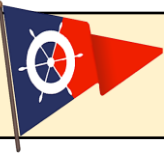


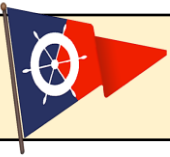
Safe Trip Planning – Project Data

Title:	Safe trip planning, and what to do if things go wrong
Objective:	Discuss boat trip pre-planning and crew conduct to minimize risks and what to do in the event of an on-board emergency
Speaker(s):	Kevin Jones
QYC Only?:	No
Date:	10 May, 2017
Time:	7 – 9 PM
Duration:	120 minutes
Location:	Vashon Library (Meyers Hut as backup)
Space Required:	Room with tables, chairs and projection screen
Supplies to bring:	Laptop and power cable, projector and power cable, laptop to projector cable
Tools to bring:	None
Props & Examples:	None
Advertising plan:	Advertise tech talk w/ flyer at QMM, library, grocery store, HW store, Burton Boat, QYC (Meyers Hut, top of hill bulletin board, dock gate), preview at QYC meeting



Safe Trip Planning – Agenda

- 7:00 Welcome / Overview / Introduce experts
- 7:05 Planning checklist
- 7:20 While underway
- 7:30 When things go wrong
- 7:45 Group exercise instructions
- 7:50 Groups split up and perform exercise
- 8:15 Groups report out – 6 groups / 5 minutes each
- 8:45 Questions?
- 8:50 Start teardown / Complete surveys
- 9:00 Depart

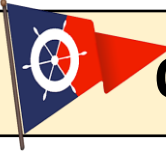


WELCOME to QYC Tech Talks!

- A Tech Talk is...
 - An exchange of information, ideas and experience
 - More dialogue than “teaching”
 - A little structure
- We encourage...
 - Listening, learning & contributing
 - Discussion and debate
 - Questions
- Our next Tech Talk is:
 - 20/21 May – Tech Talk Open House

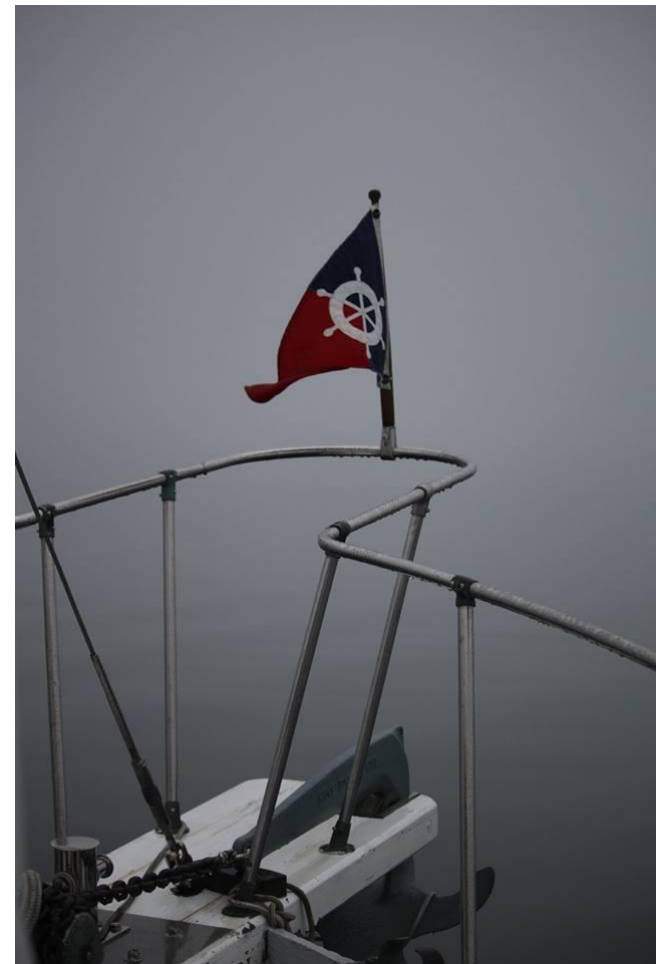


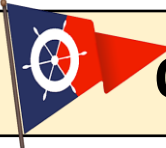
Together, to Learn From Each Other



Safe Trip Planning - Overview

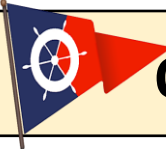
- Preventing problems before they start
- What to do if things go wrong
- Resource application
- Decision making steps
- Group exercise / report out
- Homework





Trip Planning Checklist

- Ideal Trip Plan
- Check Weather forecast – adjust plan if required
- Pre-Departure briefing plan
 - Discuss what to expect based on weather, tides, currents
 - Hazards, hazardous areas and shelter options
 - Timing constraints
 - Location of safety equipment on board and how to use it
 - Need for practice / drill prior to departure or certain hazards?
- Clarify crew roles and responsibilities (if more than 2 people on board)
- File a Float Plan
- Crew emergency contact list in case of emergency
- Rescue resources in planned travel area
- Methods to contact emergency responders (VHF radio, cell phone, other)
- Expected timeline to:
 - Get message for help to responders, and
 - For responders to reach party



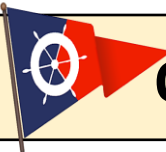
Safe Trip Planning – Pre-Departure Brief

- Introduce all crew members
- Route description / schedule
- Tides / currents / weather & associated hazards
- Alternate plans (open discussion)
- Hazards (open discussion)
- Crew discussions while underway
- Clarify crew positions for multi-member crews
- Set communication expectations
- Summarize: Risks / concerns / questions?
- Discuss plan to get underway

Things to Avoid #1:



Let the crew raise issues, Emphasize teamwork and communication



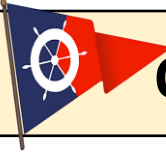
Safe Trip Planning – Communication

Like this:

- Avoid jargon
- Describe non-verbal signals
- Communicate information & intent
- Who, what, where, when, why, how
- Feedback
 - Say it, have it repeated back to you, confirm
- Listen first – seek understanding, ask open questions
- Is crew ready, able & willing to listen?



Clear communication = Reduced errors = Managed risk



Safe Trip Planning – Communication

Like this:

- Avoid jargon
- Describe non-verbal signals
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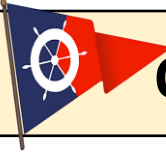


Not this:



- Say it, have it repeated back to you, confirm
- Listen first – seek understanding, ask open questions
- Is crew ready, able & willing to listen?

Clear communication = Reduced errors = Manage risk

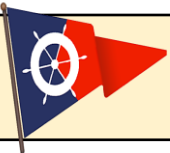


Safe Trip Planning – When things go wrong

Consider a medical emergency while underway

- First aid response plus a boat management requirement
- Accident response process – quick summary
- Resource acquisition – calling for help – quick summary
- Resource application
- Decision making process steps
- Consider options and alternatives – location, time of day, time of year, communication availability, type of medical injury and required response

Taking charge and situation assessment – most important first steps



Rescue / Lifesaving – Rescue Response

American Red Cross

Emergency Action Steps

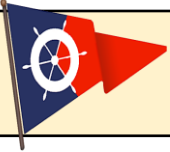
- Check
- Call
- Care

- Two different sets of rules
 - How are they different?
 - Why are they different?

Mountaineers: Freedom of the Hills

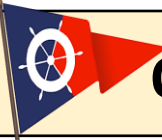
7 steps of incident response

- Take charge of the situation
- Guard against another incident
- Render life saving measures
- Protect the patient
- Establish extent of problem or injury
- Develop a plan
- Carry out the plan



Marine VHF Radio Use – Distress Calls

- Securite: General information
- Pan-Pan: Immediate assistance required
- Mayday: Life threatening
- Digital Selective Calling (DSC)
 - Maritime Mobile Service Identity (MMSI) #
 - Ship to Ship
 - Distress (Panic Button)

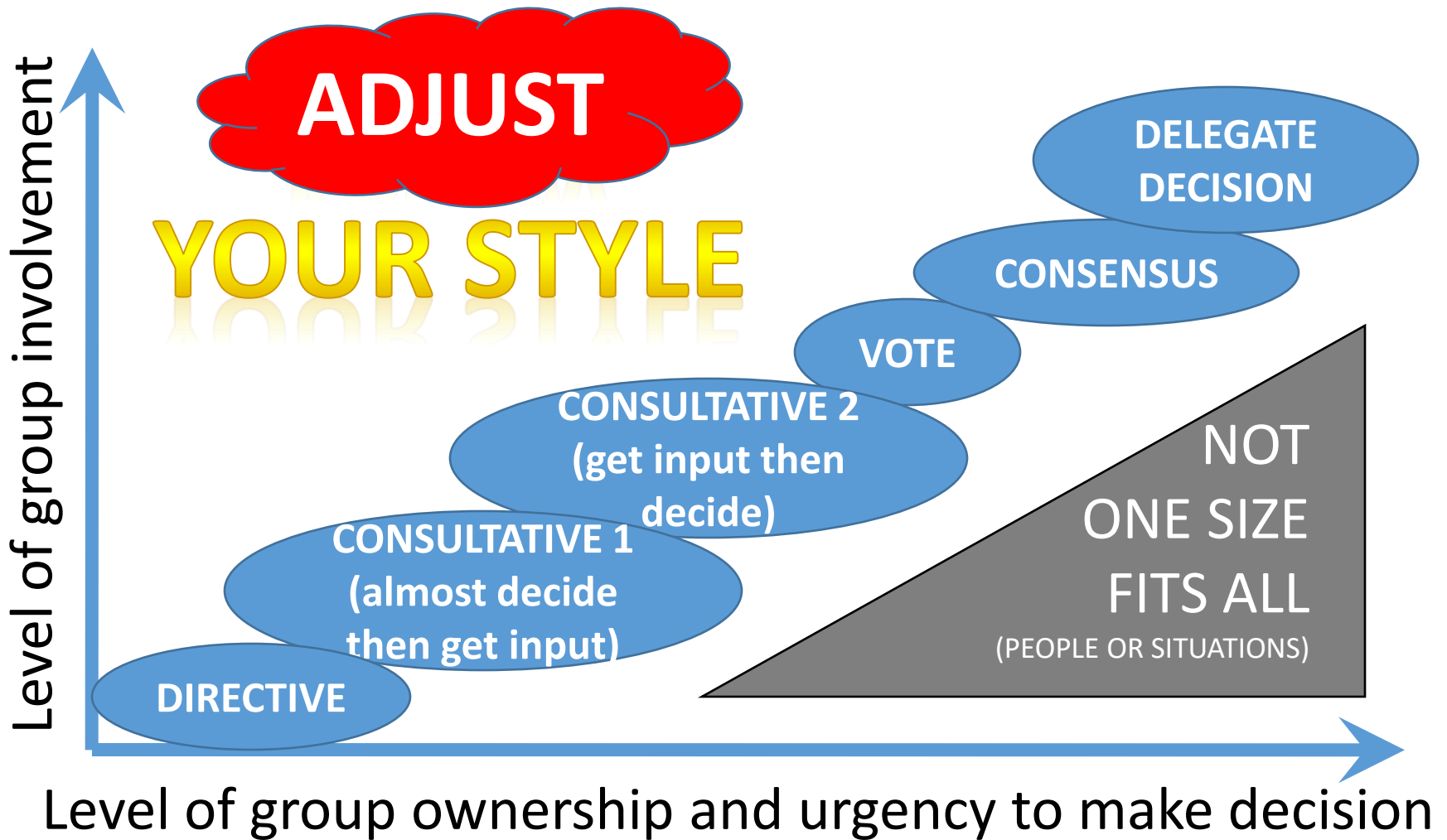


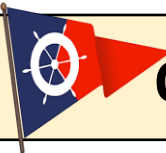
Things go wrong – Resource Application

- Use all information / active listening and clear communication / involve all group members in critical decisions
- Decision timeline – how urgent / how critical
- Decision making steps
 - Clarify / validate the situation (multiple data sources)
 - Assess team skills against the environment / situation
 - Beware of selfish motivation(s) of the decision maker(s)
 - Involve participants in the decision
 - What decision making style – depends on urgency / risk

What resources do you have, what do you need. Involve all crew members.

Decision Making Styles





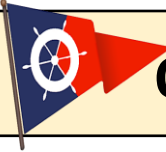
Things go wrong – DECIDE Method

- Define the problem
- Educate yourself
- Consider your options
- Identify your choice
- Design a plan
- Evaluate the decision



- Based on this reflection, should you reconsider?
- Will your actions appear rationale in the “light of day”?

Final decision test – what are the risks and rewards in your plan?

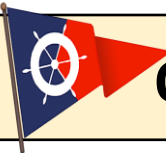


Things go wrong – Group Exercise

- **Divide into groups**
 - **Family members separate**
- **Each group has a “scenario”**
- **Groups assess the situation / develop a plan**
- **Each group reports out**

Things to Avoid #2:

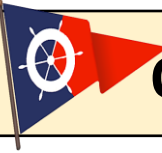




QUARTERMASTER YACHT CLUB – Safe Trip Planning Tech Talk

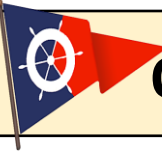
Things go wrong – Group Exercise

Assumptions:								
	Away from shore							
	Boat is operational and remains operational							
	There is only the captain and first mate on board							
Condition:	Patient: Captain First Mate	Proximity to safe landing / anchorage or shelter	Proximity to safe landing or shelter with medical personnel	Communication access	Proximity to other boaters	Time of year	Wind / Waves	Location
Range of Condition	Intestinal distress, can communicate, cannot take helm	Within 15 minutes	Within 15 minutes	cell phone / VHF radio	Multiple other boats in view	winter	None / None	Puget Sound
	Severe leg contusion, severe bleeding, no broken bones	Within 30 minutes	Within 30 minutes	VHF radio only	Multiple other boats seen in the last 12 hours	spring	5 - 10Kts / 1 ft	Desolation Sound
	Broken leg, some bleeding	Within 1 hour	Within 1 hour	no cell phone or VHF radio	Multiple other boats seen that day	summer	10 - 15 Kts / 2 ft	Broughtons
	Unconscious but breathing	Within 4 hours	Within 4 hours		Saw a boat yesterday	fall	15 - 20 Kts / 3 ft	Head of Knight Inlet
	Unconscious, not breathing	Greater than 4 hours	Greater than 4 hours		Saw a boat last week		20 - 25 Kts / 4 ft	
			Greater than 2 days		Don't recall when last boat was seen		> 25 Kts / > 4 ft	



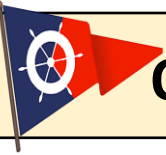
Things go wrong – Homework

- **Your next boat trip**
 - **Captain will let first mate know prior to departure that at some time during the trip the captain will turn over the helm to the first mate to emulate a captain disabled situation**
 - **Talk through “what if” scenarios (eg: transiting Tacoma Narrows during ebb tide, what if the motor stopped right now, what would we do?)**
 - **First mate identifies something wrong with the boat and alerts captain, who plays out the “what if” scenario**



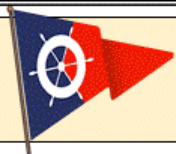
Things go wrong – Additional Training

- **First aid / CPR / AED**
- **Wilderness or Alpine first aid - Recommended**
- **Weather websites / how to read a weather map Tech Talk (planned)**
- **Independent research: Crew Resource Management**



Safe Trip Planning

QUESTIONS?



QUARTERMASTER YACHT CLUB Tech Talk Series

Hands-On Tech Talk Open House

Join us for a weekend of hands-on practice!

Saturday, May 20:

8AM - 10AM: VHF Radio

10AM - 4PM: Man Overboard Life Sling*

Sunday, May 21:

8AM - Noon: CPR/AED, Flare Use,
Knot Tying

Noon - 2PM:
Anchor Rode
Inspections**

2PM - 6PM:
Anchoring
Practice**



* Register: <http://qycv.org/>
** Sign up: kevinjonvash@gmail.com

**Where: Quartermaster Yacht Club Meyers Hut
Down the hill from the pump house at:
23428 Vashon Hwy SW, Vashon, WA 98070**