

EXPORTS discussion points for Dec. 5 telecon

- high-level view of ship operations
 - things might change when NSF selectees are added (or not)
 - R/V Ride = Survey ship (Nelson/Perry) - see document in the [folder](#)
 - R/V Revelle = Process ship (Steinberg/Graff) - see document in the [folder](#)
- over the side operations
 - intensive over the side operations (see [high-level docs for both ships](#))
 - more details specific to each ship at later time
 - over the side operations in proximity of the other ship/autonomous vehicle
- in-line uncontaminated seawater
 - diaphragm pump required for publishable science in optics, biology and biogeochemistry)
 - impeller pump breaks particles, results in bad science (see 3 page document "[Revelle-Ride Seawater Systems.pdf](#)", literature in folder "[literature for inline pump/system](#)")
 - previous success on other ships with using PI diaphragm pump on Atlantis, Falkor, Ron Brown; can provide contact with ships' technical staff to discuss process, etc.
 - cleanse lines immediately before cruises to remove biofouling (previously used protocols explained in folder "[literature for inline pump/system](#)").
 - does Ride share similar problems with Armstrong – unreliable flow, and failure of pump to stay primed in any kind of weather and also due to bow thruster activity?
- continuous ship-to-ship communications
 - need to be easily accessed from main lab and elsewhere on ship (not just from bridge).
 - sensor intercalibration across ships and autonomous platforms key to project success
 - three Ride-Revelle rendezvous during field campaign (early, middle, late).
 - minimum six Ride-autonomous vehicles during cruise (two glider, four Lagrangian float).
- CTD sensors to include mix of Scripps and PI sensors
 - ships' CTD and O2.
 - O2 sensor needs to be freshly calibrated just before cruise.
 - PIs' FLNTU, beam c, PAR (up to 1000 m routine casts) + Ship's sensors
 - we want to include Scripps instruments (if provided) in the intercalibration testing in the lab during mob.

- Additionally, need to strap on LISST and UVP (see [“UVP and LISST deployment”](#) to rosette frames)

- deck layouts
 - more details specific to each ship at later time (Revelle has preliminary layout sketches).
 - potential locations for HyperSAS for optimal view of ocean surface out of bow surge