SEATALK Collaborative CRUISE PLANNING CHECKLIST **Vers: Nov 2018**

========== BEFORE ==========

Define science goals

- Write and share a cruise plan (including emergency information), make a hard copy
- seek out others familiar with ship/region for advice.
- what defines success?
- back-up goals for bad weather

Environment

- get topography, charts, ice, weather, prior data, wind, daylight, ship working hours
- find out how to get environment info while at sea (weather, ice)
- find other research plans in the area
- set up outreach (e.g. for pre/post cruise, during cruise)

Cruise track and station plan

- work out timings under various conditions
- make and share station lists
- have contingency plans for bad weather, instrument failure, illness of key personnel
- have way of redefining/redistributing plan while at sea (e.g., programs, navigation software)
- check have enough people for work (including keeping Chief Scientist free enough to plan)
- consider useful ways of using transit
- work out sharing time and sampling (e.g., water budget for CTD, freezer space storage and temperatures) with all groups on board.
- work out who is overseeing scheduling on board
- plan how to ensure science operations compatible between vessels for multiple vessel cruises

People plan

- how many people for reasonable work load (what skills, what if someone falls ill)
- check all people have necessary personal prep (e.g., medical, dental, meds including sea sickness)
- check all people have necessary work training prep (e.g., safety at sea, polar bear training)
- prepare for what paperwork people need to bring (Passport, TWIC, Driver License, Visas)
- especially for new people, set out expectations of working, living, etc., talk through being at sea, set up pre-cruise opportunity to get to know the team, including techs
- make sure plan doesn't have people working unreasonable hours to train others
- prepare for health issues (e.g., known bad seasickness, etc.)
- prepare for any disabled members of science crew (some ships have wheel chair access, etc.)
- plan for travel to and from cruise (including pre payment for flights, hotels), being aware that cruise dates may change due to scheduling, weather, unforeseen issues.
- plan emergency evacuation, insurance
- get emergency contacts for medical, family, harassment/assault situations
- collect medical and food allergy information and convey to ship
- check ship medical set up, consider back up phone service
- check medical set up for assault (e.g., plan B);
- prepare own medical kit to take (for minor injuries, for regular medicine you take).
- set up buddy plans, especially for new people or those being only representative of a group/institute
- set up and advertise "ombuds" (confidential independent advisor) for the science party (and define their remit, skills and confidentiality)
- cabins and sleeping plan
- get vessel meal plan

- plan and advertise shift system
- assess and advertise ship facilities (e.g., laundry, gym, pool, sauna, sports facilities)

Science Communications

- set up science party communications, and develop necessary protocols
- clarify lines of communication between science and ship , for before, during and after cruise
- clarify lines of communication within science party (e.g., Chief Scientist should be told everything)
- clarify what you want crew/science to tell you (e.g., if they see something odd)
- clarify on what circumstances you can be woken up for problems.
- set up pre-cruise meeting
- set up during cruise meetings (daily? Plan of the day? How to communicate changes?)
- set up checking in with people informally ~ daily, watch for tiredness, burnout, preoccupation
- set up checking and acting on anonymous feedback
- set up morale events/occupations (e.g. for long steams, weather days, monotonous work)

Equipment

- test all your own equipment and bring spares
- get list of all gear on ship (to allow for sharing in case of problems)
- bring all own tools, batteries, consumables (e.g., tape, paper, zip ties, chemicals)
  (don't rely on borrowing from ship)
- bring electronic and paper copies of all manual, contact info for all suppliers
- bring own tie down (deck tie down, lab tie down, no-slip mats, hooks)
- check computer licenses (including those expiring while not on the internet)
- pre install VPN (for workday, accessing APL intranet, journals)
- bring install discs for essential software
- have backups for essential computer failures
- headlamps (e.g., constant red light for work on deck at night)

Ship Equipment

- winches, blocks, wires, deck gear, lab gear, other equipment (e.g., CTD)
- check what computing and communicatio equipment, printers, paper
- check ship's power, check ship's bolt and tie down set up
- submit dive plans

Precruise planning

- set up meeting with science party, and with ship
- get shipping lists (especially for communal equipment)
- plan how to share science plan during cruise
- talk through operations with crew before going to sea
- check working/deck rules (e.g. PPE, hard hats, floatation, etc.)
- Find and work with agent if necessary

Communications

- availability of phone and email (Bandwidth , times of connectivity, backup plans)
- if poor communications, work out plan for Workday/duo (can delegate to someone on shore)
- bring and make available Science Team Satellite phone
- set up anonymous reporting and ombuds (confidential independent advisors) for the ship
- set up a compliments and complaints system

On Loading plan (for gear and for people)

- prepare deck plan
- prepare lab plan (including freezer space, temperatures, storage, chairs and tables)
- prepare Hazmat plan (including e.g., list all chemicals (quantity, docs), lithium, paint, WD40)
- prepare for disposal of Hazmat after cruise (e.g., take home, leave with ship, etc.)
- plan for last minute airshipments
- get full inventory of all gear loaded
- check power/weight/footprint/on-winching for heavy/big gear
- check who is responsible for tying down gear
- reserve any in port transportation required (e.g. rental truck, including who can drive (e.g.,UW, >25yr))
- build in time for on-load delays
- prepare photo board with names (science party and ship)

Off loading plan (for gear and for people)

- special care for samples after cruise (e.g., frozen)
- Hazmat
- how to get data (and backups of data) off ship
- plan for airshipments home (including Hazmat)

For foreign vessel (or non unols vessel) ** be aware of long lead times on these issues**

- get foreign agent/customs broker (e.g., expediters international)
- get foreign permits, for transit, for sampling, for underway sampling
- prepare clearances for shipping samples home post cruise
- use "RATS" (Research Application Tracking System) scheme for EEZ
- work out import/export considerations
- plan for customs - shipped equipment, hand carried equipment
- plan for dock customs (e.g., controlled yards)
- get visas for work or travel (also for foreign nationals on board), including other necessary documentation for the country (e.g., proof you are leaving the country)
- prepare for Observers (e.g., representing foreign government, interest groups) on board (e.g., travel, pay)
- work out any Export Control issues, and any ITAR, EAR requirements (State/Commerce Department)
- work out different culture/medical issues, behavior in foreign port, (including special concerns/expectations for women, racial groups, LGBTQIA)
- prepare for different plugs and voltages
- check for consular access, or other US local resources
- collaborate with local entities/institutions, set up local outreach

For foreign ports

- where eat/stay, safety concerns, emergency contacts, curfew?) (State Department as resource)

========== DURING CRUISE==========

Initial setup

- do a safety briefing and walk through the ship
- do a start of cruise science meeting
- get clarity on who is cleaning what, where to get supplies, how to do laundry, etc.

Day to Day

- daily science meeting and next day planning

- public list of tasks/schedule/ to do lists
- communicate last minutes changes to plan, weather, team.
- reiterate flow of communications, who is in charge (day watch, night watch)
- clarify on what circumstances you can be woken up for problems.
- emphasize learning from mistakes, not blaming for mistakes
- make sure all team members have a role
- set up culture of group responsibility for highlighting problems (all scales)
- keep a daily log of events etc. from the cruise
- keep on top of data stream, organization and BACKUPS
- check in with people, encourage inclusion, (make sure everyone is counted at least twice a day)
- make sure bridge always knows who is the charge of science (e.g., lead of night shift)
- be open about science results, give crew/everyone something to aim for/feel accomplishment
- be prepared to take advantage of unexpected opportunities
- set up morale events/occupations (e.g. for long steams, weather days, monotonous work)
- address problems as they arise, while they are minor problems, before they become bigger
- have informational meetings (e.g., informal seminars, travel logs, entertainment or training; ALSO about ship - engine room, other missions,)
- start to prepare for end of cruise (check offload plans, solicit cruise report contributions, solicit sharing of photos, data back up plan)

Equipment and spaces

- check equipment tied down
- keep work areas tidy and clean
- monitor consumables
- make notes and photos of set up
- do training for deck ops,

========== END OF AND AFTER CRUISE ==========

Offload

- return shipping coordination (e.g., agents, hazmat, customs)
- reinventory, including consumables
- clean up gear and ship, pack away in an organized way

Data and reports

- collect ship's underway data, and shared data from other science teams
- collect dive logs, ship's logs
- process samples (prioritizing)
- collect cruise report contributions from all parties
- set up sharing of photos
- write cruise report
- do data backups, send back data by multiple routes

People - be careful in behavior in port when docking after a long cruise.

Post-cruise debrief

- post cruise science team debrief (multiple points of contact, to allow for honest feedback)
- revisit plan to assess strengthens/weaknesses - how did it go?
- get feedback from science party on science and ship

======= SAGE ADVICE

- ship = home for crew, respect that
- nothing is secret on a ship, the role of gossip
- make sure humor is "nice", not bullying
- respect for others, all in the same boat
- safety is everyone's responsibilities - if it looks unsafe to you, TELL someone
- help others (and ask for help), team looks out for team, check in with people
- make sure everyone, including people in authority, are interacting respectfully with the crew
- keep your work area tidy (the crew have to, and they will respect you for it)
- be respectful of common places
- be clear who is tying what down
- be punctual at meal times, and make sure you don't delay others clearing up after meals
- turn up 5-10min early for watch change, to allow information turn over
- for long cruises, repeat drills and safety briefings
- how to keep everyone engaged in what is going on
- be proactive about explaining ship culture, rules, behavior, expectations
- think about things that might not be a comfortable experience, discuss them openly, consider how to fix them
- protocols for room mates (e.g., bring a headlamp)
- good supply of ear plugs
- anticipate rooming problems (be clear on how rooms assigned)
- how to break monotony of long cruise (promote group /morale activities, plan ahead for birthdays/holidays, offer to cook, offer to wash up, ask for ship tours, eat together at meals, decorations for lab. If line ceremonies - promote positive climate, not hazing, optional, don't build enormously on it in advance, and ensure good supervision)
- communication, communication, communication (make sure coms are open, encourage people to speak up)
- also keep team looking out for team while ashore
- control expectations
- importance of detailed notes, don't rely on your memory
- calibrate your collaborators (does 10min mean 10min?)
- be sensitive to the schedules of others (e.g., when people need to sleep between watches, when people are distracted with their sampling)
- take advantage of unexpected down-time (e.g., to sleep, be social, etc.)
- be clear off watch time is important
- make sure everyone gets enough sleep
- if you are the busy one, still be polite ("Sorry, I can't tell you now .. I'll tell you later")
- transparency is good. People are happier if informed ahead of time.
- be aware of alcohol issues (e.g., those uncomfortable with drinking, those likely to over drink, those under 21, those unaccustomed to drink), and plan team events accordingly
- be clear what can be placed in waste bins on board
- be clear about what can be placed in the toilets on board (incl how to dispose of feminine hygiene products)
- schedules can (and probably will) change (don't schedule things immediately before/after cruise)
- prepare/allow time for culture shock, transition from ship-world to real-world.
- there is no hardware store at sea
- for long cruises, prepare early to get many month supply of usual medicine
- if parking a car on Seattle streets, be aware can only leave it in one place for 72 hrs

FOR MORE ABOUT SEATALK, a UW effort to build community for APL and Oceanography Fieldgoers, see psc.apl.washington.edu/Seatalk.html