The QAR support crew blew into town with bad weather. This allowed the team to get settled and prepare for the expedition. Work was concentrated on getting the excavation equipment ready, especially setting up an artifact recovery system designed to capture even the smallest objects, such as little lead shot, even gold dust. Once the wind shifted around on Tuesday afternoon, as a cold front moved into the area, the R/V Seahawk and a crew of divers began work. Despite rough seas and limited bottom visibility they were able to put up buoys on mooring blocks and run lead lines on the bottom to help investigators find their way around the shipwreck site.

**Wednesday, 9/28**

The R/V Seahawk (Captain Gerry Compeau, Julep Gillman-Bryan, Richard Lawrence, Nathan Henry, and Jim Dugan) worked at the site until around 2 pm, when the visibility dropped to zero. This was due to the outgoing tide, which brought dirty water from the recent rains out to the site. The divers were able to replace the post at the south end of the site that anchors the baseline and prepare the north end post for installation. This work is critical since the posts need to be in the correct position, and must be very sturdy to allow the baseline to be stretched tight. The rest of the team continued efforts to prepare the MRI sluice barge for operation. At the same time the R/V Shellpoint, a NC Fisheries clam dredge, was tested and readied for service as a dredging platform. Work also continued in the conservation laboratory in preparation for artifact recovery, which will begin at the end of the week.

**Thursday, 9/28**

With beautiful weather a full crew descended on the shipwreck site. R/V Seahawk (Captain Gerry Compeau, Julep Gillman-Bryan, Richard Lawrence, Nathan Henry, and Jim Dugan) went out first to install the north end of the baseline and then strung a plastic-coated cable from one end to the other a pulled it tight with a come-along. R/V Defiance (Captain Rob Smith, Dave Moore, Lindley Butler and April Varnum) followed Seahawk out and
marked out the area to be excavated with bright yellow line. Finally, R/V Shellpoint (Captain Tom Piner, Mate Rocky Best, and Mark Wilde-Ramsing) arrived with the dredge equipment. Tests of a system to bring sediment up to the surface worked very well. Then the large 6-inch dredge was deployed and divers began to remove the loose sandy overburden in preparation for artifact recovery. It was estimated that it will take a day of dredging to get the area ready to set up the grid for artifact mapping and then tagging and recovery. Shore personnel Wayne Lusardi, Kim Eslinger, continued lab preparation, Mike Daniel and Tom Weaver worked on the MRI sluice barge, Connie Asero and Barbara Brooks took care of project administration, and Mark Mathis and Matt Muldorf handled the web site postings.

**Friday, 9/29**

The wind continued to build through the night, and over the course of the day it reached nearly 20 miles per hour. This produced with R/V Shellpoint (Captain Tom Piner, Mate Rocky Best, Nathan Henry and Mark Wilde-Ramsing) making out the best. The other vessels on-site were R/V Seahawk (Captain Gerry Compeau, Richard Lawrence, Mike Plakos, Matt Muldorf and Rick Allen) and R/V Defiance (Captain Rob Smith, Dave Moore, Lindley Butler, and Jim Dugan). Bill Lovin (Marine Grafics) placed video and audio equipment on board Seahawk in preparation for the QARLive broadcast scheduled for next week. Although the weather created some difficulties in transmitting from the site, the system tested out successfully. Divers from all vessels participated in getting the shipwreck ready for excavation. The baseline was completed and the 10 by 10 foot grid was put on the bottom to help guide preliminary excavations. The plan is to outline a 20 by 30 foot area using sandbags, and then remove the sand overburden. Once the level where the wooden planks was reached, the grid squares will be positioned accurately and excavation will proceed slowly. Archaeologists will map, tag and recover artifacts. The outfall from the dredge will be brought to the surface and passed through screens to recover small artifacts missed by divers. A shore crew of Mike Daniel, Tom Weaver, and John Masters continued work on the MRI pontoon barge, which will allow archaeologists to run the dredge materials through a sluice system and recover even the smallest items, such as tiny lead shot and specks of gold. It is hoped that with good weather, researchers will begin artifact recovery within a few days.

**Monday, 10/2**

QARLive’s inaugural run is a grand success! Thanks to the hard work of Bill Lovin, Rick Allen, Mark Mathis, TP Barker, Sim Wilde and a cast of dozens of others, the live feed from the shipwreck site was clear both in visual images and sound. The project staff were happy to share the underwater archaeological world with the interested public. Hopefully, the daily broadcasts will continue to go well and the internet attendance will be good. Work on the site continued with the removal of large amounts of sand from the excavation area. The first order of business was to assess damage from the storms over the weekend, which were minimal, and put the site in order.
R/V *Seahawk* (Captain Gerry Compeau, Rick Allen, TP Barker, Julep Gillman-Bryan, Wayne Lusardi, Mark Wilde-Ramsing) conducted the *QARLive* transmission. Divers from R/V *Defiance* (Captain Rob Smith, Dave Moore, Mike Plakos, Jim Dugan) handled the dredging operations in conjunction with R/V *Shellpoint*. Mike Daniel and John Masters completed construction on the MRI pontoon barge. Hopefully, sometime tomorrow the artifact layer will be reached and the mapping and recovery of artifacts will begin.

**Tuesday, 10/3**

Today the wind shifted to the southwest and, although not nearly as strong as the northerly winds of the past few days, they were from offshore and increased wave action significantly. By the afternoon conditions had deteriorated such that the *QARLive* feed had to be suspended. Shortly thereafter the research vessels made their way back to shore. Having gotten an early start, however, allowed the *QAR* team to get a tremendous amount of excavation completed. This set the stage for archaeologists to begin mapping and recovering artifacts in the morning starting immediately adjacent the exposed mound on the north side. After returning to the Gallant's Channel docks, a sluice and screen system was placed on the deck of R/V *Shellpoint*, in preparation for recovering small artifacts. Vessel crews were as follows: R/V *Seahawk* (Captain Gerry Compeau, Rick Allen, TP Barker, Wayne Lusardi, Julep Gillman-Bryan); R/V *Defiance* (Captain Rob Smith, Dave Moore, Lindley Butler, Jim Dugan, Mike Plakos, Matt Muldorf); and R/V *Shellpoint* (Captain Tom Piner, Mate Rocky Best, Richard Lawrence, Nathan Henry).

**Wednesday, 10/4**

Wow! What a fantastic day despite forecasts for rough weather. As project director I am constantly amazed at how hard it is to predict from day to day what conditions on the site might be. Braced for more of the same as yesterday, which presented rough conditions due to southwest winds, today turned out to be an absolutely gorgeous day. Therefore, work proceeded at a good pace. Divers created a formidable wall of temporary sandbags to keep sand from trickling into the excavation area. Meanwhile the dredge operation, with a sluice and screening system, was perfected to allow the capture of the smallest artifacts. By the end of the day the cultural layer was exposed in a 20’ X 30’ area where the hull timbers were recovered in the spring. Now, mapping, sample-taking and artifact recovery can take place in earnest. At the end of the day researchers recovered bits of the hull structure, small ballast stones, and to everyone’s a surprise, a small flake of gold!
Thursday, 10/5

Early this morning R/V Defiance (Captain Rob Smith, Mark Wilde-Ramsing, Julep Gillman-Bryan, April Varnum) headed out to the shipwreck site to assist geologists from the Institute of Marine Sciences, UNC Chapel Hill, conduct a side scan sonar survey. These surveys give a detailed view of the sea floor and allow researchers to evaluate the effects of sand movement around the shipwreck. While archaeologists have noticed during the expedition that cannon C-1 is slowly being covered by sand, the results from the sonar survey will give them a better understanding of where it is coming from and whether it will remain on the site. By 9:00 am, R/V Seahawk (Captain Gerry Compeau, Rick Allen, TP Barker, Wayne Lusardi, Mike Plakos, Dave Moore, Mike Plakos) and Bryan, Jim Craig, Mark Wilde-Ramsing) and R/V Shellpoint (Captain Tom Piner, Mate Rocky Best, Nathan Henry, Kim Eslinger, Mike Daniel, Matt Muldorf, Jim Dugan, Jim Craig) were setting up at the site. Archaeologists Moore, Lusardi, Plakos and Muldorf divided the excavation block into 5x5 foot squares and each was responsible for carefully excavating and mapping the remains. By the end of the day three of the squares were completed and artifact recovery initiated. Large numbers of ballast came up along with several cannon balls and numerous lead shot, reminding us once again that this vessel was very heavily armed. The material captured in the screens during dredging operations were stored in containers and will be examined in the conservation lab for small artifacts. Over the course of the day another successful QAR Live session was conducted with classrooms from around the country joining the divers touring the bottom through a live video feed. Questions about the shipwreck and investigations were submitted via email by school children and relayed to the divers from the shore "base." Finally, as researchers returned to the docks, they were greeted by a news crew from CNN doing a story on the expedition.

Friday, 10/6

The final day of QAR Live went smoothly despite poor visibility in the morning. Director Mark Wilde-Ramsing and ECU intern Kim Eslinger handled the topside and underwater narration; Nautilus Production’s Rick Allen and TP Barker shot the video; UNC-W’s Gerry Compeau managed topside communications; and Marine Graphic’s Bill Lovin, OSA’s Mark Mathis and QAR technician April Varnum were in the control room at the Duke University facilities. The tallying has just begun, but the early results suggest that many dozens of schools and individuals logged on to the live internet feed, including folks from as far away as Utah, California, New York, Kansas, Canada and of course, North Carolina. Given the success of QAR Live, plans are already underway to do it again in the Spring, with a focus on work in the laboratory. Students and the public will be able to watch conservators clean newly retrieved artifacts, as well as the exploration and recovery of a large cluster of ballast rock and encrustation, which may hide at least one and perhaps two small cannon(s). At the shipwreck, archaeologists continued the mapping and recovery of artifacts from four grid squares. By the end of the day QAR staff members Wayne Lusardi and Mike Plakos had nearly completed two of the 5 by 5-foot units.
NCMM staff member Dave Moore, with help from ECU’s Matt Muldorf, had mapped a third square and started on a fourth. One of the difficulties researchers have to deal with is several long hull planks that extend across the excavation units and beyond. One extends under the pile of wreck debris where the others were cut last spring; several others run out of the excavation area to the north. Once mapped, these fragile artifacts will be recovered for examination and treatment. Much of the materials from the excavation brought to the surface by the dredge was run through the sluice and screen system under the watchful eye of MRI’s Mike Daniel, VPI’s Jim Craig, and UAB’s Nathan Henry and Jim Dugan. Tom Piner and Rocky Best, of the NC Marine Fisheries, were active participants in the artifact recovery. Captain Julep Gillman-Bryan brought out UAB’s R/V *Snap Dragon* for the first time to ferry out CNN crew in the morning and provide standby assistance during the rest of the day.

**Monday, 10/9**
A hard north wind dropped the temperatures nearly thirty degrees and blew strong enough to keep the boats out of the water this morning. Team members took the opportunity to transfer their field sketches from clear plastic sheets used underwater to scaled drawings on graph paper. Maintenance activities in the conservation laboratory consisted of checking every artifact's status and providing many with fresh water. Specialized tools were fabricated with a torch and welder - some tools were made for cleaning out the barrels of recovered cannons and others were designed to take accurate elevation readings on artifacts at the site. While expedition members always want to go out to work at the shipwreck, days of bad weather are always put to good use on the shore. Late in the afternoon *QAR* members Julep Gillman-Bryan, Rob Smith, Rick Allen, TP Barker, and Mark Wilde-Ramsing went out on Olympus Dive Shop's *Midnight Express* (Captain Bob Purifoy) with a television crew from ABC's *Good Morning America*. Several hours were spent diving at the site testing the transmission equipment for tomorrow's morning broadcast. The biggest surprise was to have over ten feet of visibility at the site. This allowed a thorough examination of the excavation units, which were found to have held up very well over the weekend.

**Tuesday, 10/10**
Several *QAR* members found out what the glamour of television really means - getting to the boat at 4 AM! On top of that it was in the low forties and the thought of getting in the water sent shivers up the divers' spines. However, at 7 o'clock three short segments were run live on *Good Morning America*. The first was Mike Daniel on the deck of the dive boat *Midnight Express* with artifacts provided by George Shannon of the NC Maritime Museum. During the second part, correspondent Don Dohler and Mark Wilde-Ramsing took a tour of the shipwreck transmitting video and audio from 25 feet below the ocean. Rick Allen, Rob Smith, TP Barker, April Varnum and Julep Gillman-Bryan handled underwater video and dive safety. The show ended with Don showing Diane Sawyer and
Charles Gibson in their New York studio a small vile of gold flakes from the shipwreck and bantering with them about how this is the extent of monetary treasure from the wreck, but that the real treasure is all the historic artifacts associated with Blackbeard and pirates that the site has to offer. [See QAR Site Map] R/V Seahawk (Captain Gerry Compeau, Wayne Lusardi, Dave Moore, Mike Plakos, Jim Dugan) arrived at 7 am and began cleaning and mapping the excavation units. Soon after R/V Shellpoint (Captain Tom Piner, Mate Rocky Best, Nathan Henry, Kim Eslinger, Matt Muldorf, and Chris Southerly) were there to provide dredge support. By the end of the day most of the units had been excavated and the artifacts mapped. Small artifacts consisting mostly of ballast rock but also an occasional piece of iron barrel hoop, pewter plate, and wood were brought to the surface, tagged and placed in water-filled storage containers. Visibility on the site continued to be fairly good until around 2 PM when low tide brought out cloudy river water. Work at the site ended at that point.

QAR Site Map, 31CR314, June 1999
**Wednesday, 10/11**

It was a beautiful fall day out on the site and the water was so clear in the morning that people on the boat could see divers swimming around on the bottom. Work progressed quickly as archaeologists mapped artifacts and recovered them from the four 5-foot by 5-foot units. A 7-foot long, wooden hull plank was brought up on a stretcher, as well as two large concretions of ballast rock and iron barrel hoops. The most exciting find was a small brass cup or thimble that may have been used as a measuring device. Lead shot, lead strips and an assortment of interesting objects were also recovered. Their identity and use should be revealed during conservation in the months to come.

**Thursday & Friday, October 12-13**

Activities these last two days proceeded at a quick pace. The weather and water conditions continued to be nearly perfect, allowing researchers to record minute details as they excavated the cultural layers of each 5-foot by 5-foot unit. In the end, four units had been excavated down to sterile sand and major artifacts were recorded and recovered adjacent to the exposed mound. The profile of the sediments in this area consist of up to two feet of sandy overburden, a 6 to 9-inch layer of shell and sand with artifacts, and then a fine, densely-packed layer of sand. The most intact portion of the site is the section that lies just above the fine sand layer. It is here that heavier artifacts, such as lead shot and gold flakes, survive, and is an area least affected by ocean currents and marine life. Artifacts recovered during the completion of excavation included a small brass nesting cup for measuring small objects, a large quantity of lead shot, green glazed pottery, a few gold flakes, lots of ballast rock, and an 18-foot long pine sheathing plank. There are undoubtedly many interesting things hidden in recovered concretions that will come to light through X-rays and cleaning as they undergo the conservation process. Researchers closed down the site by taking up the reference lines, grid frames and recovery equipment, and closing the excavation units. There are plans, however, to return to the site next week with a skeleton crew and complete excavation in the units next to the exposed mound. This will take advantage of the extremely good weather and water conditions, which are expected to continue for several days.