you didn't watch the dial closely, a seemingly 5 pound bucket of fish could be misread as 15 pounds. It was a 20 pound scale that went only from 1 to 10 pounds so you would have to see if the scale's pointer did or did not go past the 10 mark. Now with digital scales, we've gone from not being able to measure anything that weighed less than one pound accurately to being able to weigh young-of-year fish to one one thousandths of a gram.
gloves strung up by the stack...trying to get the floor clean in the wet lab...the old wooden secretary aft of the hood...catching so many dogs that the net could not be brought onboard...crawling inside the net to pull dogs out...the lead fisherman playing, “Who Let the Dogs Out” when we had a bagful...the annoying pitch of the jilson when we were trying to work up fish on the back deck...watching the fish from the bag fall all over the deck instead of in the checker...getting covered in cold spray when working at sampling location 3...bruised legs from getting pinned by sliding baskets when the seas were less than optimal...having to remove wet gear while in the middle of processing to get the trawl log on the bridge...I remember chasing a $10k Marel scale around the back deck when it became unleashed in heavy seas and nearly going overboard in the process.

October 7, 1999, while chief scientist on the Fall BTS [Bottom Trawl Survey], I received word from

**Circular Current**

*Don McMillan,*  
*Fishery Biologist, Sandy Hook, NJ:*

When my daughter, Caden, was attending 2nd grade at Navesink Elementary School, I approached her teacher, Mrs. Melissa Ford, with the idea of having the kids write short bios on waterproof paper, stuff them in wine bottles and cork them, and I would arrange for the bottles to be tossed overboard during the 2000 Spring Groundfish Survey (we were in compliance with trash overboard regs!) I shipped the bottles to Linda Despres. She transferred them to John Galbraith, chief scientist, Spring Groundfish Survey. John jettisoned the bottles at station 1, Hudson Canyon, off the NJ coast. Some thirteen months later, the first bottle washed ashore at the resort beach between Carcans-Plage and Hourtin near Bordeaux, France. This bottle was found by two young sisters, Karel and Tea Leenhouts from Holland, who were on a holiday with their parents. Alyx Wolfe was the lucky second grader from Navesink. Unfortunately, she had moved to Alaska before the postcard arrived. In 2004, the second bottle washed ashore in Cuba. That’s four years afloat! The young Cuban father wrote Mrs. Ford a great letter, and included a picture of his young son as well as the original bio – classic 2nd grade thoughts.
the lab to locate and retrieve a satellite buoy which had released from an entangled right whale (#2030). The buoy had been attached to the whale for twenty days. Try looking for a 14-inch diameter white ball in the ocean! Success was achieved 76 miles E of Barnegat Inlet, NJ. We located it using satellite positions and pings transmitted from the buoy. The skeleton of this whale is now on display at the Paleontological Research Institution in Ithaca, NY. http://www.priweb.org/whale2030/whale_tale.htm

**Julie Long**  
*Teacher-at-Sea Volunteer, Guiderland, NY*:
Really late last night I woke up to use the bathroom. I didn’t turn on the light because I didn’t want to bother the people in the adjoining cabin. I’m writing this because when I flushed the toilet, the water glowed. The water gets pumped in from the ocean and there were bioluminescent plankton in the water. It was kind of neat.

**Joseph Kunkle,**  
*Professor, University of Massachusetts, Amherst, MA*:
I was really excited when I went out on my first couple of Groundfish Surveys on *Albatross IV*. In the spring of 1988 on Leg IV, my first cruise on *Albatross IV*, we came upon a big hagfish. After opening it up, I found some lozenge shaped structures that were about an inch long and I thought, “Wow, are these metanephric kidneys?” Going to the books as a last resort, I found that they were not kidneys; they were the anomalously large oocytes of the hagfish. I went further in the literature to find the first descriptions, which I thought might be in some German morphology journal, but to my surprise the first mention of these strange oocytes was in one of the earlier issues of *Science*, reported by the original *Albatross* on one of her trips through the Panama Canal to Monterey Bay.

**Storms at Sea...and Porpoises**

**Linda Despres,**  
*Fishery Biologist, Woods Hole, MA*:
Every ship has its own unique “feel” or “rhythm” to it during its good and bad days. Even when tied to the dock, *Albatross IV* has a slight movement that you don’t consciously feel but that your body slightly compensates for. Even on flat calm days at sea, the legs and torso make incremental adjustments, but it’s on those snotty days that the whole body gets involved in a battle to either stay upright or horizontal. How many of us have tried to “run” up the stairwell only to feel like either a feather weight one minute and a heavy weight the next? How many
times have you leaned over at a 45 degree angle and still been 'standing'? How many times have you had a body check with an unseen protrusion or door knob or low ceiling and either saw stars or nursed a bruise for a week? Ahhh...those are the days! Sailor scars to entertain our shore side family and friends!

How many of you first made the mistake of sitting at the head of the scientific mess table when the ship took a roll and everyone's tall plastic cup spilled its contents and headed in your direction? Some of us got quite good at being able to cut our food, take a bite and hold on to plate, glass and silverware in between rolls. A bowl filled with soup was another challenge. How many of us forgot to latch the mess room fridge door and ended up on our knees trying to catch rolling jars and bottles spilling their contents all over the messy mess room deck? How many times have you had sandwiches for a meal when lunch or supper (as well as dishes) were all over the deck and a blue haze of profanities emanated from the galley walls? How about those 'magic' drawers that would open in the middle of the night either in your cabin or wet lab and again regurgitate their contents? Ahhh, remember those days when we preserved stomach samples in formalin and broken shards of glass, gooey guts and formalin would be sloshing over the deck...who was the 'lucky' one to be able to hold their breath long enough to clean that mess up? How about waking up in the morning and seeing how your cabin had been 'reorganized'? The engine room must be filled with 'lost' items that never reappeared after particularly bad storms.

How many 'headers' have you taken either in a standing or sitting position? More than once I've slid across a room in
Jose Pereira, Fishery Biologist, Milford, CT:

One trip I was on really brought home how powerful the sea can be and how insignificant we can be. We were out on the Northeast Peak of Georges Bank and the weather was turning nasty. Seas were running 12 to 15 feet and we had the net out and hung up. Every time we went down in the trough the cables would go slack; when we came up on the crest of a wave they would go taut and vibrate like guitar strings. Eventually the cables pulled one of the massive bronze blocks out of the A frame and the cable whipped over and bent the angle iron legs on the checker. Luckily no one was on deck at the time or they would have had their legs broken. We eventually pulled loose and had to steam back to Woods Hole because we had no spare block aboard.

a chair or extended my arms to cushion an encounter with a bulkhead...one such encounter landed me in a Yarmouth, Nova Scotia, hospital....my shipmates were very grateful that I had sacrificed myself for a port call! How many sleeping positions did you discover that you could curl, bungee cord, wedge yourself into? Pity the poor souls on those top bunks who also had to fear being thrown over their 'crash' bars! Remember how the conversation of the day centered around how badly you slept or how much damage your room suffered. How many times did you wake during the night to try to find that one irritating item that was somewhere in the cabin which would roll endlessly around? How many times did you think that you saw a fish swim by your shower porthole during that last roll while you're trying to suds up, rinse off and not be hit in the head with shampoo/conditioner bottles or end up with one foot in the toilet?
Joe Miller was the captain on the first trip I ever took on a NOAA vessel. The first trip is one of those things you never forget. Eleven days on Georges Bank in rough seas is something to remember. My first cruise was in October, which is not the best weather month of the year, but it's not the worst either. The part I most remember about the trip was the very first night. I was bunking with another novice from the Gloucester Lab and the ship was held in port because of the high winds and rough seas. They decided to sail around midnight. We were safely, or not so safely, tucked into our bunks. I was in the top bunk and there was no chicken bar...or at least I didn't find it...so I tucked the blankets in and slept with my knees bent to help hold me in the bunk as the ship rocked. Around two or three in the morning, the ship suddenly changed course and rocked furiously. We could hear everything crashing in the galley and/or storage room. The PFDs [personal flotation devices] fell from the top of the cabinet and the strobe lights started flashing. It was an eerie feeling in the pitch black with the blue strobes flashing and the sounds of everything crashing. What a way to start off a trip!

Derek Sutton,
former Commanding Officer, Albatross IV:
During one of the bottom trawl surveys, while we were operating around Yarmouth, Nova Scotia, a storm came up the coast. While we will often ride out gales, we run from storms. We thought it was going to be the typical one day deal, so we decided to anchor in Saint Mary's Bay (on the northwest corner of Nova Scotia,) which promised to be very protected from the easterly winds which were forecasted. Well, the winds ended up being from the northeast (not good) and the storm lasted three days (lots of antsy and angry people making less overtime.) Anyway, the anchor held firm, and on the third day we weighed anchor to finish the survey.
Fishermen working on back deck during a snow storm. Courtesy NOAA Fisheries Service, Woods Hole, MA.

Chief Bosun Rondeau with the anchor detail on the foredeck called up to the bridge and said, “Captain, you had better take a look at this.” When I got down there, I saw that the ship’s riding pawl (a ratcheting mechanism intended to keep the anchor chain from being pulled out of the ship) had been peeled back from its mounting point on the foredeck. It looked like the bent back top of a sardine can. No one knows when it happened, but it did open the port side crew’s head to the wind and rain - no one seemed to notice. The deck crew and engineers quickly sealed up the hole with damage control wedges, caulking and plastic bags, then we went on our merry way to finish that leg of the survey.

Jose Pereira  
Fishery Biologist, Milford, CT:

Another time we were out on Georges and we were shutting down operations due to the weather. We were going to go hide somewhere until the storm blew over. We got word that a fishing boat had lost its steering, put out a sea anchor, and had called the Coast Guard for a tow. The Coast Guard asked us to stand by until they could get there. They were 20 hours away. We sailed around in circles for 20 hours in 20 foot seas (the tops of the waves were even with the portholes in the Scientists’ Lounge) and got beat up slam dancing with the bulkheads in the passageways. No meals were served, only sandwiches. Eventually the Coast Guard got there and took the fisherman back to port. We just went back to work.

Patricia Gerrior  
retired Fishery Biologist, Woods Hole, MA:

There was a real Christmas tree aboard on this trip. So as chairs and other items flew around the vessel as we heaved and pitched, we did have the smell of spruce to comfort us. The weather was typical De-
ember and the captain (could it possibly be Capt. Walter Beattey?) told Woods Hole the weather was so bad it would take us at least 3 days to get back. We were reportedly jogging in 25 foot seas with 40-50 knot winds. And then the snow came! We did see Christmas ashore though despite these reports.

Denise Grucio
former officer, Albatross IV:
I remember shortly after I reported to the A4 we had to take the ship down to the shipyard down in Norfolk. The seas got so rough...it actually ended up being the biggest seas I ever saw during my tour on board. I remember standing watch on the bridge hanging on the best I could. The chart kept falling on the floor. We got hit by some pretty big waves...maybe they were 20 feet. When I went back to my stateroom I found that a large metal file cabinet had been thrown across the room and made a big hole in the wall!

There was another time off Georges Bank when we got into some heavy seas. Jack Moakley was on the bridge talking to me about what our plans were for the day when we heard a huge noise and felt a big thud that caused the ship to shudder. We don’t know if it was a rogue wave or maybe something floating in the water but it caused all the stores in the forward storage locker (like glass bottles of spaghetti sauce) to fall and break all over the deck. When we pulled into port we found a new dent in the bow of the ship.

Jose Pereira,
Fishery Biologist, Milford, CT:
It wasn’t all bad. Once on an old Northeast Monitoring Program (NEMP) cruise, we were out on Georges Bank in July. It was near sunset and flat calm. The water looked like a mirror. Suddenly there were porpoises everywhere. There appeared to be hundreds of them and they were headed west, directly into the sunset. We were headed north, I think. They took about 20 minutes to cross our course. As I watched them swim off, one porpoise at the tail end decided to take flight, did a double somersault as a grand finale and they were gone.

Hazards to Navigation
Craig McLean,
former Executive Officer, Albatross IV:
Albatross IV was working hard in the weather, in winter. A snow storm that wasn’t abating wasn’t the problem, it was the howling westerlies that were going to follow and make gale conditions for a few days. So, in the night, Albatross IV went into Governor’s Island at about 0300, heavy snow. I had to pass my final exam under Captain Frank Arbusto and he had me dock the ship in the only space available, right behind the NOAA Ship Whiting, a hydrographic
ship. I had to back the ship up-current, and then slide it sideways against the current to put it away. Somehow I made it. When we got to the pier, the Whiting guys, a few of them being up on watch, met us with the criticism that we “had a little rust back aft.” The lead fishermen, Manny Botelho and Sammy Reed, were offended, and I was proud to offer the observation that, “You have to go to sea to get some rust, which the Whiting might try.”

Derek Sutton,
former Commanding Officer, Albatross IV:

We were returning home just after midnight; westbound through Great Round Shoals Channel on a clear and beautiful night. The north or south currents in the channel can get quite severe, so the boat has to “crab” 10 or more degrees off course to stay in the middle of the channel; there isn’t much room for error. Officer Mike Abbott and I noticed a lobster boat minding its own business hanging around one of the buoys marking the north side of the channel. Because we were crabbing to maintain course, for a short moment it must have looked to the lobsterman that we were heading right toward him. For some unknown reason, he decided to leave the relative safety of being near the buoy, and he putted southbound intending to cross our bow. A non-changing closing bearing had now been established, so a collision would happen unless we did something. For some reason that escapes me, Mike and I decided to nudge the boat a bit left to avoid this guy. This didn’t help, so we nudged a bit more left, and then again. Remember, we were in a narrow channel and were restricted to the channel by our draft. We were now well off the centerline of the channel, angling toward its southern boundary while also being pushed southward by the southbound current. Things were now getting a little too close for comfort. Finally, the guy...
gave his boat some throttle and scooted across our bow while Jorge Barbosa (fisherman and our bow lookout) was yelling down at the lobsterman in Portuguese, and the lobsterman was yelling back up at Jorge. I'm not sure what either was saying, but I'm sure it wasn't nice. I think the lobsterman may have seen God for a moment that night, or he was trying for a "Darwin Award."

However, we weren't out of the woods yet. What really saved the day was that Mike was able to focus on navigation while I was focusing on not hitting this guy. I still remember Mike's words: "You still have room to come right," so, on blind faith and confidence in Mike's judgment, we got back on track without further incident. It took us a while to wind down. At least we had never lost visual sight of the guy from the bridge as he crossed our bow. This is why I was always on the bridge whenever the ship was in the Canal, in Great Round Shoals Channel, in Quick's Hole, north of Nomans Island, or in the Woods Hole Channel. None of these places are really difficult to navigate, but things can go to hell really fast.

Daily Life at Sea

Linda Despres,
Fishery Biologist, Woods Hole, MA:

The bridge has had many cosmetic and technical equipment upgrades over the years. The major non-electronic difference is that there was once a couch where the current chart table is located. There have also been changes to the horsepower of the ship, and the square portholes were replaced with round ones. Derek Sutton has written a comprehensive document on these and many other changes throughout the ship's history. Whatever was done to this ship only enhanced her habitability and productivity over the years. If nothing else, she's been an extremely versatile and seaworthy ship.
Baskets of Atlantic cod (*Gadus morhua*). Courtesy NOAA Fisheries Service, Woods Hole, MA.


Fishermen Nick and Frank Vadala, brothers and salt cod experts who worked aboard *Albatross IV*. Courtesy NOAA Fisheries Service, Woods Hole, MA.

Operations Officer Ensign Jonathan Heesch raising the morning colors. Courtesy NOAA Fisheries Service, Woods Hole, MA.

Lead fisherman Tony Viera mending the net. Courtesy NOAA Fisheries Service, Woods Hole, MA.
Linda Despres,  
Fishery Biologist, Woods Hole, MA:  
The next room up from the wet lab didn't originally have a table and seating area there... that's where the foul weather gear was stored against the wall adjoining the wet lab. The current dive locker room was originally a dark room for film development, but by the time I got on board, it was the reel-to-reel projection booth which was aimed at the wall behind where the officers currently sit. The wall, and eventually a screen, was used to see the movies we were given (one for each day we were out which was shown twice the same day...1:00 and 7:00 pm).

Nancy McHugh,  
Fishery Biologist, Woods Hole, MA:  
The Food: Having to eat ice cream, cereal and toast when the food looked less than appealing...knowing what the menu would be just by the day of the week...sneaking a peak at the next day's menu, which was in the printer at night...always getting squirted by lobster juice when the crustacean was on the menu (even though I never ate it)...sitting at the end of the table and wondering how much food/drink would end up in your lap when the ship took a roll... taking over the galley in the middle of the night to make pizza (Jerry Prezioso style)...working the midnight shift and eating everything not locked down to stay awake...anything from tinned sardines (who knows how long they were around) on crackers, cereal, sandwiches, peanut butter & crackers, steam plate leftovers, soup, ice cream....Jeff Taylor, the first to bring an espresso machine aboard, was everyone's friend! CO Gary Bulmer prohibiting popcorn because he did not care for the smell, which permeated the ship. Remember when the galley freezer was locked and we did not have free access to ice cream?...cookouts on the back deck.

Jack McAdam,  
former Commanding Officer, Albatross IV:  
I remember showing a three-reel movie and the ending showed up on what we thought was reel two. That's right; we had one more reel to watch but we never realized that we had shown them out of order. That shows you how good the reel-to-reel movies were.
Linda Despres,
Fishery Biologist, Woods Hole, MA:

In what is now the chief scientist’s office were two low chairs where the desk currently is. We used to tie them down with net twine to keep them in place. Next to them was a narrow table that a few of us used to take cat naps on. There was also no enclosed area for the winch operator...he was completely exposed to the elements.

Most of the early crew weren’t too conversational (except for Tommy Frontiero or Nick Vadala) but they would acknowledge your presence, and I knew that I was finally accepted when I was shown how to make salted cod...leave the skin on your cod fillet and poke a hole in the tail section of the fillet so that you can run a 6 foot piece of net twine through the fillet and tie it on the string. Get your next fillet and about 6 inches away, tie it on. You eventually have a ‘clothesline’ of fillets that won’t bunch up together once the string is hung up to dry. Put enough salt in a barrel of water so that you can float a potato in it and soak your string (make sure you label your strings since a bunch of them go in the brining barrel) for three days. After that, you have to find a dry place somewhere around the ship (the best place was around the corner where the water bottle rosette was stored...now where the barbecue grill is located.) It sometimes looked like a Chinese laundry around the ship and often we had to bend down and around corners so as not to rub up against the strings. We then prayed for good drying weather or else we had to take our lines in at night so that they wouldn’t get wet again with dew or spray. I can still see the original vessel’s fishermen taking out the pocket knives that they used to do EVERYTHING with and cut a small piece off from one fillet to taste it for just the right amount of dryness. If we were lucky, we could get our strings dried during a cruise; if not, we would have to take them home and dry them there. I remember one time when one of the fishermen was missing some of his strings at the end of the cruise...he was so upset that he took the brining barrel and threw it over the side!
Susie Hill,
Education Specialist for Nauticus, Norfolk, VA:

The crew was so friendly, they made me feel welcome from beginning to end. They were willing to answer any questions I asked them. The food was delicious - better than I eat at home! Cookouts on the stern of the ship were such amazing memories of the yummy food and hanging out, sitting on buckets with the crew having a great time. The staterooms were comfortable. It was kind of weird watching waves crashing outside the peephole window while taking a shower, though. Last, but not least, I enjoyed the scientific research. I always wanted to be a marine biologist growing up, but switched gears to teach science in a museum setting. It's so much more amazing to study ocean life up close and personal than in a classroom. In bright yellow waders and boots for 12 hours, we rummaged through loads of sand dollars, quahogs, and rocks to find the treasure - scallops! We also conducted counts on skates, sea stars, monkfish, and crabs - true predators of the scallops! It was messy and tiring, but lots of fun and I learned so much! I wouldn't trade this experience for anything!

Don McMillan
Fishery Biologist, Sandy Hook, NJ:

Here's one that I never told anybody about. Summer 1979; my fist cruise ever! Capt. Beatteay is at the wheel. We are returning from a two week MARMAP survey and get back to the sea buoy on Sunday morning to hit a fog bank. Nobody is at the Woods Hole Lab to handle a call, so we sit, and we sit. I run out of smokes late Monday and happen to be strolling past the "ole man's" stateroom, when I see a box of his cigars. Well... being young and dumb, I walk in and steal a cigar. Little did I know that he had them
counted!! All hell broke lose and I was scared for my life. He went ballistic, but I never said a word and quaked in my boots. On Wednesday a.m., mutiny was about to happen so he pulled anchor and we were out of that fog bank within 50 yards. It turned out to be his last survey and I assume he did not want to take any chances.

**Women at Sea**

*Linda Despres,*  
*Fishery Biologist, Woods Hole, MA:*

Sixty years ago, Rachel Carson, who was then working for the Dept. of Interior, was asked to write a story about the work going on at the Woods Hole lab. Arrangements were made so that she would sail aboard *Albatross III*. There was another woman who was scheduled to sail with her, but at the last minute couldn’t go; therefore Rachel couldn’t go either. There’s an interesting note written by the chief scientist in the cruise results of cruise 11, 1948... the trip that Rachel didn’t go on: “The strong relief expressed by practically all members of the scientific staff when they learned that female observers would definitely not accompany this cruise might be of some interest. Their presence in the intimate confined living quarters set aside for scientists, without specific provisions for privacy, would have been resented.”

One year later, in 1949, Rachel found another roommate, Marie Roddell, and together they created the opportunity for other women to follow. [Ed. note: Rachel Carson went on to write “The Sea Around Us” (1951), “The Edge of the Sea” (1955) and “Silent Spring” (1962), her classic study of the environmental damage caused by widespread use of chemicals.]

Marie wrote about her *Albatross III* adventure in the October 1950 edition of “Frontiers” magazine. She wrote, “We were the first women to spend more than a few hours aboard, and I do not know who was more doubtful about what was to come – the crew, the scientists or we.”

*Jeanne St. Onge Burns,*  
*Biological Aide, Narragansett, RI:*

In 1968, I got my first job in Woods Hole, much to my delight. I would have been happy just Xeroxing (women’s lib had not yet kicked in!), but I was fortunate enough to end up working up data for Marv Grosslein. After a month or so, he asked if I would be interested in going on a short cruise. I picked my jaw back up off the floor and stammered a quick yes. Judy Penttila and Brenda Byrd also got asked and happily agreed, and then we were assembled in Marv’s office for a bit of a talk. Marv told us that we were sort of a ship-test, and that if we messed up, it would mess up women after us for a long time. Only, being Marv, he said it much better than that. We were suitably impressed, and determined to do our very best. The men on the ship were really gracious
for the most part, considering what a big change it was for them. Some of them said they liked it better, because their shipmates showered and shaved more, and the ship didn't stink so much! Those who considered us "jinxes" (occasionally heard) just left us alone initially, but most of them came around. The Falmouth Enterprise wrote an article (with picture) about us. We must have done OK, because I made two more cruises that summer, and now, it seems there are more women than men on most of them!

Judy Pentila,
retired Fishery Biologist, Woods Hole, MA:

My first cruise aboard Albatross was a gear comparison cruise back in the summer of 1968, along with Jeanne St. Onge and Brenda Byrd. The crew members were friendly, but didn't interact too much with the scientific personnel unless it was work related. It was quite different when I went out on a regular survey cruise as the only female aboard. There was supposed to be another female going too, but at the last moment, she couldn't make it. Herb Stern was the chief scientist for that cruise and he gave me his stateroom, while he moved below deck with the other members of the scientific crew. After my first attempt to "sleep" in that stateroom, with the bunk board in, I knew why he said he didn't mind giving me his room. Albatross always did roll a lot! The fishermen and other crew members were all very friendly to me on that cruise, to the point where it was difficult to find any time alone (except in my room) to sit and read without being interrupted by someone coming over and asking how I was doing. They were all concerned that I was lonely since I didn't have another woman there to talk with. I felt like I had been "adopted" by the crew of Albatross and that feeling continued through all the many survey cruises that I participated in.

Falmouth, Mass., Friday February 25, 1972

Pioneering Fisheries women who followed in the footsteps of Rachel Carson. Clipping from The Falmouth Enterprise courtesy NOAA Fisheries Service, Woods Hole, MA.
became accustomed to our presence... they either ignored us since it was bad luck to have women on board, adopted us as either another daughter or granddaughter, or had less than admirable intentions which we learned how to quickly deflect. As the original fishermen retired, younger men came on board. I distinctly remember one fisherman being disappointed that the next group of scientists coming aboard were going to be all men. The crew were now used to seeing more women at the lab and at sea and they didn’t mind us being around. In 1975, I became the first female chief scientist during a bottom trawl survey and it was also the first time women scientists outnumbered the men...we were nicknamed the “Magnificent 7 + 6” and it made headlines in the local newspaper!

Aboard Albatross IV, women have since worked in the galley, engine room, as deckhands and as officers.... hundreds of women have sailed on this vessel in the intervening 46 years...we had a slow start but we’re making a spectacular finish!

Committing Ashes to the Deep

Henry Jensen
retired Fishery Biologist, Woods Hole, MA:

Robert Hersey’s ashes were committed into the ocean at a position 75 miles south of Martha’s Vineyard in over 100 fathoms of water during the afternoon of March 29, 1974 from the deck of NOAA Research Vessel Albatross IV. Normal operations of sampling fish on deck ceased. Bob’s ashes were placed on top of a wooden trunk of preserved fish which was centered next to the fishing ramp at the stern of Albatross. All personnel who were able to leave their stations
gathered around dressed in foul weather gear, aprons, etc. The setting of a salt-water soaked deck, wet fish gear and a stiff breeze seemed somehow proper, and the Captain brought down a new American flag.

Capt. Walter Beattey, First Mate Joe Miller, Robert Livingstone, William Callahan, Frank Bailey and Phil Chase held the flag over the remains. Henry Jensen introduced the ceremony to those around, followed by an exchange of places with Livingstone who gave a final tribute in Bob's memory. Jensen again exchanged places with Livingstone to read what King David wrote about 'marine scientists' ten centuries B.C. in the Book of Psalms of the Old Testament as follows:

Psalm 104, verses 24 – 26:
The earth is full of thy riches. So is this great and wide sea, wherein are things creeping innumerable, both small and great beasts. There go the ships: there is that leviathan, whom Thou has made to play therein.

Psalm 107, verses 23 – 30:
They that go down to the sea in ships, that do business in great waters: These see the works of the Lord, and his wonders in the deep. For he commandeth, and raiseth the stormy wind, which lifteth up the waves thereof. They mount up to the heaven, they go down again to the depths: their soul is melted because of trouble. They reel to and fro, and stagger like a drunken man, and are at their wits' end. Then they cry unto the Lord in their trouble, and he bringeth them out of their distresses. He maketh the storm a calm, so that the waves thereof are still. Then are they glad because they be quiet; So he bringeth them unto their desired haven.

People frequently confused the Fisheries lab and staff with the lab and staff of the Woods Hole Oceanographic Institution. One day Lab Director Dr. Robert Edwards, Facilities Officer Dr. Herbert Stern and Fishery Biologist Dr. Richard Cooper decided to put on WHOI T-shirts and pose in front of WHOI's ships and lab. Courtesy NOAA Fisheries Service, Woods Hole, MA.
After the reading, Jensen asked if all were ready to commit Bob's ashes to the deep and was answered by Captain Beattay that they were and ordered the flag folded. Jensen lifted the ashes saying "We now commit Bob's ashes to his haven of rest" and the ashes were poured into the sea. After a moment of silence, a toast to Robert Hersey's memory was proposed by Livingstone, using a bottle of Sherry wine which was passed around to all the participants. The flag and remaining wine were given to Bob's family upon return. The call back to work was given by the Chief Scientist and work resumed.

Bob had a ready wit and a cheerful outlook on life which brightened many days for his colleagues at the Fisheries, as well as friends in the community at large. At sea, no matter how severe the weather conditions or work load, he would use his know-how, energy and wit to get the job done, and was an inspiration and encouragement to those around him.

*Linda Despres,
Fishery Biologist, Woods Hole, MA:

Even at sea, we are touched by life's circle...I remember personally telling Paul Wood that he was a grandfather for the first time (before email existed). We've taken off officers and crew members who were about to be fathers...sometimes sooner than they thought they would be. Tommy Frontiero, the ship's first lead fishermen, passed on while working on the ship's back deck. I have also assisted in distributing the remains of Jack Merchant, the first chief steward aboard this ship. A few years ago, Captain Steve Wagner was asked to take Jack's remains out to Georges Bank. On the next trip that Steve and I were on together, we read a poem and scattered Jack's ashes...I think some are still in the rigging... the circle of life of a sailor.

Parting Thoughts

Craig McLean,
former Executive Officer, Albatross IV:

Albatross IV was the best seagoing experience of my NOAA career. A beautiful sheer and camber to her lines, and despite many claims otherwise, a comfortable ride and a sturdy ship that served the fisheries community and NOAA remarkably well.

John Galbraith,
Chief Scientist, Legs I & II, 2008 Fall Bottom Trawl Survey:

I have been honored to sail on her first as a wide-eyed kid with no idea of a life at sea, and finally as a chief scientist with many cruises under my belt and the beginnings of a grasp on what actually lives in this Northwest Atlantic Ocean ecosystem. I have experienced the elements up to hurricane level, and seen weather of the finest kind imaginable; I have seen tow after tow after tow of nearly identical catches, and I have seen species that turn up once in 45 years of towing; I have met people from all walks of life, some at their very best, others in their sorriest state; I could go on, but suffice it to say that I have experienced all these things in direct association with this vessel. Walking off that gangway for the final time will be a strange feeling for me. I have spent a lot of my life aboard this vessel - I hope that feelings of gratitude for the opportunity will drown out the sadness I know will come. I would like to thank the crew of this trip for working hard to try to make this calibration as successful as it can be. I would also like to thank crews past and present for bringing me home safe and sound - that was not always easy. As well I thank the scientists I have sailed with over the years for their tutelage and camaraderie. I will miss this vessel; it’s hard to believe she will sail away and not return.

Fishery Biologists John Galbraith, Don McMillan and Jose Pereira with armfuls of red drum (Sciaenops ocellatus). Courtesy NOAA Fisheries Service, Woods Hole, MA.
Addenda

Linda Despres,
Fishery Biologist, Woods Hole, MA:

I was greatly honored to ride the ship to Norfolk, VA, on December 5, 2008 where she currently is docked. There was a large crowd (including Dr. Herb Graham) assembled at the dock and parking lot as we left in the afternoon during one of the most beautiful sunsets I had seen in a while. Delaware II saluted us as we left and we signaled back. WHOI gave us a cannon blast and the Steamship vessels blew their horns...it was a fitting & noisy departure for a hard working vessel who served the lab well for 46 years.

Linda Despres describes herself: Who would have ever thought that an eighteen year old Maine high school student would first hear about Woods Hole from a Jacques Cousteau TV special? As a 20 year old college sophomore, Linda walked on Water St. in awe of the buildings and of the scientists she had heard about, thinking that she would need her Ph.D. to ever work in this town. That same year, she could not stay overnight on
board a State of Maine research vessel because there were no accommodations for a woman. Three years later, Linda went on her first Federal cruise as a female employee with her Bachelor’s degree in hand. Dreams do come true. During her 36 year career at the lab, Linda has spent over 1500 days at sea of which more than 970 days were aboard the NOAA Ship *Albatross IV*. Linda has thoroughly enjoyed the adventures of being a scientific sailor aboard several foreign and domestic research vessels and is now preparing to go aboard the government’s newest research vessel, NOAA Ship *Henry B Bigelow* which will continue the scientific research of its four predecessors.

Captain Steve Wagner reading the orders to decommission *Albatross IV*. Courtesy NOAA Fisheries Service, Woods Hole, MA.

Last *Albatross IV* First Officer Donn Pratt with first First Officer Robert Cusick during decommissioning luncheon. Courtesy NOAA Fisheries Service, Woods Hole, MA.


*Albatross IV* decommissioning program and hat. Courtesy NOAA Fisheries Service, Woods Hole, MA.