

**PRE-CRUISE PLANNING & CHECKLIST**

**General Info**

Ship	NEW HORIZON
Cruise	N0908
Dates	9 – 21 Aug (7 days may be added at beginning)
Loading Date(s)	7 – 9 Aug (possible 30-31 July loadout, if extended)
Off-loading Date(s)	21 Aug (all gear will be removed off ship, to be trucked home w/Constable's gear)
Chief Scientist	MIRIAM GOLDSTEIN
Start Port	SAN DIEGO
Intermediate Ports	N/A
End Port	NEWPORT, OR
# of Scientific Participants	16 science, plus one restech. One scientist is deaf (see notes below).

**Equipment Requirements**

<b>24 HOUR OPERATIONS ?</b>	Science party will supervise deck ops when restech not available
Trawl Winch (9/16" M, 0.680EM)	NET TOWS (use marine biology's IKMT)
CTD Winch (0.322EM)	CTD
CTD Equipment	Transmissometer, fluorometer, PAR, 12ea 10l bottles (or 30l if kaisei); PAR sensor limited to 1000m; maybe Pinkel's fast CTD?
Hydro Winch (0.25'M)	NET TOWS (bongo & manta)
Portable Winches	If Hildebrand, then TSE (TSE also to be used on Send cruise)
Navigation	GP 90 D
Dynamic Positioning	N/A
Multibeam Sonar	N/A
ADCP	75 KHz Ocean Surveyor (use CalCOFI setup)
Doppler Sonar	N/A
PDR (3.5kHz, 12kHz)	Available (needs to be synched w/EK60 if used)
Magnetometer	N/A
Gravity	N/A
IMET	Event logger (from CalCOFI), GPS feed for acoustics
XBT	No
Seismics (Air/Water Guns, Hydrophone Streamers, etc.)	N/A
Air Compressor Vans	N/A
Coring (Gravity, Piston, Multi, etc.)	NO
Explosives	NO
Containers/Vans	CUFES van (10x10)
Electrical, Special Requirements	No
Foreign Shipments	N/A
Isotopes	No
Hazmat (chemicals, lithium batteries.) Battery Specialties ??	Formalin, gluteraldehyde, ethanol, liquid nitrogen, proflavin (a fluorescent stain, needs isolation containment procedures because it interfere w/tritium swabs), needs MSDS; needs proper HAZMAT shipping upon demob
Hazmat response issues	No (unless recover Niiler drifters, which may contain depleted lithium – verify) Lithium requires special shipping
Laser	Possible self-contained laser in Kaisei gear
Freezers/Reefers	-80 freezer (3 cu ft available) – note that science will need to provide for dry ice etc to remove samples during one-day demob in Newport
SIO Technicians	1 research tech (Matt Durham)
Data Processing	No

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Communications	Ku-band HiSeasNet will be out of range past 125W; Fleet broadband available at \$11/Mb if 370 kilobits/sec or ~\$2/MB if 64 kilobit/sec (SIO will subsidize \$50/day, excess will be billed)
Clearances	No
INTERNET Rqmts	When within Ku-band range, wireless on board will be active – uses WPA encryption, so make sure your laptops are capable. Please let STS know what internet connections you'll be making so we can configure the firewall to work correctly.

### **Additional Notes**

1. WIRELESS ISSUES.
2. EIS or IHA REQ'D?
3. Small Boat Ops - if calm & lots of plastic, may have one deployment for several hours. If cruise is extended, may have multiple deployments. Constraints: time between deployments to meet mandatory rest requirements for operators; gasoline storage; ship ops will be limited while small boat is on water (shallow CTDs, bongos & mantas probably OK at the discretion of Captain)
4. Recover ghost net? Size and manner of recovery will depend on conditions and space available.
5. Need to know which wire Constable will use
6. EK60 required (installed by Koslow's group); needs to be synched with ADCP; for best results, needs to be calibrated before/after cruise. Calibration has taken about 8 hours on NH in the past. Science party needs to pack gear up at end of cruise for shipping. STS will restore ADCP & Knudsen configs from synched config.
7. Sea bird and marine mammal observers on board on pilot house level (not on top) – so comms can stay on. Will they have bigeyes that need to be shipped?
8. Need super sized HAZMAT locker?
9. New UPS in lab puts out 2250 watts
10. Try using the free program *Process Explorer* to check PC processes (to limit bandwidth off ship)
11. We'll be on HiSeasNet Ku-band Beam1 (check out [hiseasnet.ucsd.edu](http://hiseasnet.ucsd.edu) to see coverage map).
12. Wants to spend the night of 21<sup>st</sup> on board ship in Newport – needs consent of Constable
13. One scientist is profoundly deaf, with cochlear implants. Needs to have buddy assigned.
14. If Hildebrand comes – will we need to drag for mooring?
15. Everybody needs positive ID – passports are strongly recommended.