Sharp Debrief summary			
11-Oct-11			
Question	Summary	Minor points	Debrief #1
Size: Has the overall size of the vessel either enabled or hindered you in meeting the science objectives of your cruise? Please explain how with specific examples.	All say Sharp is right size for their project.	Much better than Cape Henlopen (2 responses) Small Crew (for deck Ops) Low freeboard (wet deck) Rough seas (rough ride)	The size has allowed us to do w we normally have done, but I ha found deployment of moorings a other equipment much easier tha the R/V Cape Henlopen and son other vessels as the deck size a wonderful for a range of work. lir from the bottles.
Over-the-Side Handling System: Has this system had a positive impact on your work and if so how? Are there any negative impacts associated with this system?	All say over-the-side handling system is great.	Long learning curve overkill roll compensation	The major positive impact for the CTD launch and recovery is that is all automatic and we don't hav to bring it aboard and possible injuring ourselves in the process Sampling is much easier and sa as the CTD can be brought withi the garage doors on the ship for sampling from the bottles.
Retractable Centerboard with mounted acoustic transducers: Has this had any significant positive or negative impacts on your work?	Did not use or no impact.	The one fisheries Scientist likes the shallow draft (NOAA ships 20 ft).	This is a good arrangement and has not impacted our science..

Question	Summary	Minor points	Debrief #1
Acoustically Quiet: Have you noticed any difference compared to other vessels, and has this had any positive or negative impacts on your work?	All say really quiet	fisheries Scientist appreciates quiet	This ship is VERY quiet and I kn of no other ship that give such noise reduction comfort!
Vans and deck space: If you have used the vans, how well did they accommodate your internal space requirements? Did this modularity have a positive or negative impact on your cruise planning and work at sea?	Most have used vans and say still have adequate deck space when one van on board. Van capability viewed as positive.	can only have fresh water to one van.Breezeway is nice	We have used the trace metal clean van and normal van on on cruise and we were still able to have ample room to deploy a mooring. The vans provide much more space and allow for more science to be accomplished whil at sea.

Question	Summary	Minor points	Debrief #1
Variable Berthing Capacity: The Sharp can accommodate science parties ranging from 14 to 20. By using the conference room as a two person stateroom, 16 can be carried presently. In the future by using a 4 person berthing van the total can be 18 or 20. Did your project have need for the full berthing capacity of Sharp, and what do you see as the benefits and drawbacks to the approaches available on Sharp?	No responder used all available berths, i.e. conference room	Several say Galley crowded at mealtimes when 14 Scientists and 8 crew are aboard.	We have used all the berths with needing the conference room. I don't see a reason to use the conference room or a berthing v
Dynamic Positioning: . How important was the DP system to your work? How well did this system operate during your cruise(s)? Was noise from the DP system disruptive?	Half say used and DP works well half did not use	No one commented about DP noise	We have used the DP to make s that our mooring is placed at the same position each year in the Delaware Bay. It met our expectations.

Question	Summary	Minor points	Debrief #1
Other Features: Can you describe other design, outfitting or operational features of the Sharp that had significant positive or negative impacts on your work at sea? Should these features be requirements of other new Regional Class Research Vessels (RCRVs)? Were there any important design features missing that should be available on RCRVs?	**Positives:** Sharp best in RCRV class, Everyone says very capable ship. Ideal size for coastal/inland work. Hands free system great. Nice lounge/conference room	Negatives: 9/16th wire light for trawling (3/4 better). Net real would be nice. Internet access is poor, limited and costly. Underway DAS not adequate. Stability in rough seas.	I believe that the R/V Sharp has wonderful capabilities for a RCR and exceeds many other, if not a other, vessels in that class. The deck and lab (both wet and dry) space are laid out well and two vans can be accommodated eas with plenty of deck space still available. The berthing quarters also as good if not better than m vessels that I have sailed on.

Sharp Debrief summary		
11-Oct-11		
Question	Debrief #2	Debrief #3
Size: Has the overall size of the vessel either enabled or hindered you in meeting the science objectives of your cruise? Please explain how with specific examples.	The Sharp has enabled their science objectives being met. With 24h ops, 13 scientists, and two 12-h watches, the overall size is good and the cost reasonable for the work done. Praised Matt Hawkins and Bill Bryant (sp?). Slight negative is relatively smaller crew than some vessels, i.e., for gear handling.Low freeboard makes for wet deck in rough seas. Shallow draft leads to significant rolling. Trim tabs help.	He says the Sharp is the right size for his work that is mostly at the interface of rivers and the coastal ocean he also said the ship is fairly comfortable offshore. The Ship is headed to the shipyard for some work to stabilize it so not everyone thinks the ride is fairly comfortable
Over-the-Side Handling System: Has this system had a positive impact on your work and if so how? Are there any negative impacts associated with this system?	CTDs made every third station, hence ~ 150/cruise. Handling system viewed positively. Better than without the system. Do not have severe weather in May and June so no comment on system performance in poor conditions. No negative impacts.	He really likes the CTD crane besides allowing deployment of the CTD in rougher weather; it makes the whole operation safer. He says almost everyone he talks to is very happy with the CTD handling system.
Retractable Centerboard with mounted acoustic transducers: Has this had any significant positive or negative impacts on your work?	Not used. Like shallow draft of Sharp. New NOAA Fisheries vessels draw 20' and hence have 'halo effect' with inaccessible areas. Sharp can get to these areas. Can imagine how acoustics would be of value. May soon begin using HABCAM system to video bottom and transmit via fiber optic to ship. If so, a Seabeam capability to map the bottom would be beneficial. Don't know if feasible and, if so, if would use retractable centerboard.	He does not use this feature so he has no comment.

Question	Debrief #2	Debrief #3
Acoustically Quiet: Have you noticed any difference compared to other vessels, and has this had any positive or negative impacts on your work?	Not necessary for scallop surveys. However, Sharp in noticeably quieter than many other ships, which is viewed favorably. Noted as expensive (15% of cost of ship) and with real amd significant maintenance costs. Good to have the ship quiet and hence 'fishing capable'. The ship is so quiet that noises not normally heard are heard. Thus, the added stabilizer arms have hydraulic lines which are noisy, due to the use of 90 deg elbows rather than the specified smooth, tapered curves (Vic didn't know if this has yet been corrected).	He says the ship really is quiet. He doesn't require the quiet but he really appreciates it.
Vans and deck space: If you have used the vans, how well did they accommodate your internal space requirements? Did this modularity have a positive or negative impact on your cruise planning and work at sea?	Yes, use a van, and view this positively. Has sink and measuring stations, with electronic equipment (e.g., scales) that transmit to main lab. A real plus over commercial boats they once used. Second van not used, as would take significant deck space now used for spare dredge. Two van issues. Freshwater supply is limited to either, but not both, on deck and van use; need more flow. Must put many computer cables (serial and Ethernet) through pass-throughs from van to main lab; would be helpful to have semi-permanent connectivity between van and main lab, precluding stringing wires every time.	He also doesn't use vans in his work but he did say that there is adequate (lots of) deck space and it is clear deck space even when there are 2-25 foot vans on board. He fills 25-55 gallon drums as part of his work and there is still lots of deck space. The multi beam system is housed in a van so when that is used it goes on quickly and everything just plugs in. He also says the wet lab and the dry lab are good sized. He compares the deck space with the Wecoma.

Question	Debrief #2	Debrief #3
Variable Berthing Capacity: The Sharp can accommodate science parties ranging from 14 to 20. By using the conference room as a two person stateroom, 16 can be carried presently. In the future by using a 4 person berthing van the total can be 18 or 20. Did your project have need for the full berthing capacity of Sharp, and what do you see as the benefits and drawbacks to the approaches available on Sharp?	The Sharp sails for them with 22 persons aboard: eight crew plus one cook, and 13 NMFS scientists. They don't use conference room for berthing but, rather, for a dry work (paperwork, I believe) area. All rooms with one person always on watch, so no more than one person at a time in rooms, generally. Can be crowded at mealtime, but tolerable. Lauded single cook – excellent food.	They use 13 of the 14 standard bunks when the do their cruises. The Sharp has the capability to get something like two more spaces by converting something else. Then they can also add a bunk van (max capacity is 18 scientists). He says the ship works well with 13 or 14 scientists but the single galley table only has 10 seats so mealtimes become a little conjested.
Dynamic Positioning: . How important was the DP system to your work? How well did this system operate during your cruise(s)? Was noise from the DP system disruptive?	Don't use it, save perhaps for CTDs (uncertain).	They put pumps overboard and they need to stay on station for 20 min or so. Usually the boat driver can hold station, but when the get in the high tidal current areas they use the DP. This feature is very nice when they need to be perpendicular to the currents. He thinks the DP works well.

Question	Debrief #2	Debrief #3
Other Features: Can you describe other design, outfitting or operational features of the Sharp that had significant positive or negative impacts on your work at sea? Should these features be requirements of other new Regional Class Research Vessels (RCRVs)? Were there any important design features missing that should be available on RCRVs?	Wire (9/16th) a bit light for dredge; minor issue. Fishing boats use 1" wire; ¾" would suffice. Net reel would be nice to have. Endurance is good: 12-14d cruises. Adequate deck and lab space, and good support at sea and ashore. NOAA has on its ships 24/7 internet; increasingly useful, if not necessary, for real-time data transfer ashore for decision making in management. Sharp internet access poor: one computer on bridge, shared with crew and costly. This, I (Dave) thinks is a fleet-wide issue, not only the Sharp. FIC should see what NOAA now does and ask if UNOLS can do better re connectivity. The Sharp's underway data acquisition system could be better. Again, this may be a fleet-wide issue, but may also be unique to these users. Would like trawl winch data logged by data acquisition system. Output from Sharp's data acquisition system difficult to access. May begin habitat mapping using HABCAM and scallop trawl sequentially on some stations. Hence, both fiber optic (large bending radius) and wire rope (smaller bending radius) with separate sheaves (app	He says the sharp is a very cable ship and everyone feels that way. However they are comparing to their previous ship the Cape Henlopen. He thinks this ship comparable to some of the other Intermediate Class UNOLS ships. He feels this is the ideal size for a coastal/inland waters ship. Some people have complained about stability but he doesn't think this is an issue. He thinks that 85% of the users do water column work and all think the hands free CTD is great. Overall he really likes this ship.

Sharp Debrief summary	
11-Oct-11	
Question	Debiref #4
Size: Has the overall size of the vessel either enabled or hindered you in meeting the science objectives of your cruise? Please explain how with specific examples.	Sharp is just about right for what we do. It is comfortable and safer than Cape Henlopen. Van space used heavily.
Over-the-Side Handling System: Has this system had a positive impact on your work and if so how? Are there any negative impacts associated with this system?	The handling system is great. At first it took a little while for the crew to get used to using it. This is past now. The system is reliable but a little overkill in terms of roll compensation
Retractable Centerboard with mounted acoustic transducers: Has this had any significant positive or negative impacts on your work?	Do not use

Question	Debiref #4
Acoustically Quiet: Have you noticed any difference compared to other vessels, and has this had any positive or negative impacts on your work?	It is noticeable that Sharp is quieter. This has a positive impact when working long hours.
Vans and deck space: If you have used the vans, how well did they accommodate your internal space requirements? Did this modularity have a positive or negative impact on your cruise planning and work at sea?	We have used two configurations- one radioisotope van or two vans (isotope and general use). Deck space was not limiting and was used for incubators. Stern operations were not conducted. Breezeway is a good feature. It is nice for changing shoes when entering the isotope van. It is well lit when deck lights are off

Question	Debiref #4
Variable Berthing Capacity: The Sharp can accommodate science parties ranging from 14 to 20. By using the conference room as a two person stateroom, 16 can be carried presently. In the future by using a 4 person berthing van the total can be 18 or 20. Did your project have need for the full berthing capacity of Sharp, and what do you see as the benefits and drawbacks to the approaches available on Sharp?	Never maxed out berthing. 14 is plenty
Dynamic Positioning: . How important was the DP system to your work? How well did this system operate during your cruise(s)? Was noise from the DP system disruptive?	Not important for our work. Not used

Question	Debiref #4
Other Features: Can you describe other design, outfitting or operational features of the Sharp that had significant positive or negative impacts on your work at sea? Should these features be requirements of other new Regional Class Research Vessels (RCRVs)? Were there any important design features missing that should be available on RCRVs?	Features of Sharp that standout are its relative proportions of wet and dry labs, berthing space is right, galley is a little small, nice lounge/conference room. Technicians shack is easily accessible and centrally located. Short distance and direct connections between labs