

# **SAFETY MANUAL**

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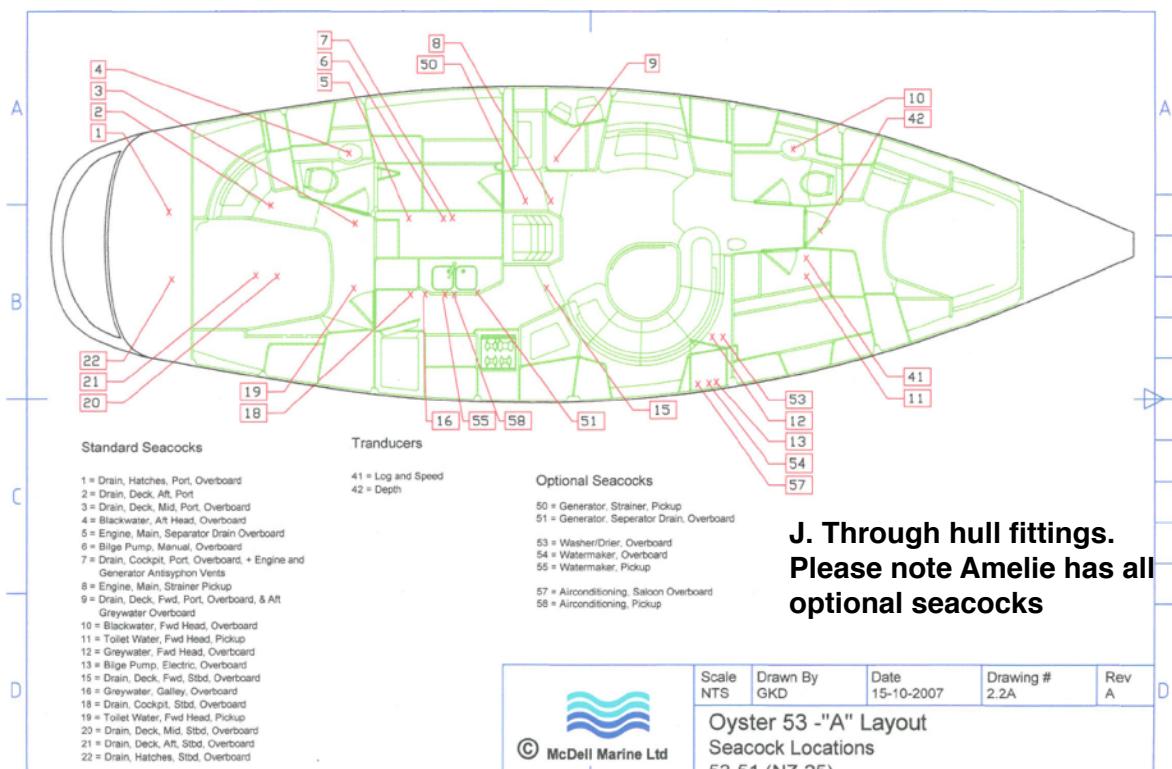
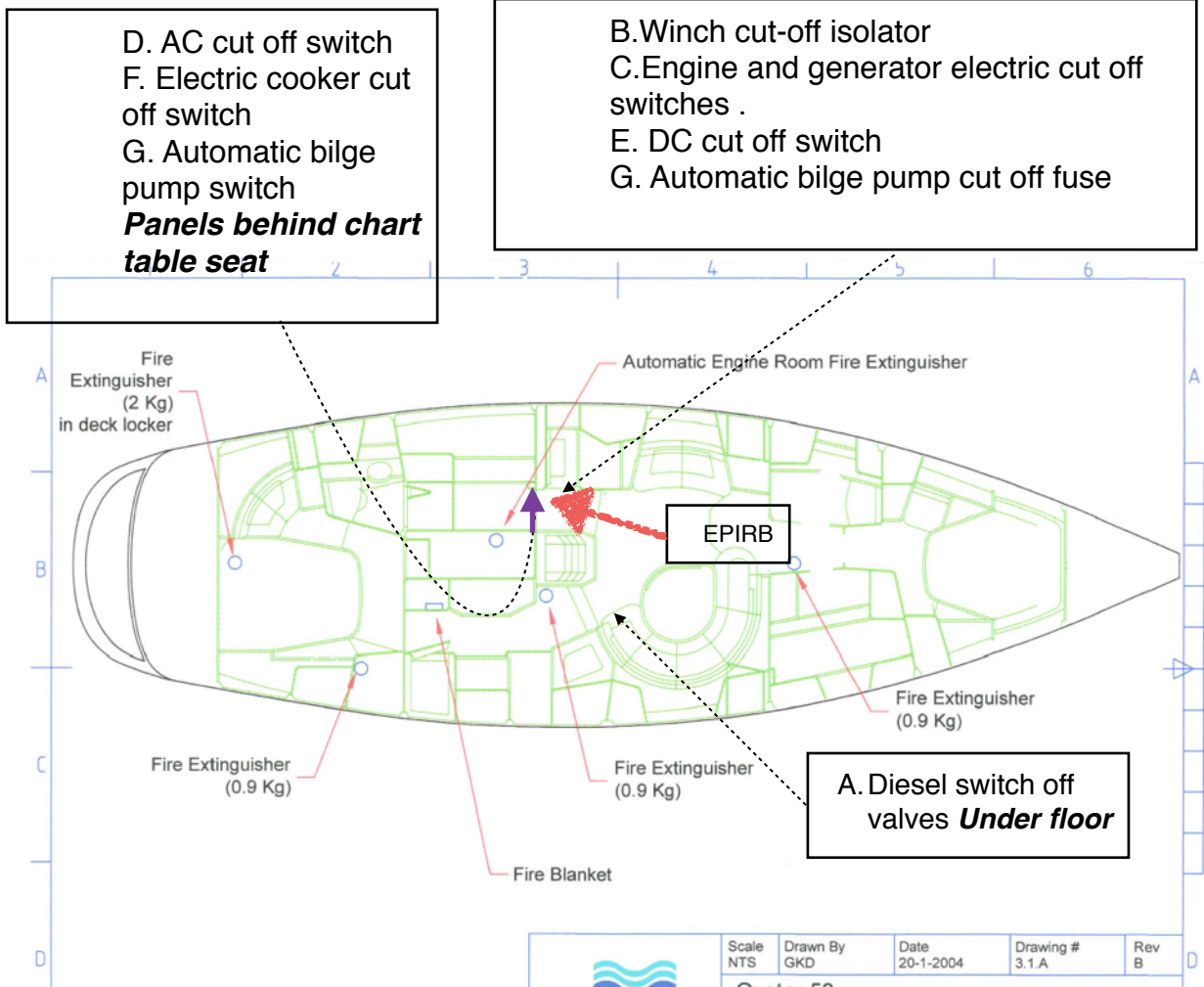
**SAFETY EQUIPMENT****1.1 List of Safety Equipment On Board**

- A. Liferaft — 8 person Lifeguard located in its own locker immediately behind the cockpit
- B. Horseshoe lifebuoy, mounted at push pit aft
- C. Dan buoy, mounted port side aft at pushpit
- D. Grabbag under chart table seat, containing:
  - 1. 6 Parachute flares
  - 2. 8 Hand held flares (4 x red, 4 x white)
  - 3. 2 Smoke signals Orange
  - 4. Handheld GPS & VHF + reserve battery
  - 5. Epirb
  - 6. Iridium satellite phone aerial
- E. Epirb ACCUSAT above Tank Tender Water/Diesel sight gauge behind chart table seat Hex ID: 1D0E580158FFBFF Registered with the UK Maritime and Coastguard Agency
- F. 2 life vests per cabin
- G. First Aid kit in Stb cabinet in galley
- H. Ship's pharmacy in forward cabin under bunk
- I. Fire extinguishers in master bed room, galley, forward cabin and lazarette
- J. Fire blanket in galley Stb fwd.
- K. Torches on shelf behind chart table seat.
- L. Emergency fog horn under chart table seat.
- M. Automatic bilge pump permanently installed
- N. Emergency manual bilge pump to be operated from cockpit.
- O. Emergency steering stored in lazarette
- P. CO Alarm under companionway steps
- Q. Soft wooden plugs under chart table seat
- R. Handheld VHF ICOM at chart table
- S. Safety lines with hooks, under the chart table seat
- T. Hydraulic rig cutter, under the chart table seat
- U. Iridium satellite phone to left of chart table

**1.2 List of important on board systems**

- A. Engine and generator diesel switch off valves
- B. Winch cut-off isolator
- C. Engine and generator electric cut off switches
- D. AC cut off switch
- E. DC cut off switch
- F. Electric cooker cut off switch
- G. Automatic bilge pump switch and cut off fuse
- H. Chart plotter MOB buttons
- I. Auto pilot Standby and Auto buttons
- J. List of through hull fittings

1.3 Location of important on board systems

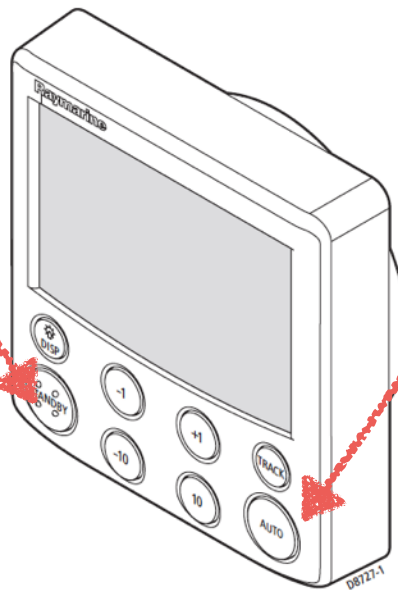


**1.3 Location of important on board systems (Contd)**

**H. Save MOB Button**



**I. Auto Pilot Standby Button**



**I. Auto Pilot Auto Button**

The SmartPilot controller is a SeaTalk® compatible autopilot control unit. It is designed as the main controller for the SmartPilot system.

The SmartPilot controller operates in the following modes:

- **Standby:** SmartPilot off. You have manual control of the boat.
- **Auto:** The SmartPilot steers the boat to maintain a locked heading.

**2. SAFETY INDUCTION AND CREW FAMILIARISATION****2.1 Safety and instruction under deck prior to departure (For newly joining crew and passengers.)**

- Show all rooms on the boat and point out where all safety equipment in that room is located or the nearest point.
- Show the location of the First Aid kit, Epirb, Fire Extinguishers and Fire Blanket.
- Show the location of the life vests and assign every person his/her own life vest.
- Explain the working of the life vests.
- Explain how the heads operate and that nothing can be flushed through unless it has passed through the body.
- Explain why doors and drawers always need to be closed properly and locked where applicable.
- Pull on the door to unlatch it from its open latch and not by pulling on the door knob.
- Put things back where they belong and keep a clean and tidy ship. (Your mother doesn't live here)
- Leave the fridge and freezer open as short a time as possible.
- Keep your personal belongings as much as possible in your cabin.
- Keep out of the chart table as it is used for navigation.

**2.2 Safety instruction on deck. (For newly joining crew and passengers.)**

- Smoking is only allowed on deck and not near the sails. Take care of your cigarette butts!
- Close the openings (entrance) in the railing immediately after leaving the dock.
- Always use one hand to hold onto and the other for doing things when outside of the cockpit!
- A life vest can be worn at any time a person feels more comfortable to wear one, and is mandatory to wear when the skipper feels the need is there.
- Explain how the life vest works and make the persons fit the life vest and adjust it to fit comfortably how and when to use the safety line.
- Explain the working of the Safelink R10, personal AIS beacon.
- Use a lifeline when the ship is moving too much.
- Always use a lifeline when leaving the cockpit at night.
- At night never leave the cockpit unless someone is watching you.
- Point out the fire extinguisher in the lazarette.
- Explain the working of the life raft.
- Explain the use of the horseshoe buoy in case of a man-overboard situation.
- Explain the working and use of the Dan buoy
- Discuss the man-overboard manoeuvre, also in case the skipper falls overboard!
- Don't leave anything laying on deck that can be stored away or properly secured.
- Always walk carefully on deck, and even in calm weather always hold on to the ship. It is easy to slip, trip or stub your toes.
- Do not touch the steering wheel when the autopilot is activated.

**2.2 Safety instruction on deck. (For newly joining crew and passengers.) (Contd)**

- When around the boom and the main sheet, always be aware that it can move at any time and may hit you, so stay clear!
- Be very careful with hands near lines and winches, this is a large ship and forces are big. Give clear instructions how to handle sheets when sailing and be careful with operating the winches.
- Keep good watch, (especially when the skipper is below) Call when there is danger or when in doubt.
- Listen well and follow orders!
- Look after yourself, the boat and the crew.
- Enjoy being at sea and your time on—board Amelie, she is a beautiful and very seaworthy ship.
- With everything you do; ensure you are safe, cannot fall overboard, cannot get caught in a slipping line or anything that can move, with fingers, hands, arms or legs! *Be Safe at all times!*

**2.3 “Man Overboard” procedure**

A man overboard situation is cause for a Distress Call if they cannot be located quickly! In case of a Man—Overboard situation follow the described process below in the following order as numbered:

1. Call “Man-Overboard!!! Man—Overboard!!!, etc and push the MOB button on the Furuno plotter and keep it pushed in for 3 seconds until it activates the MOB alarm and puts the position in the chart. (To silence the MOB alarm, push any button on the Furuno system.)
2. Throw the horse shoe buoy overboard as close to the MOB as possible and keep your eyes on the person and point your arm in the direction of the person overboard until you get help from a person off duty, who then takes over by keeping an eye on the MOB and keep pointing the arm in the direction of the person in the water.
3. Start the engine, roll in the yankee and main sail.
4. Turn the boat around and approach the person in the water, so the boat will be in—between the wind and the MOB.
5. Bring the boat to a halt and stop the propeller from turning.

**2.4 Falling Overboard**

The chances of surviving a fall overboard at sea are drastically reduced without the aid of a life vest. Therefore a life vest must be worn when on deck alone (day and night), as the movement of the vessel in any weather conditions make moving around outside of the cockpit dangerous.

What to do if you fall overboard:

- In case you fall overboard but are still attached to the boat by a safety line, and you are being pulled underwater, there is an Emergency Safety Line Cutter in a pouch on the right hand inside of the vest near the belt. This can be used to cut the safety line. Better alive floating away from the boat then drowning alongside.

**2.4 Falling Overboard (Contd)**

- Inflate your life vest, it should inflate automatically within seconds of falling in the water.
- When it does not inflate automatically. It can be inflated manually by pulling sharply the rubber handle downwards to activate the CO2 cylinder. The vest can also be inflated orally by opening the zip at the yellow breakout point and pulling out the tube. After removing the end cap, blow into the tube until the vest is fully inflated.
- Upon coming in contact with water a high intensity flashing light comes on. You can pull out its extension to make you more visible.
- Mobilise the sprayhood to keep the water of your face and make you breath more easy.
- There is a high pitch whistle in the pouch with the safety belt cutter. Mobilise it and clip it to the top side of your vest so it is ready for use when you need to attract the attention of closing in search parties.
- Activate the Safelink R1OSRS which is in the pocket of your vest on the left hand side. This unit DOES NOT ACTIVATE AUTOMATICALLY.
  1. Take it out of its pocket and ensure that the yellow line is tied off to your life vest so you cannot lose the Safelink.
  2. Pull out the Orange de-arm tab. Pull firmly on the Red activation cover to remove it. This will activate the unit and the antenna comes out to start sending.
  3. Clip the Safelink to the top of your life vest and make certain that the BlueGPS Zone is pointed towards the sky and is not obstructed.

**2.5 Search for a Missing Person**

- Stop the boat.
- In a situation that a person is missing and not on board, evaluate when they were last seen or heard and over which time period they went missing.
- Call for help immediately by sending out a distress call, time is of an essence to find them.
- 2 life vests on board Amelie have been equipped with the Kannad Marine SafeLink RIOSRS, which is a personal, portable AIS device. The AIS signal can be received by all AIS receivers within a radius of 4 NM with the unit properly activated and above water.
- Look for the AIS signal of the Safelink on the Furuno plotter to identify course to MOB

**2.6 Retrieval of the Man Overboard**

- With the boat close to the MOB but less than 25 meters away from the person in the water, throw the Dan buoy to the person in the water so he can pull it over his head and put it under his arm pits.
- The person in the water can now be hoisted out of the water with a halyard and a winch.
- When on board examination needs to take place to find out:
  - Why did the person fall overboard in the first place.
  - Did he get injured when falling overboard.
  - Did he get injured when in the water
  - Did he get injured when brought back on board.

**2.6 Retrieval of the Man Overboard (Contd)**

- Depending on the above a medical examination should take place. (see page 216 and section 3.3 below)

**2.7 Abandon Ship**

- Abandon ship should only be considered when the yacht is on fire or sinking. At sea the safest place to be is on Amelie even if she is badly damaged.
- The ship is only abandoned when instructed by the skipper or his/her replacement
- When in the liferaft attach the lifeline of the life vest to the raft.
- To be taken in the liferaft:
  1. Epirb, Grabbag, Medical Grab Bag, Satellite phone, bottled water.
  2. Pocket knife, hand held VHF
  3. Passports, ship's papers, Log book, fishing gear, emergency rations

**2.8 What to do in case of a Fire On Board**

A fire on board of a yacht at sea is one of the most life threatening situations for the whole crew. All material this boat is made of are flammable and fire has to be controlled immediately or the situation will rapidly become hopeless.

Remember, there are 3 parts required to have a fire, these are; Fuel, Oxygen (air) and Heat. Without either one of these three there will be no fire. Each type of fire as well as different circumstances require different methods, but they are all aimed at removing one of the 3 elements.

The fire extinguishers are of the ABC type suitable for wood, fuel and oil fires.

The places where a fire is most likely to occur are:

***Engine Room:***

An engine room fire is most likely a fuel fire.

Actions to take:

- i. Stop the engine and generator.
- ii. Close off the fuel supply to the engine and the generator.
- iii. CO2 fire extinguisher should release CO2 automatically into the engine space.
- iv. Wait until the engine room has cooled down before opening the door.

It is extremely important that the engine room is NOT opened until it is completely cooled down, this may take hours!!! When the engine room is opened too early, fresh air will run in and self-ignition, because of the high temperature still inside, may take place and then there will be NO CO2 left to extinguish it.

***Galley:***

In the galley the most common fire is of the oil in a frying pan catch on fire.

Actions to take:

- i. Pull the fire blanket from its storage case, at the entrance of the galley.
- ii. Hold the blanket as a shield in front of you.
- iii. Place gently over the fire.
- iv. Turn off the electric cooker cut off switch.

v. Let everything cool down and do not move the hot oil but leave the fire blanket in place and stay watchful. NEVER use water to extinguish a fire like this, because oil will be splashed out of the pan and now hot oil runs over the floor under the floor boards and it will put the whole boat on fire.

## 2.8 What to do in case of a Fire On Board (Contd)

### *Anywhere in the boat:*

This will most likely be an electrical fire caused by a short circuit. Turn off the AC and DC electrical circuits and use a fire extinguisher to extinguish the fire.

### 2.8.1 Fire Prevention

- Keep a clean engine and engine room, repair fuel and oil leaks immediately.
- No flammable materials to be kept in the engine room.
- Oily and greasy rags to be disposed off immediately.
- When using a pan with oil on the stove for deep frying, watch it closely and stay around as long as it is being heated, to prevent overheating.
- Never put more oil in a frying pan than half full on a sailing ship and preferably less.
- Do not smoke inside the accommodation but only on deck.

## 2.9 What to do in case of a Seawater Leak into the Boat

Unless there has been a serious collision with another boat, or a very hard, sharp and large floating object (freight container), most causes of a seawater leak in the boat is caused by a failed overboard valve or leaking seawater hose/piping.

Action to be taken:

1. One person stand by at the emergency bilge pump in the cockpit to pump out the water.
2. The second person ensures that the bilge pump is running and lift up the floor board above the bilge water well to check the water level in the boat. When he sees that the electric bilge pump cannot keep up with the supply he will instruct the person on the emergency bilge pump to start pumping as well.
3. Listen well if you can hear water flowing into the boat.
4. Lift up floor boards to find the leak.
5. Under the chart table seat a variety of wooden plug sizes are stored to insert in a hole in case an overboard valve is broken off.
6. If the leak is not found quickly and the bilge pumps cannot stem the water ingress then preparation must be made for Abandon Ship (2.7 above) **although actual launch of the liferaft can only be ordered by the skipper**

Always be alert and check when you hear the bilge pump start up. The bilge pump generally will run only once a day max. for maybe 30 seconds. When you hear it start more than that and it runs longer, go and check it out immediately.

## 2.10 What to do in case of a Dismasting

We have to be prepared on the action to be taken in the unlikely event of losing the mast. This situation is a potentially dangerous situation for boat and crew. People can get seriously injured and the boat can be damaged enough to sink her.

1. Wires and ropes are all in a terrible mess and the sails are all tangled up in it all.
2. In a rough sea, the jagged ends of spars may be banging against the hull and threatening to pierce it.
3. Cutting it all loose may be required to save the boat depending on the situation.
4. However, you may need the remains to make a jury rig to reach the coast.

## **2.10 What to do in case of a Dismasting (Contd)**

5. A hydraulic rig cutter is kept under the chart table seat

**Do not run the engine as the propeller, almost certainly, will get entangled in the wreckage!**

### **2.10.1 Making a Jury Rig**

- The main sail will most likely be ruined, however, the stay sail will most likely still be intact, possibly even the yankee.
- A retrieved piece of mast will be too heavy to man handle, but the spinnaker pole will be suitable to rig up as a jury rig.
- Use all wire on board to support the jury rig and hoist the stay sail.
- Throw as much of the debris overboard but try to save the SSB antenna and some of the VHF cable to make emergency antennas.

**3. MEDICAL EMERGENCY**

***This section is based on “Skipper’s Medical Emergency Handbook” by Dr Spike Briggs and Dr Campbell MacKenzie, page numbers refer to this handbook for reference.***

**3.1. General Procedure for On Board Medical Emergency**

At sea as in other areas of life, prevention is always better and easier than a cure.

The aim of dealing with Medical Emergencies at sea are to:

- Preserve Life
- Prevent further Injury
- Promote Recovery
- Provide a Diagnoses and deliver a stable casualty to shore

The On Board Medical Emergency Procedure is

1. Alert all crew to the occurrence of a medical emergency
2. Locate and assess casualty
3. Stabilise yacht with reliable helmsman or Autopilot and reduce sail
4. Immediate treatment
  - ABCDE Assessment
  - Pain relief
  - Immobilise fractures
5. Retrieval of casualty
  - To a safe place (table, bunk, saloon floor, etc.)
  - Be careful with lowering down the companionway
  - Reassess and remove clothing
  - Undertake further treatment
  - Keep warm
6. Communication
  - Prearrange shore support
  - Advice through Coast Guard
  - Search and Rescue Resources (SAR)
7. Evacuation
  - Familiarise with rescue procedures
    - By boat
    - By Helicopter

**3.2. Assessment of a Sick or Injured Person (Pages 32 – 33)**

When faced with a sick or severely injured crew with multiple problems, every second counts. It is important that you work out rapidly to assess what tasks to carry out and in what order. The system of Primary and Secondary Survey is an excellent system to organise your actions. Practise this survey with the crew.

**3.2.1 The Primary Assessment is conducted following the ABCDE Method.****A. Approach**

- Lookout for danger, avoid causing more casualties.
- Clear obstacles
- Wear Protective Equipment
- Level the yacht

**A. Approach (Contd)**

**Assess**

- Is the crew **responsive** or **unconscious**.
- Speak loudly in the person's ear
- Firmly grasp the shoulder
- Normal Response: Breathing and Circulation Adequate
  - Action :
    - If response is normal, go to Secondary Survey
    - If abnormal response, complete Primary Survey.

**Airways**

- Is the airway open or blocked? Is there a risk to the cervical spine? Protect if any doubt.
- Unconscious?
- Distressed?
- Seesaw chest?
- Noisy breathing?
- Effort on inspiration?
- Injury to Mouth/ Face/ Neck?

Action :

1. Stabilise the cervical spine if any history of head or neck injury. (Pages 164 — 165)
2. Open Airway using “Head Tilt/Chin Lift” method. (Page 159)
3. Look in the mouth for obstructing objects
4. Use airway device if available. (Pages 159 — 160)

**B. Breathing :**

- Is the person breathing? Is breathing adequate? Is the casualty blue?
- Is the person blue or pale?
- Is the chest moving up and down?
- Rapid, shallow breathing?
- Measure the rate of breathing.

Action :

1. Start BLS if no Breathing
2. Put in the recovery position if this helps.
3. Treat Pneumothorax if possible. (Page 180)

**C. Circulation and Control of Bleeding :**

- Is there a pulse? Is the circulation adequate?
- Is the person confused or anxious?
- Cold, sweaty face, hands, feet?
- Obvious bleeding?
- Measure pulse rate, blood pressure and capillary refill.

**C. Circulation and Control of Bleeding (Contd):**

Action :

- Start BLS if no Pulse.
- Place the person horizontal with legs above the heart.
- Control Bleeding. (Page 70)
- Insert a cannula into a vein. (Pages 172 – 173)
- Give IV fluids. (Pages 174 – 175)
- Keep warm!

**D. Disability :**

- What is the level of consciousness?
- Is the level of Consciousness:
  - A – Alert
  - V – Responds to Voice
  - P – Responds to Pain
  - U – Unresponsive
- Are the pupils equal and responding to light?

Action :
- Reduced conscious level but breathing: Place in recovery position.
- Continue to treat other problems.
- **Reassess frequently.**
- Keep warm.

**E. Environment :**

- Protect the casualty from the environment and further injury.
- Increasingly cool and mottled skin.
- Shivering.
- Low temperature.
- High temperature.

Action :

- i. Keep exposure time to a minimum
- ii. Remove the casualty from the exposed deck as soon as possible.
- iii. Keep the crew warm and dry.
- iv. In areas which are warm, keep the person out of the sun and get him into the shade.

**3.2.2. Secondary Assessment of a Sick or Injured Person (Pages 34 – 35)**

The Secondary Survey is a thorough, head-to-toe evaluation of the injured crew, comprising a complete history and examination. Its purpose is to make sure that no significant medical problems have been missed. A significant “distracting injury” like a compound open fracture may mean that another less “obvious” injury like broken ribs may be missed.

The history includes all the previous medical history of the patient and the most accurate account of the events that led to the accident.

The History of a Sick or Injured Person (Pages 34)

Below is an aid that can be used to have the vital elements available of the history of a patient. This has to be available on board and kept confidentially and on file by the Skipper.

- Allergies : These are common especially to some antibiotics, can be life-threatening making a bad situation worse
- Medication : What does the patient normally take? Some medication may confuse the situation, causing symptoms in their own right
- Past Illnesses : Ongoing medical complains (such as diabetes) may have considerable impact on the current problem. The list of medications being taken often gives a clue to past illnesses.
- Last Meal: Time of the last meal gives an indication whether the stomach may be full, which increases the chance of vomiting, especially if unconscious.
- Events : Finding out exactly what happened, and when, gives a good idea of the possible injuries that may be expected. Try to establish:
  - What happened?
  - Where did it happen?
  - When did it happen?
  - How did it happen?
  - Why did it happen?

**3.3. Man Overboard (Page 216)**

After a person has been retrieved back on board a thorough investigation must be conducted to identify the cause of the person falling overboard. This may have a medical reason, a mechanical reason, unbalance, a slip or fall. To ensure that the person is well and has no injury, an examination must take place.

- Conduct a primary survey as described in section 3.2.1 above.
- Conduct a secondary survey as described in section 3.2.2 above.
- Eye/Mouth/Skin
- Analgesics (needles)
- Rebreath Pocket Mask (For protection when giving mouth to mouth resuscitation)
- Sudocrem (Antiseptic healing cream)

### 3.4. Medical Kits

Identification Medical Kits: MSOS.

Type: Distant Ocean Medical Kit

Consist of: 1 Grab Bag and 2 Main Bags.

**Nothing should be taken from the Medical Kits without the permission of the Skipper.**

Inside each bag on the inside of the cover is an inventory of what was originally in the kits when provided to Amelie. In the ships computer is a list kept of what was used out of the kits so it can be reordered.

A medical kit could well contain several hundred items and finding the right item could become like finding a needle in the haystack. To prevent that, a medical kit must be well organised. When you open the medical kit you will find that it is subdivided in several sections/bags which are well labelled what they contain. Make certain that you keep that intact, so in case of an emergency you can find what you need very quickly.

Amelie Medical Kits are Distant Ocean Kits and equipped to sail well away from the shorelines and crossing oceans.

The medical kits are organised as follows:

*Grab Bag:*

- First Aid.
- Skin Repair
- Eye/Mouth/Skin
- Analgesics (needles)
- Rebreath Pocket Mask (For protection when giving mouth to mouth resuscitation)
- Sudocrem (Antiseptic healing cream)

*Main Bags:*

- Antibiotics.
- Gut/Seasickness
- Allergy/Emergency
- Dressings/Splints
- Equipment (Several)
- Blood pressure meter.
- BNF 62, September 2011. (Book on medicines)

### 3.5. Medical Support Services

Medical support services can be provided by Medical Support Offshore

Contact information:

Dr Spike Briggs Mobile +44 (0)7973 149615 Email [dr.spike@msos.org.uk](mailto:dr.spike@msos.org.uk)

Dr Tommo Tomson Mobile +44 (0)7770 436022 Email [dr.tommo@msos.org.uk](mailto:dr.tommo@msos.org.uk)

**4. COMMUNICATIONS PROCEDURES IN CASE OF AN EMERGENCY****4.1. Introduction**

No Distress calls should be made without the approval of the Skipper.

When making a Distress call the international call sign and MMSI number must be on hand as this is the international code and number the yacht is registered under and recognised by the agencies.

**Amelie MMSI #: 235060724**

**Amelie Call Sign: 2ALH3**

**4.1.1. Marine Alphabet**

A	Alfa	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliect	W	Whiskey
K	Kilo	X	X-ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

AMELIE = Alpha, Mike, Echo, Lima, India, Echo

**4.2. Iridium 9505A Satellite Phone**

The Iridium 9505A satellite phone works like any other hand held phone, to make an international phone call, key in the number by dialling “+” or “00”, country code and the phone number (without a 0).

Making a phone call is easy, check the display to ensure it shows “Registered”, key in the number, push the green button, lift the receiver (with the unit in the docking station) and wait for the phone to connect. When the phone call is ended, push the red button and hang up the receiver.

When the call is made in the hand-held mode, pull the antenna first and position it as such that it has a clear unobstructed view of the sky. Then follow the same procedure as above and hold the phone against your ear.

**4.2. Iridium 9505A Satelite Phone (Contd)**

The Iridium phone is password protected with a 4 digit pin when restarting from switch off. The PIN can be found inside the front cover of Amelie’s Log Book.

The SIM card will hold 155 personal phone numbers.

The following number has been programmed to be used in case of an emergency:

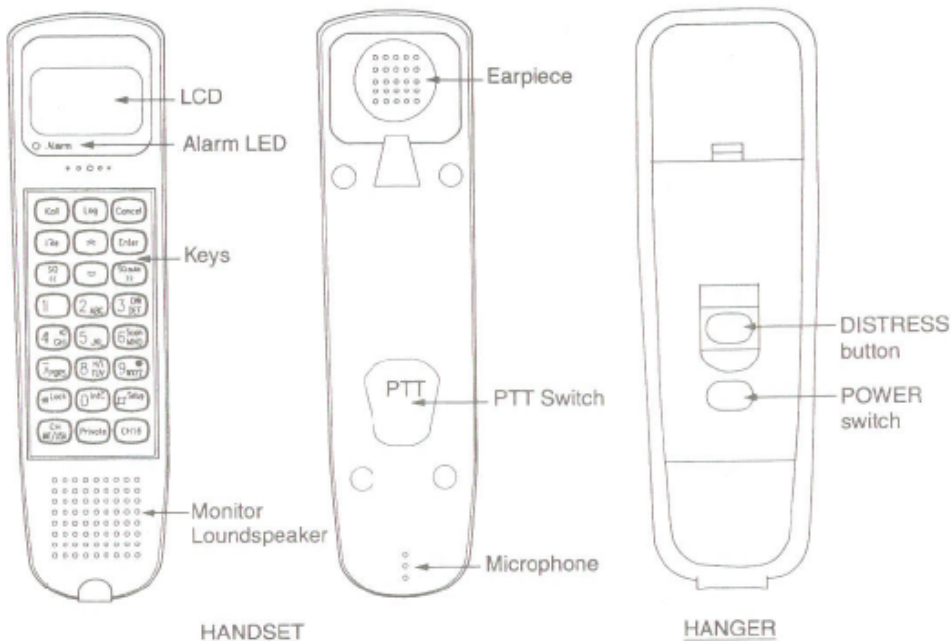
**Falmouth Coast Guard**—Telephone 00 1326 317575

This is stored as the first memory number and to call the following key strokes are used: [Menu],[OK],[OK],[OK],[OK], “1 Falmouth Coas” will display, [OK],[OK], the call will then be placed provided a good satellite signal is present.

**4.3. Furuno VHF Radio**

The Furuno VHF is equipped with digital selective calling (DSC) the ship's MMSI number 235060724 has been entered.

**The VHF must be kept on at Ch 16 at all times at sea.**



When sailing with other boats within VHF range, an alternative channel can be agreed upon, for instance Ch 72, for ship to ship communication. When the VHF is set at the alternative channel and the button “Dual Watch” is activated, the VHF will monitor both channels.

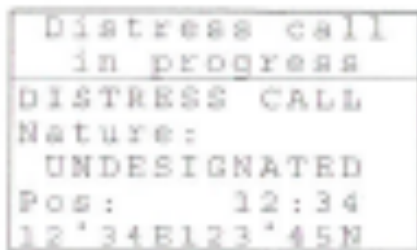
DSC is part of the Global Maritime Distress and Safety System (GMDSS), a maritime communication system, not just for emergency and distress messages, but also for all types of existing ship-to-ship and ship-to-shore routine communication.

### 4.3.1. Making a DSC Distress Call

**Caution:** Prior to making the distress call, check the display on the VHF to ensure that GPS OK indication is on and that there is no warning that MMSI number is missing. A Distress Call can only be made by the Skipper or his replacement when instructed by the Skipper.

Follow the following steps:

1. Hook off the Handset
2. Press the [POWER] switch in the hanger to turn the unit on, if not already on
3. Open the DISTRESS button lid in the hanger and press the [DISTRESS] button about three seconds to show the following display, then release the button



4. The equipment displays “Wait for Ack Auto re-Xmit” while waiting for acknowledgement of the distress call. (Transmitting repeats with 3.5 to 4.5 minutes interval until pressing [Cancel] key)
5. When you receive the distress acknowledgement call you are automatically connected to CH16. Hook off the handset if it is not already off hook press [PTT] switch and say
  - a. MAYDAY, MAYDAY, MAYDAY
  - b. This is Sailing Yacht AMELIE, This is Sailing Yacht AMELIE, This is Sailing Yacht AMELIE (Repeat name of vessel 3 times)
  - c. MAYDAY
  - d. This is Sailing Yacht AMELIE, 2ALH3 (Name of vessel spoken once)
  - e. My Position Is (Latitude and Longitude, IF YOU DON'T KNOW DON'T GUESS)
  - f. Nature of distress
  - g. Kind of assistance needed
  - h. I have (Number of persons) on board
  - i. Any other information — drifting, flares fired, EPIRB activated, etc.
  - j. OverRELEASE THE [PTT] SWITCH AND LISTEN FOR A RESPONSE

### 4.3.2. Cancel a Distress Call

To escape from the distress mode, turn the power off and on again.

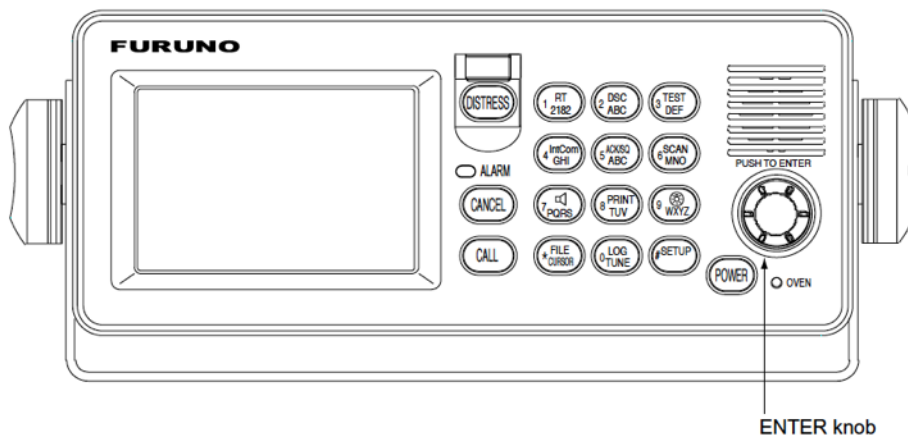
#### 4.4. Furuno SSB Radio

##### 4.4.1 Switching on Furuno SSB Radio

The SSB is not normally left on during passage, to switch on do the following:

1. Switch [SSB] on the 24v Distribution panel behind the chart table seat, it is the bottom right hand switch, normally the set takes 5 minutes for the 'oven' to power up
2. Press [POWER] switch on the right hand side of the Transceiver unit, which is above the Furuno Chartplotter to the left of the chart table seat.
3. The SSB Handset is the Left Hand Set beside the Furuno VHF and Iridium 9505A Handsets to the left of the chart table seat. **The [PTT] button is on the inside of the handset and must be pressed to talk and released to hear transmissions.**

##### 4.4.2 Controls on the Furuno SSB Radio Transceiver



*Description of controls*

Control	Function
POWER switch	Turns the power on/off.
DISTRESS button	Press and hold down the button more than three seconds to transmit the distress alert.
CALL key	Transmits calls.
ENTER knob	Radiotelephone: Rotate to change TX/RX channel, sensitivity, audio volume, etc.; push to register selection. DSC: Rotate to choose menu items; push to register selection.
CANCEL key	<ul style="list-style-type: none"> <li>• Cancels wrong data.</li> <li>• Restores previous menu.</li> <li>• Silences audio alarm.</li> <li>• Cancels transmission, printing.</li> <li>• Erases error message.</li> </ul>
1/ RT/2182 key	Switches to the radiotelephone screen. Press and hold down more than two seconds to get 2182.0 kHz/J3E automatically.
2/DSC key	Composes DSC TX message.
3/TEST key	Executes daily test.
4/IntCom key	Turns on/off the intercom with other Control Unit FS-2570C.
5/ ACK/SQ key	DSC: Switches automatic and manual acknowledge alternately. Radiotelephone: Turns squelch on and off.
6/SCAN key	<ul style="list-style-type: none"> <li>• Displays DSC standby screen.</li> <li>• Starts/stops scanning of DSC routine frequencies, on the DSC standby screen.</li> </ul>

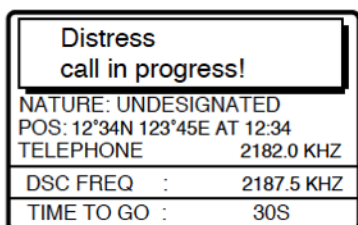
### 4.4.3 Making a Distress Call on the Furuno SSB Radio Transceiver

**Caution:** Prior to making the distress call, check the display on the SSB to ensure that the unit is switched on. Follow procedure in 4.4.1 if you need to switch on. **A Distress Call can only be made by the Skipper or his replacement when instructed by the Skipper.**

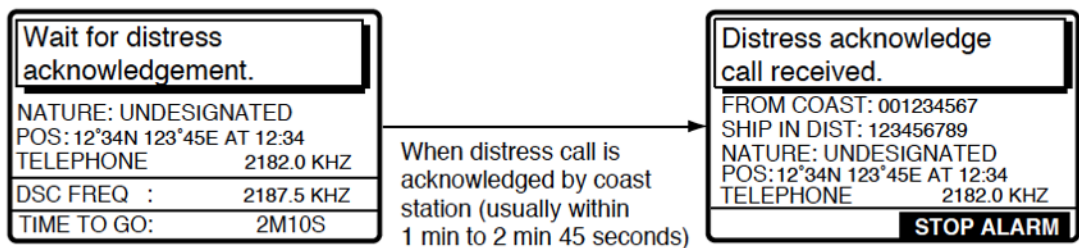
## Distress Alert Calling Procedure

Below is the procedure for transmitting a distress alert via radiotelephone. Transmit the distress alert when a life-endangering situation occurs on your vessel.

1. Open the DISTRESS button cover and press the [DISTRESS] button more than three seconds to show the following display, then release the [DISTRESS] button.



2. After the distress call has been transmitted, the following displays appear in order.



3. The audio alarm sounds; press the [CANCEL] key to silence the alarm.

4. To communicate with the coast station:

Press [PTT] switch and say

- a. MAYDAY, MAYDAY, MAYDAY
  - b. This is Sailing Yacht AMELIE, This is Sailing Yacht AMELIE, This is Sailing Yacht AMELIE (Repeat name of vessel 3 times)
  - c. Nature of distress and assistance needed
  - d. I have (Number of persons) on board and any other information — drifting, flares fired, EPIRB activated, etc.
  - e. Over
- RELEASE THE [PTT] SWITCH AND LISTEN FOR A RESPONSE

## **5. WATCHKEEPING AT SEA**

### **5.1 Principles applying to watchkeeping generally**

The skipper of Amelie is bound to ensure that watchkeeping arrangements are adequate for maintaining a safe navigational watch. Under the skipper's general direction, the on watch crew are responsible for navigating Amelie safely during their periods of duty, when they will be particularly concerned with avoiding collision and stranding.

#### **5.1.1 Protection of marine environment**

The skipper and crew shall be aware of the serious effects of operational or accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution, particularly within the framework of relevant international and port regulations.

### **5.2 Principles to be observed in the observance of proper watch keeping**

The on watch crew of the navigational watch is the skipper's representative and is primarily responsible at all times for the safe navigation of Amelie and for complying with the International Regulations for Preventing Collisions at Sea, 1972.

#### **5.2.1 Look-out**

A proper look-out shall be maintained at all times in compliance with rule 5 of the International Regulations for Preventing Collisions at Sea, 1972 and shall serve the purpose of:

1. Maintaining a continuous state of vigilance by sight and hearing as well as by all other available means, with regard to any significant change in the operating environment;
2. Fully appraising the situation and the risk of collision, stranding and other dangers to navigation; and
3. Detecting ships or aircraft in distress, shipwrecked persons, wrecks, debris and other hazards to safe navigation.

**The look-out must be able to give full attention to the keeping of a proper look-out and no other duties shall be undertaken or assigned which could interfere with that task.**

#### **5.2.2 To assist crew in their lookout duties Amelie has the following aids to navigation:**

1. Two Furuno chart plotters, one in the cockpit and one at the chart table. The current position of Amelie is plotted and the crew should familiarise themselves with the basic operation.
2. AIS. The positions of other vessels will be displayed, using AIS, on the chart plotters. In the event that any Closest Approach is expected to be less than 2 nm the skipper shall be notified immediately.

**5.2.2 To assist crew in their lookout duties Amelie has the following aids to navigation: (Contd):**

3. Radar. In poor visibility or in darkness radar is an essential aid to navigation and if in doubt scan every 10 minutes for possible targets.
4. Sea me. Amelie has a Sea Me system with a light positioned on the chart table which will indicate if another vessel is pinging us with their radar. If this light is flashing then a higher state of watch alert should be adopted and in the event that no target can be identified visually or by radar the skipper should be notified.
5. Binoculars are located below the mirror in the fourth cabin.
6. To protect your night vision there are red LED lights for use after dark, above chart table, in galley, outside forward heads and fourth cabin. Avoid using white lights, it will take 20 minutes for your night vision to restore.
7. VHF radio. If unsure of a vessels intentions then call them on CH16 and ask whether they have seen you on their radar.
8. Fog horn under chart table seat.

**5.2.3 Watch arrangements**

The skipper will determine the on watch crew and their watch times which will be written down in the Log Book

**5.2.4 Taking over the watch**

1. The on watch crew of the navigational watch shall not hand over the watch to the relieving crew if there is reason to believe that the latter is not capable of carrying out the watchkeeping duties effectively, in which case the skipper shall be notified.
2. The on watch crew will have prepared a hot drink (of their choice) for the relieving crew.
3. The on watch crew shall ensure that the members of the relieving watch are fully capable of performing their duties, particularly as regards their adjustment to night vision. Relieving crews shall not take over the watch until their vision is fully adjusted to the light conditions.
4. Prior to taking over the watch relieving crews shall satisfy themselves as to Amelie's estimated or true position and confirm its intended track, course and speed, and as appropriate shall note any dangers to navigation expected to be encountered during their watch.
5. Relieving crews shall personally satisfy themselves regarding the:
  1. Standing orders and other special instructions of the skipper relating to navigation of Amelie;
  2. Position, course, speed and draught of Amelie;

**5.2.4 Taking over the watch (Contd)**

3. Prevailing and predicted tides, currents, weather, visibility and the effect of these factors upon course and speed;
4. Procedures for the use of main engines to manoeuvre.
5. Any navigational situation, including but not limited to:
  1. the operational condition of all navigational and safety equipment being used or likely to be used during the watch,
  2. the presence and movement of ships in sight or known to be in the vicinity,
  3. the conditions and hazards likely to be encountered during the watch, and

**If at any time the on watch crew of the navigational watch is to be relieved when a manoeuvre or other action to avoid any hazard is taking place, the relief of that crew shall be deferred until such action has been completed.**

**5.2.5 Performing the navigational watch**

1. The on watch crew of the navigational watch shall:
  1. Keep the watch in the cockpit;
  2. At the prescribed times perform the required log entries in the log book
  3. Continue to be responsible for the safe navigation of Amelie, despite the presence of the skipper or relieving crew in the cockpit, until informed specifically that they have assumed that responsibility and this is mutually understood; and
  4. Notify the skipper when in any doubt as to what action to take in the interest of safety.
2. During the watch the course steered, position and speed shall be checked at sufficiently frequent intervals, using any available navigational aids necessary, to ensure that Amelie follows the planned course.
3. The on watch crew of the navigational watch shall have full knowledge of the location and operation of all safety and navigational equipment on board Amelie and shall be aware and take account of the operating limitations of such equipment.
4. The on watch crew of the navigational watch **shall not** be assigned or undertake any duties which would interfere with the safe navigation of Amelie.

**5.2.5 Performing the navigational watch(Contd)**

5. The on watch crew of the navigational watch **shall**
  - A. Make the most effective use of all navigational equipment at their disposal.
  - B. When using radar bear in mind the necessity to comply at all times with the provisions on the use of radar contained in the International Regulations for Preventing Collisions at Sea.
  - C. In cases of need use the helm, engines and sound signalling apparatus.
  - D. Regularly check that the automatic pilot is steering the correct course
  - E. Ensure that the navigation and signal lights and other navigational equipment are functioning properly;
  - F. Notify the skipper immediately:
    - if restricted visibility is encountered or expected;
    - if the traffic conditions or the movements of other ships are causing concern;
    - if difficulty is experienced in maintaining course;
    - on failure to sight land, a navigation mark or to obtain soundings by the expected time;
    - if, unexpectedly, land or a navigation mark is sighted or a change in soundings occurs;
    - on breakdown of the engines, auto pilot, chart plotter or any essential navigational equipment, alarm or indicator;
    - if the radio equipment malfunctions;
    - in heavy weather, if in any doubt about the possibility of weather damage;
    - if Amelie meets any hazard to navigation; and
    - in any other emergency or if in any doubt.

**Despite the requirement to notify the skipper immediately in the foregoing circumstances, the on watch crew of the navigational watch shall in addition not hesitate to take immediate action for the safety of Amelie or crew, where circumstances so require.**

**5.3 Watch at anchor**

If the skipper considers it necessary, a continuous navigational watch shall be maintained at anchor. While at anchor, the on watch crew of the navigational watch shall:

- determine and plot Amelie's position on the appropriate chart as soon as practicable;
- when circumstances permit, check at sufficiently frequent intervals whether Amelie is remaining securely at anchor by taking bearings of fixed navigation marks or readily identifiable shore objects;
- ensure that proper look-out is maintained;
- ensure that inspection rounds of Amelie are made periodically;
- observe meteorological and tidal conditions and the state of the sea;
- notify the skipper and undertake all necessary measures if Amelie drags anchor;
- ensure that the state of readiness of the main engines and other machinery is in accordance with the skipper's instructions;
- if visibility deteriorates, notify the skipper;
- ensure that Amelie exhibits the appropriate lights and shapes and that appropriate sound signals are made in accordance with all applicable regulations; and
- take measures to protect the environment from pollution by Amelie and comply with applicable pollution regulations.

Dear ,

As you will be joining Amelie in the near future and we are certain that this will be a very enjoyable and safe voyage, we also like to be prepared to be able to deal adequately and fast with any event that may need medical attention. At sea, as well as in remote areas, we may have to consult a medical specialist by radio or satellite phone. To be best prepared for any event we have made a "Safety Manual". Part of this requires you to complete and email back, prior to the start of the voyage, the Medical History Information below. I will keep this confidential and on file until you leave Amelie.

Assessment of a Sick or Injured Person. Amelie is equipped with a full up-to-date inventory of medicines and aids to be able to deal with most of the medical situations and injuries which may happen on a sea voyage. Obviously this can only be used with the full support of fully qualified medical professionals onshore. A medical doctor may have to make an assessment of the patients situation, from a remote location over the radio or phone, without being able to examine the patient himself. In such a situation, as much medical information must be available and on hand to act quickly and adequately.

### **Medical History Information**

Below is an aid that can be used to have the vital elements available of the history of a patient. Please fill this in to your best knowledge and memory, include any operations you may have had as well as serious injuries and diseases. Below is an aid that can be used to have the vital elements available of the history of a patient.

This has to be available on board and kept confidentially and on file by the Skipper:

- Allergies : These are common especially to some antibiotics, can be life-threatening making a bad situation worse
- Medication : What do you normally take? Some medication may confuse a medical situation, causing symptoms in their own right
- Past Illnesses : Ongoing medical complaints (such as diabetes) may have considerable impact on any current problem. Your list of medications being taken is vitally important.

In planning your arrival to Amelie please ensure you have sufficient medication for the planned trip duration plus 50% to allow for any delays or spoiling of medication.