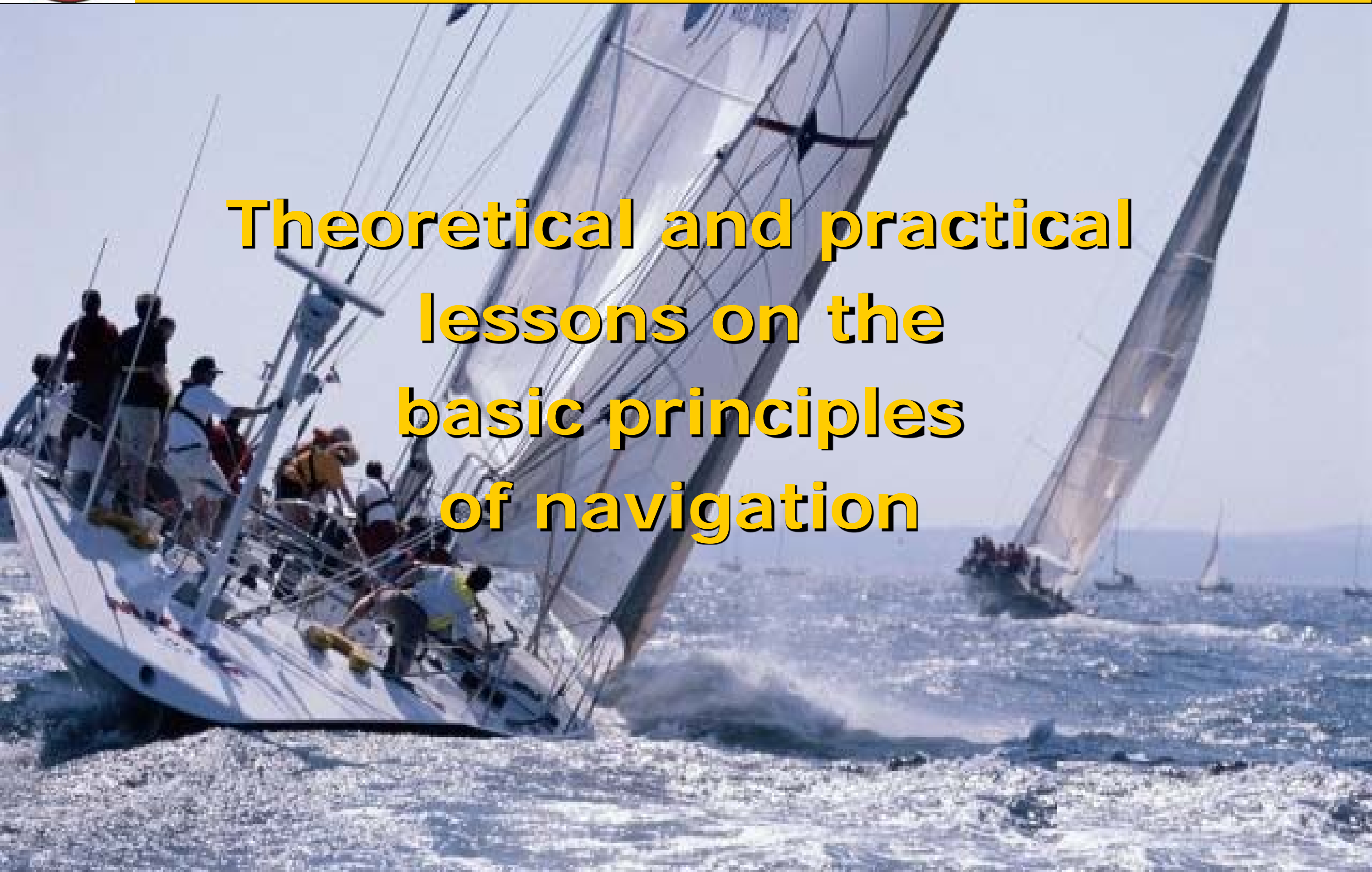




MISTRALIS

Outdoor Training

**Theoretical and practical
lessons on the
basic principles
of navigation**





General acquaintanceship

What is to navigate?

It's to conduct or steer a boat from a determinate location to another one.

Ideally with safety and economy.

The shortest way represents, in the most cases, the least expenditure and a quickest trip.

In sailboats, not always the shortest way is possible, for sometimes the sailor is obliged to endeavour in alternative routes, because of wind conditions.

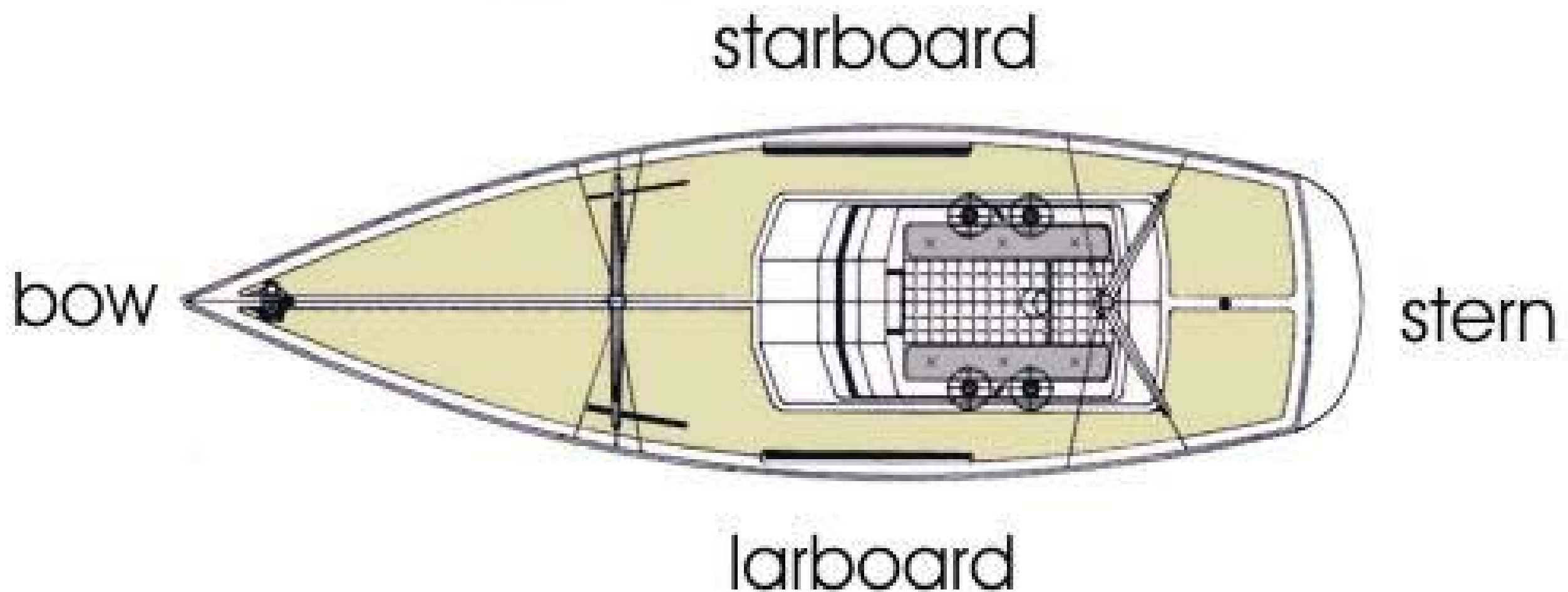


Basic Vocabulary

Positions

Bow (proa) - **Stern** (popa)

Larboard (bombordo) - **Starboard** (boreste)





Basic Vocabulary

Structure and general definitions

Rudder (leme) - Keel (quilha)





Basic Vocabulary

Structure and general definitions

Snatch blocks (patescas)
Blocks (moitões)

Winch handle (manicaca)
Winch (catraca)





Basic Vocabulary

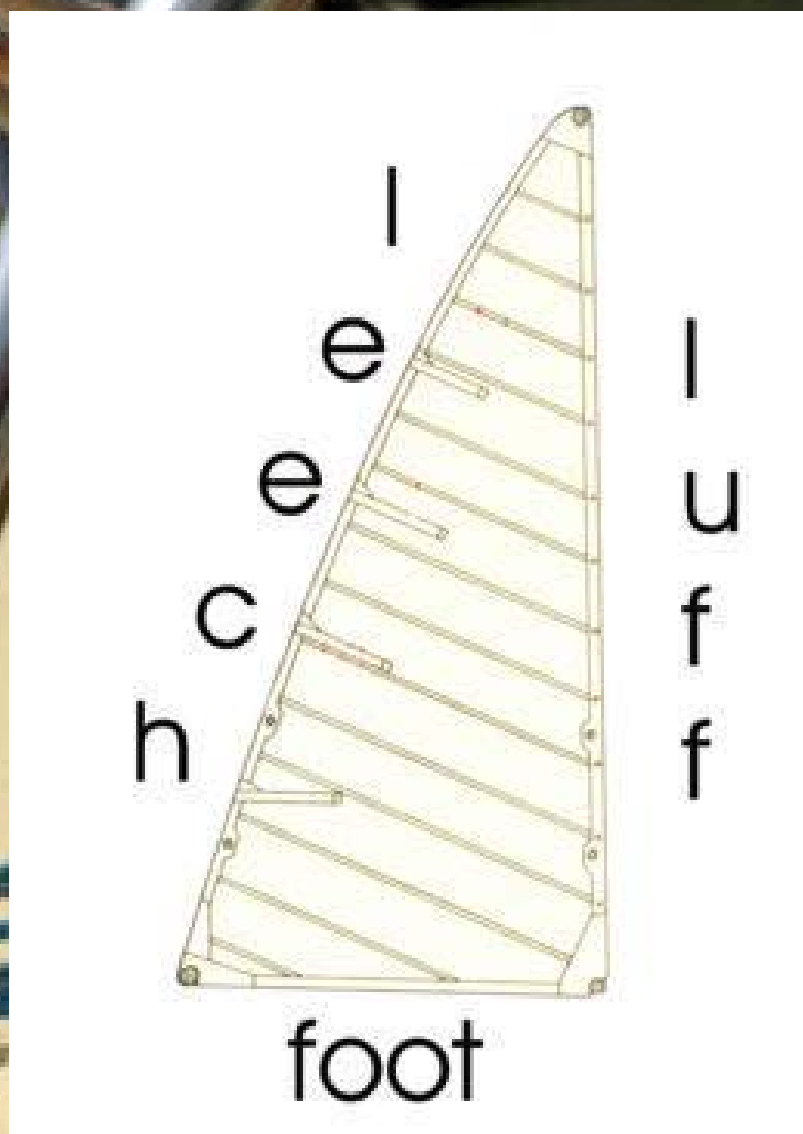
Structure and general definitions

Foot (esteira)

Leech (valuma) – **Luff** (testa)

Mast (mastro)

Boom (retranca)





MISTRALIS

Sailboat starts sailing

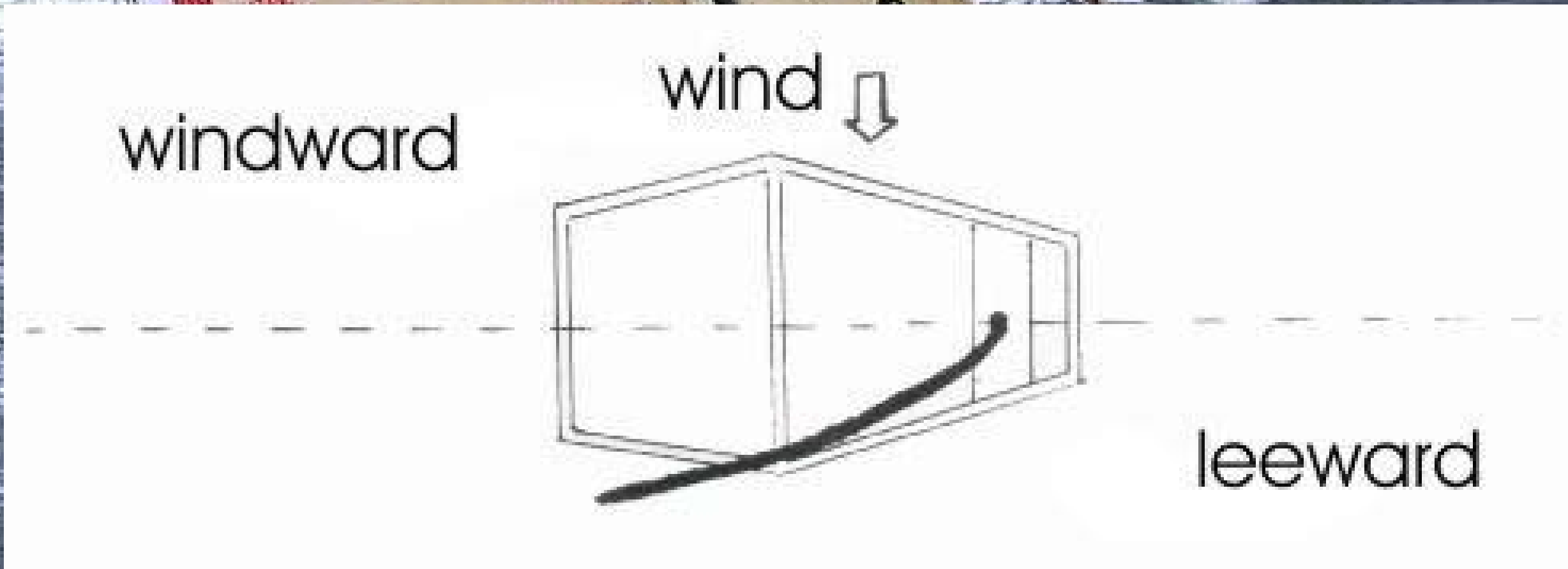




Basic Vocabulary

Maneuver

Leeward (sotavento) - **Windward** (barlavento)

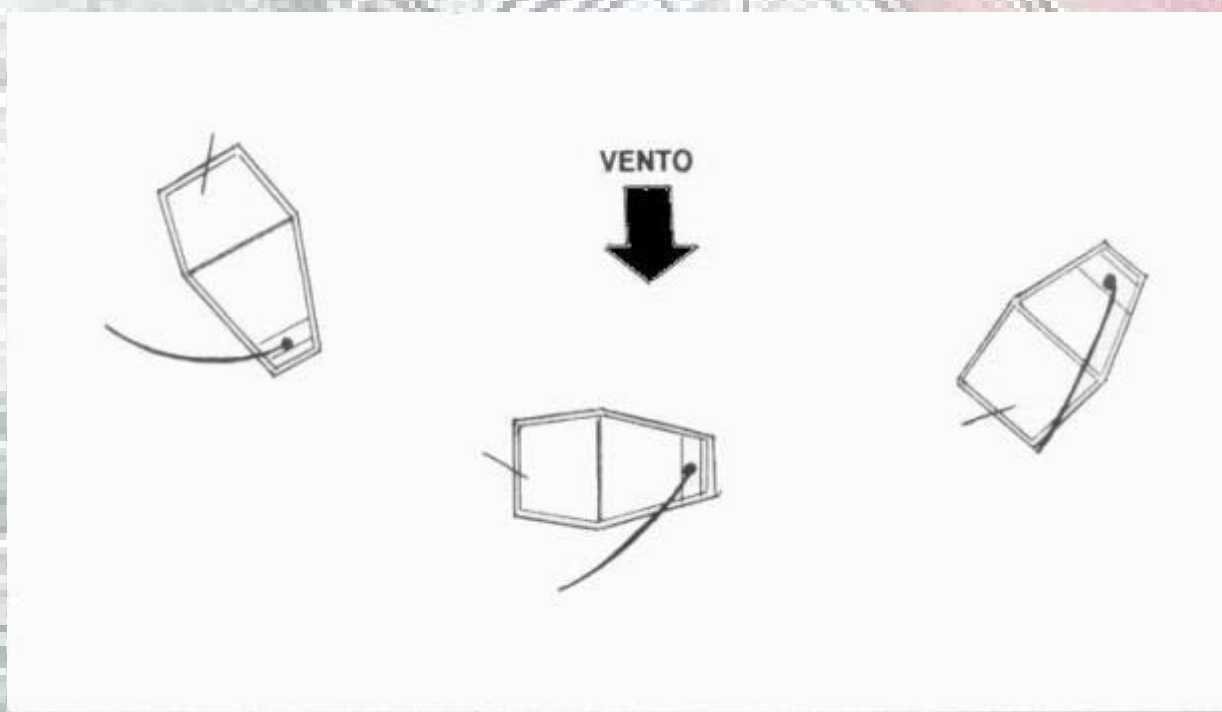




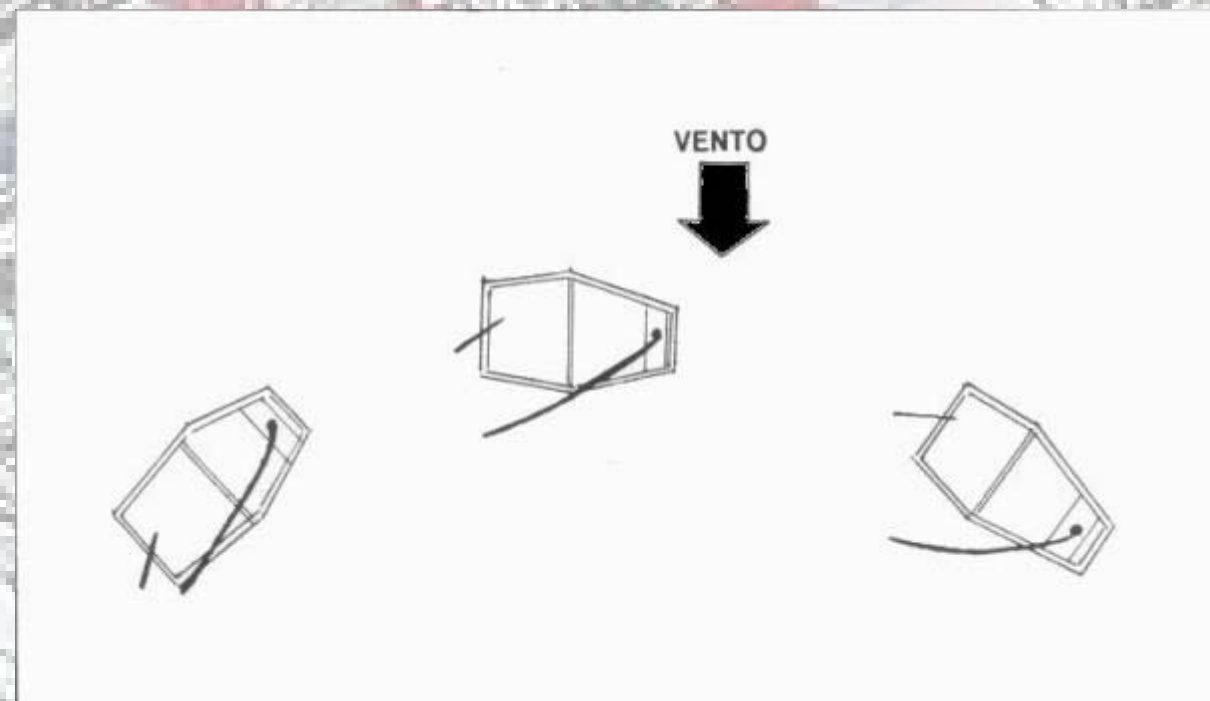
Basic Vocabulary

Maneuver

Luffing (orçar)
when a sailboat is
heading upwind



Head to wind (arribar)
when a sailboat is
heading downwind

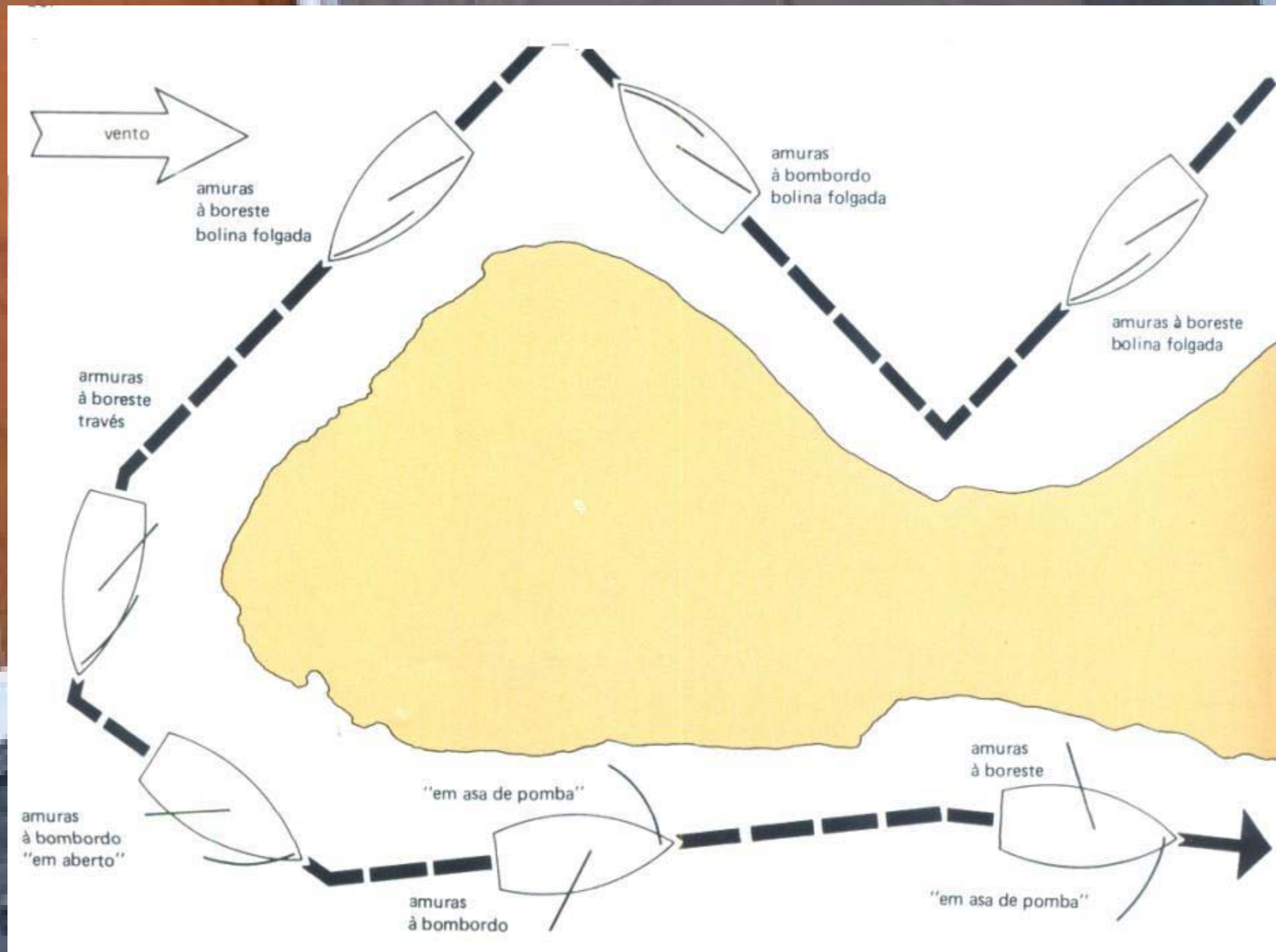




Basic Vocabulary

Maneuver

Tacking (cambiar)



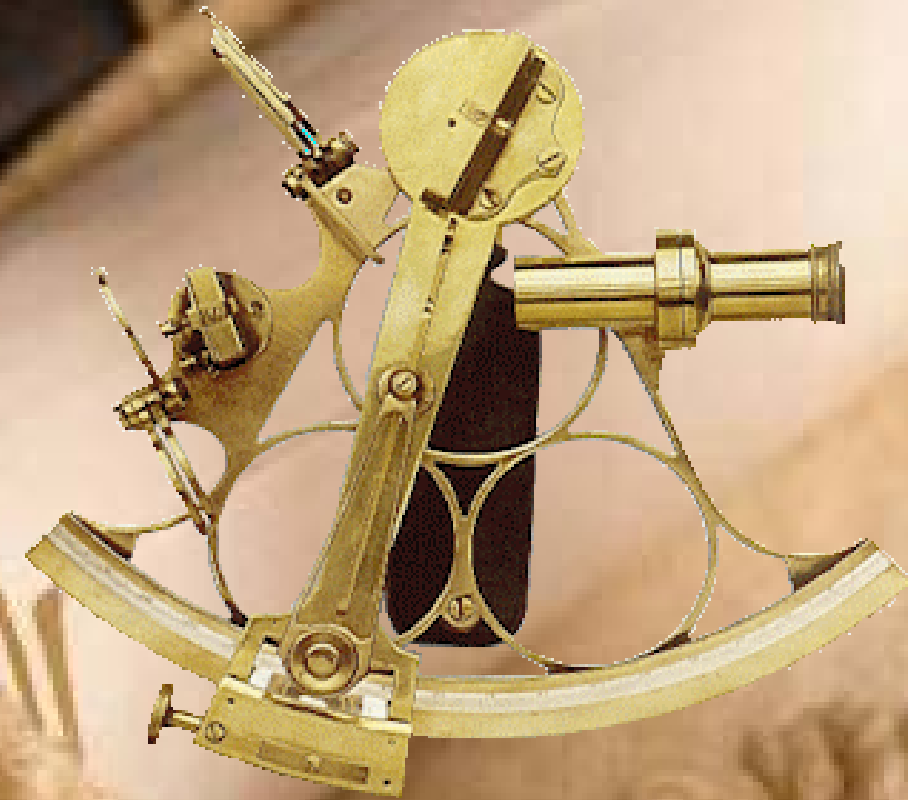
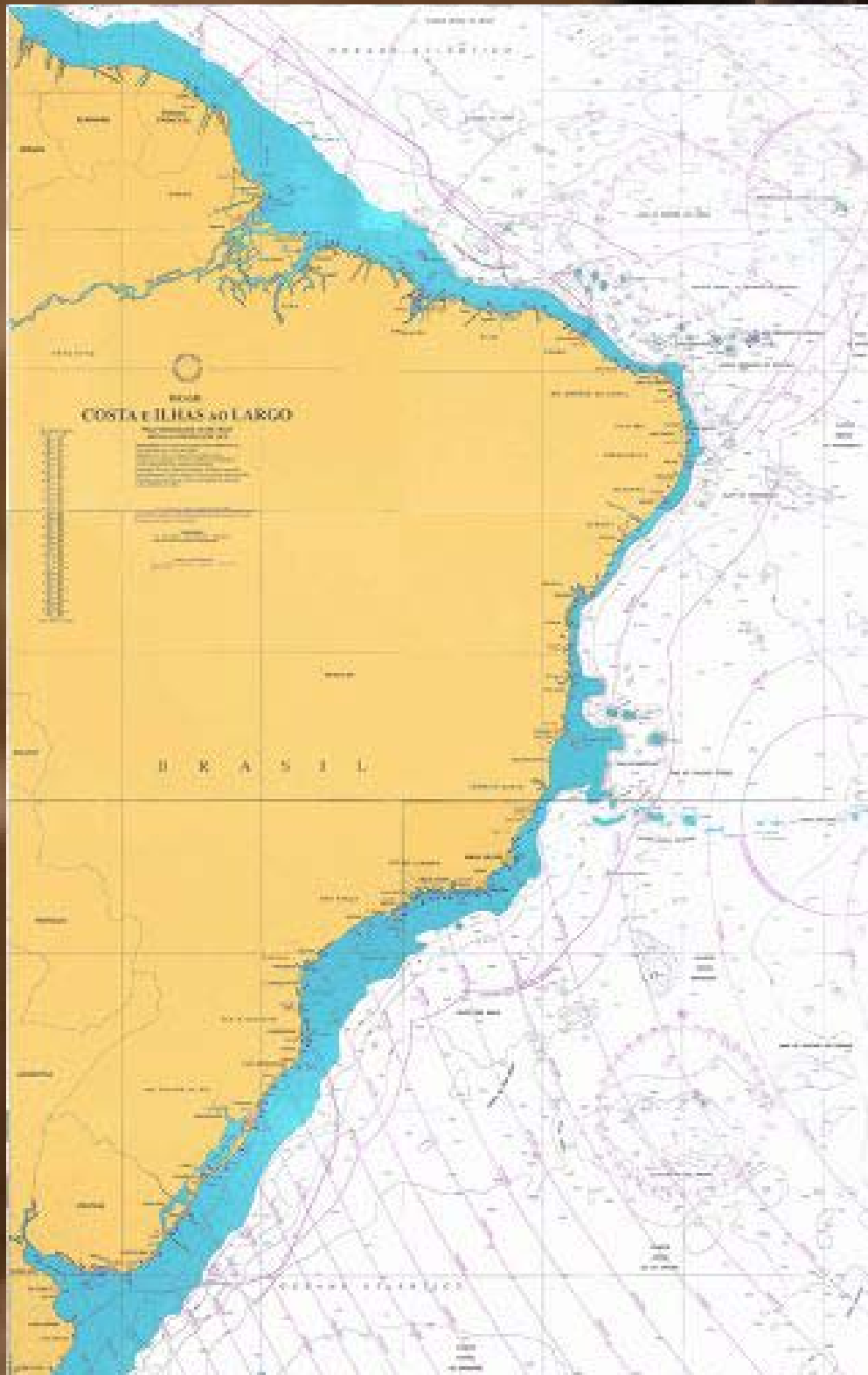


Essential care to avoid collisions

- Always maneuver well ahead of time
- If necessary invert engines to produce backward motion
- In case of doubt always consider the risk of collision and maneuver



Instruments for Navigation





Instruments for Navigation





Charts

1. Indicate our exactly position on the surface of the earth, through latitude and longitude coordinates.
2. Represent, in a flat disposition, a section of the surface of the earth.
3. With a help of the GPS instrument we may know our exactly location. All we need to do is plot our position on the chart.

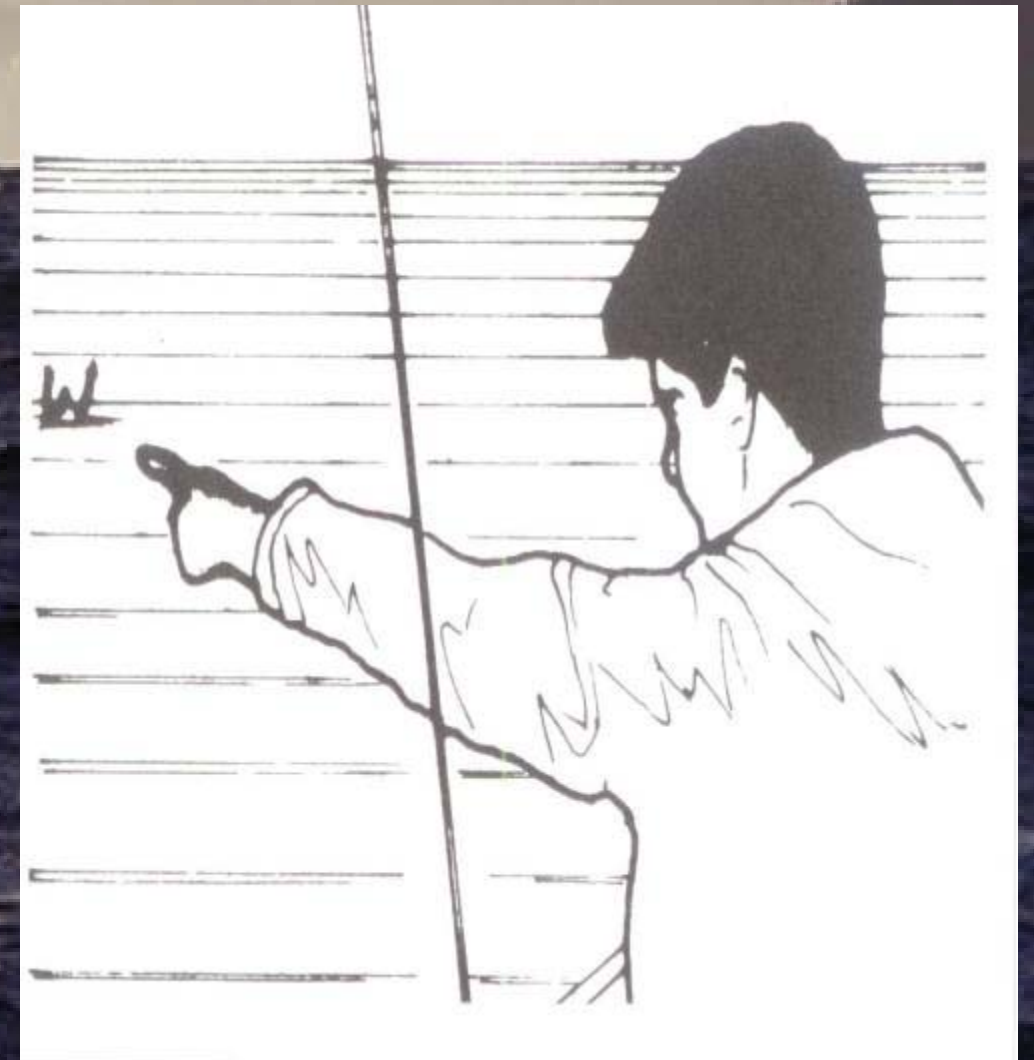


Winds, tides and currents

They are the main factors that come across the navigation of any boat.

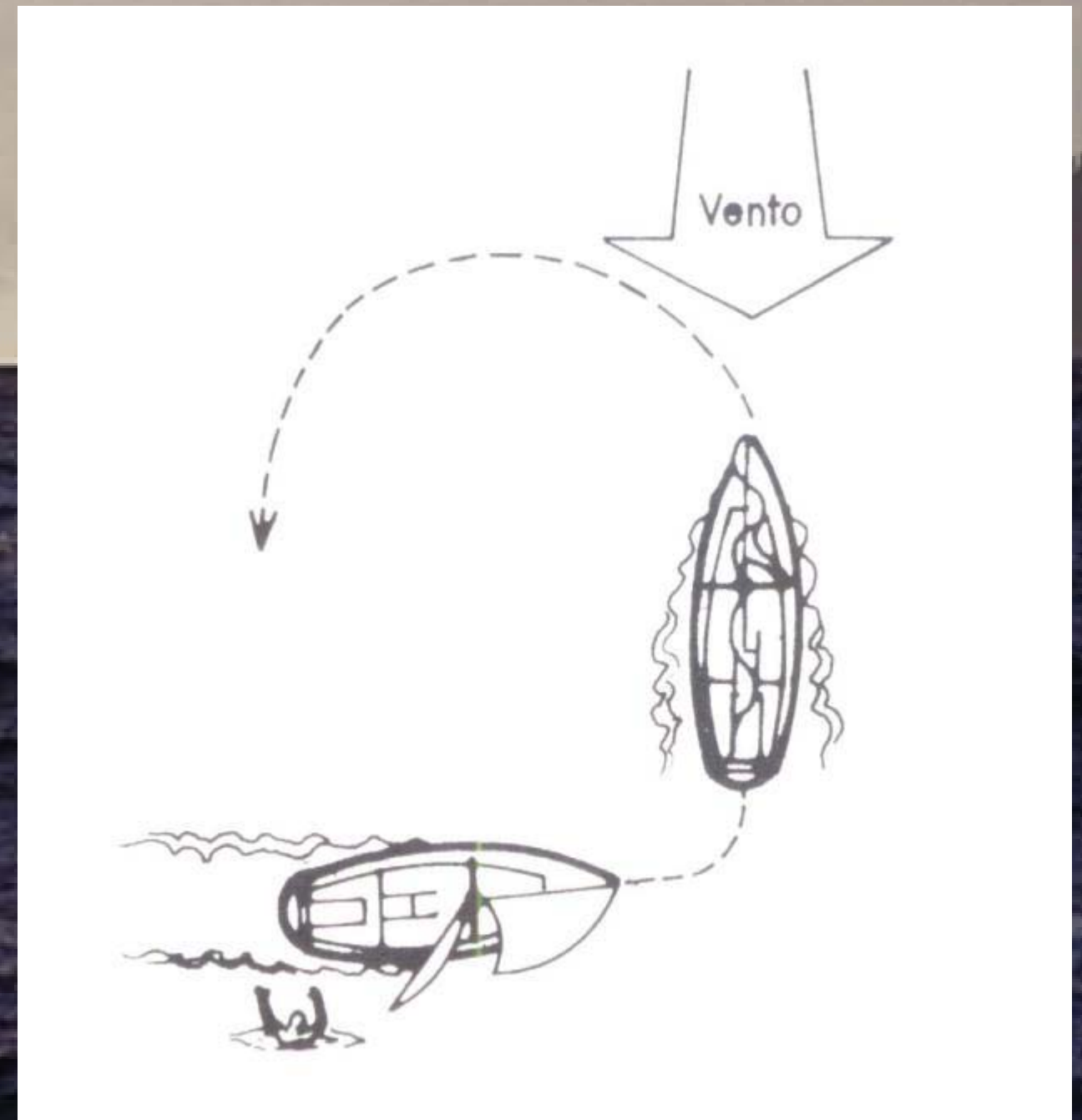
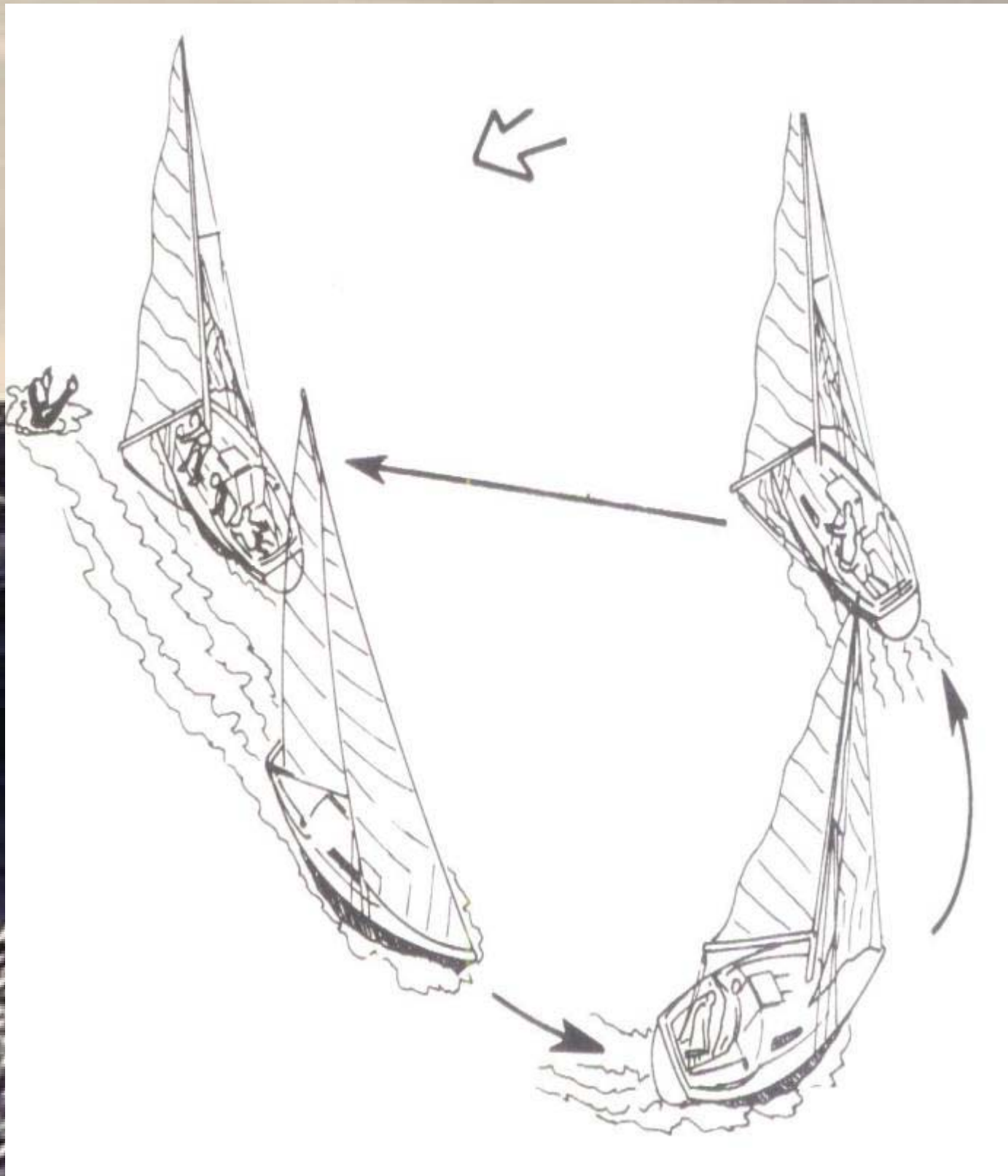


Man over board



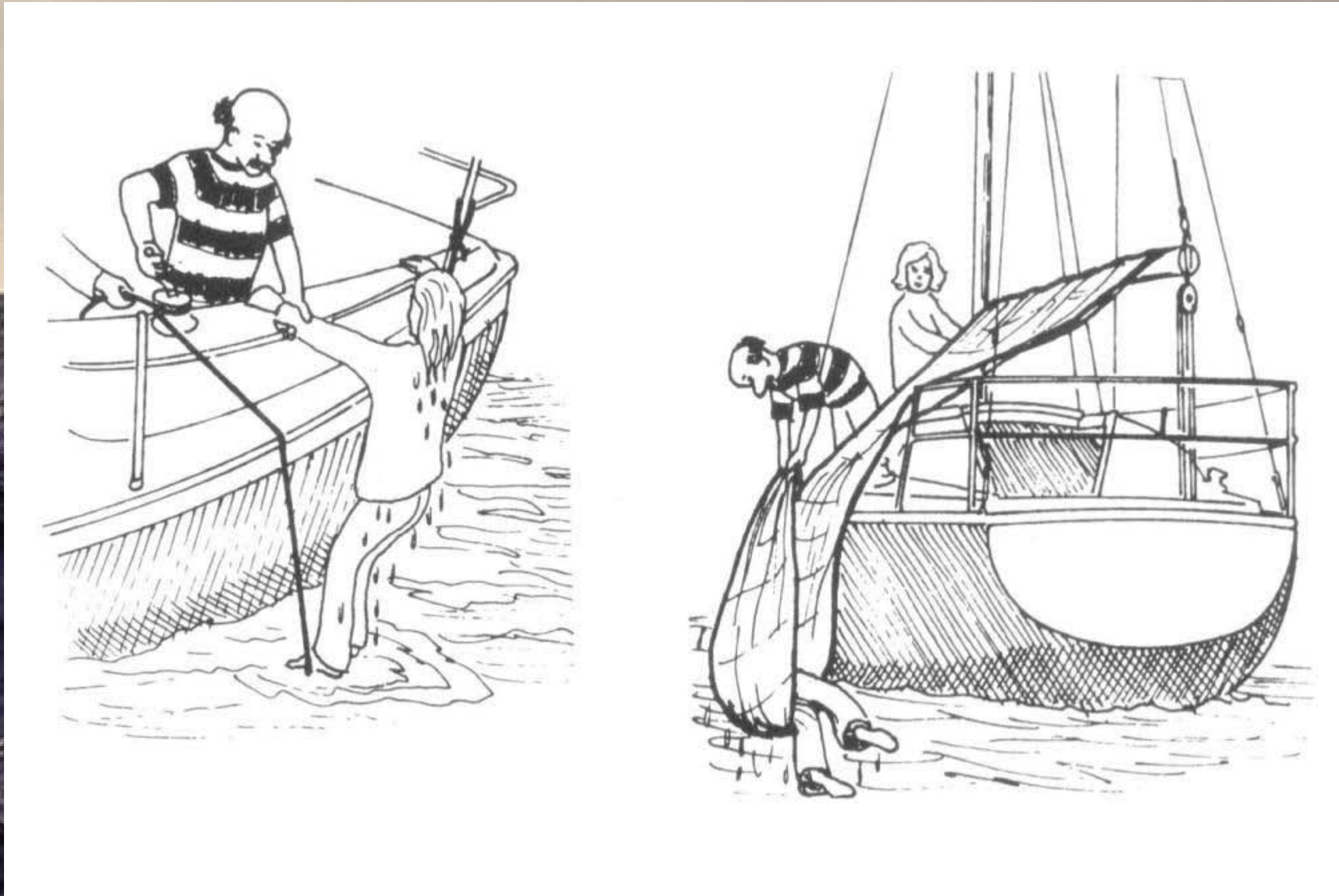


Man over board



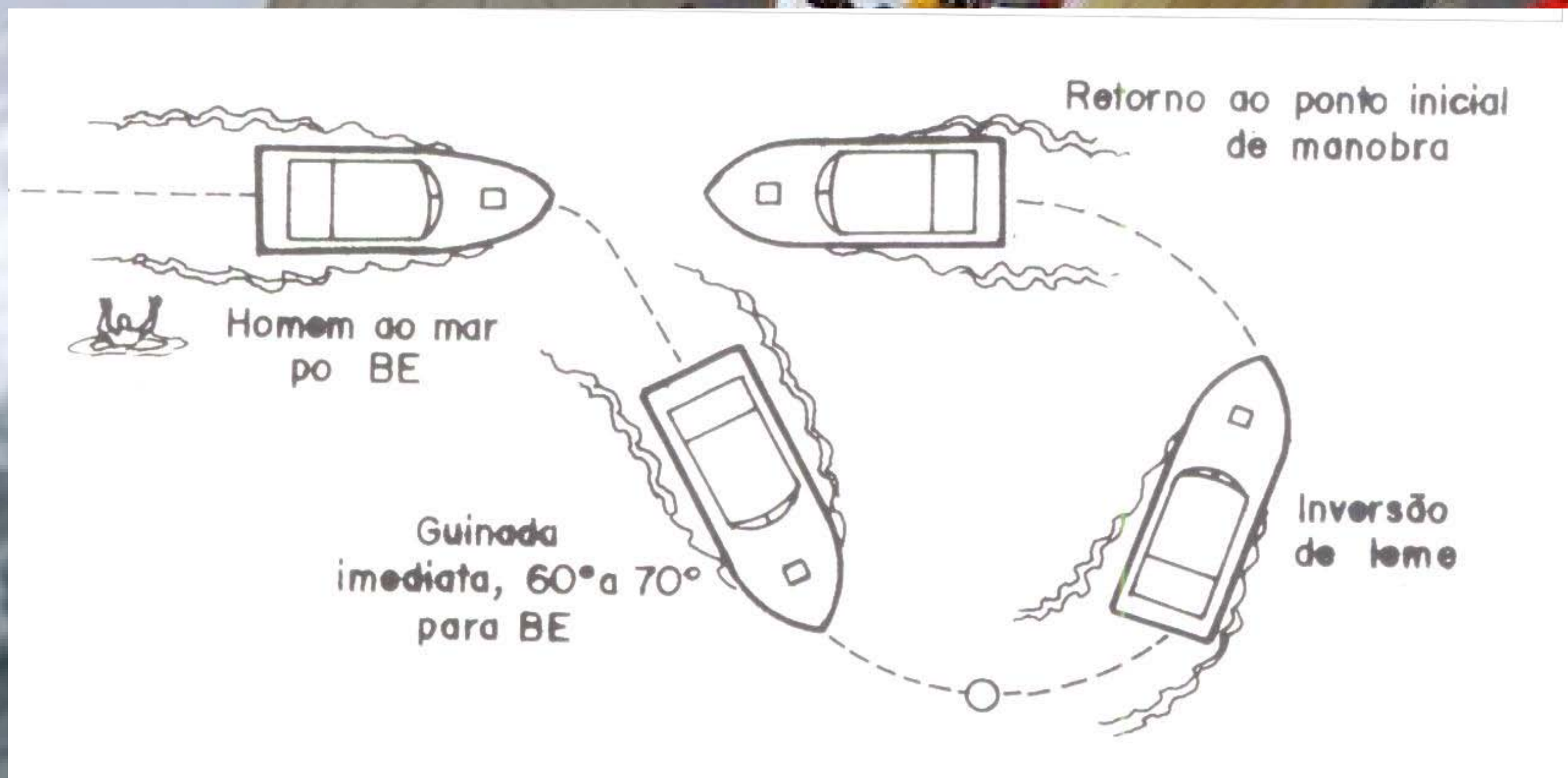


Man over board





Man over board





Step by step

Reduced or inexperienced crew

- 1° Throw buoy on the water or any floating object
- 2° Designate a crew member to keep the eyes on the victim
- 3° Slow the boat down
- 4° Drop the sails of the bow
- 5° Turn back immediately to proceed rescuing
- 6° Pull the man onboard



MISTRALIS

Rest





Anchoring

We anchor to:

- **Get rest**
- **Land / Go ashore**
- **Take shelter**



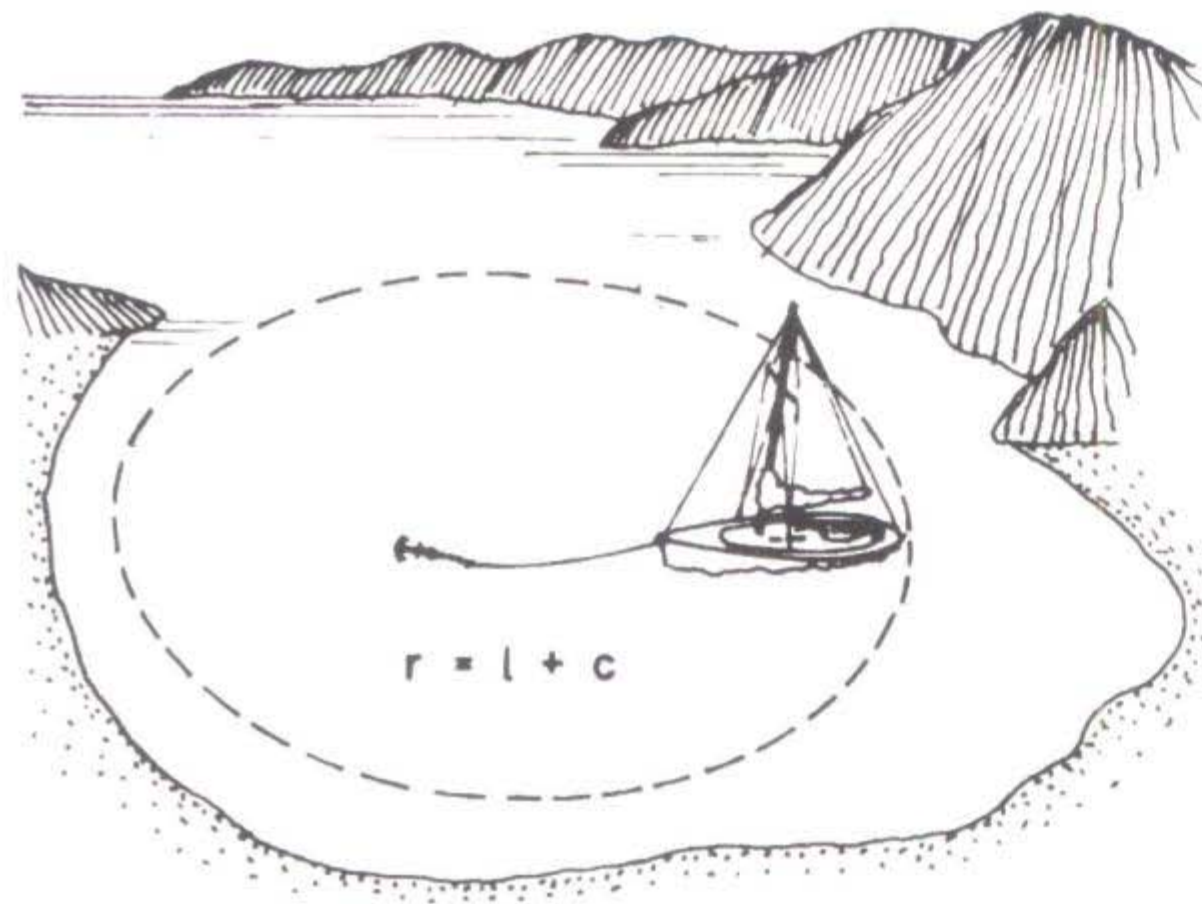
Anchoring

Some safety points to be thought out in anchoring

- Consult the charts and verify tide oscillation
- The approach must be the slowest possible
- Pay attention to boats in the area

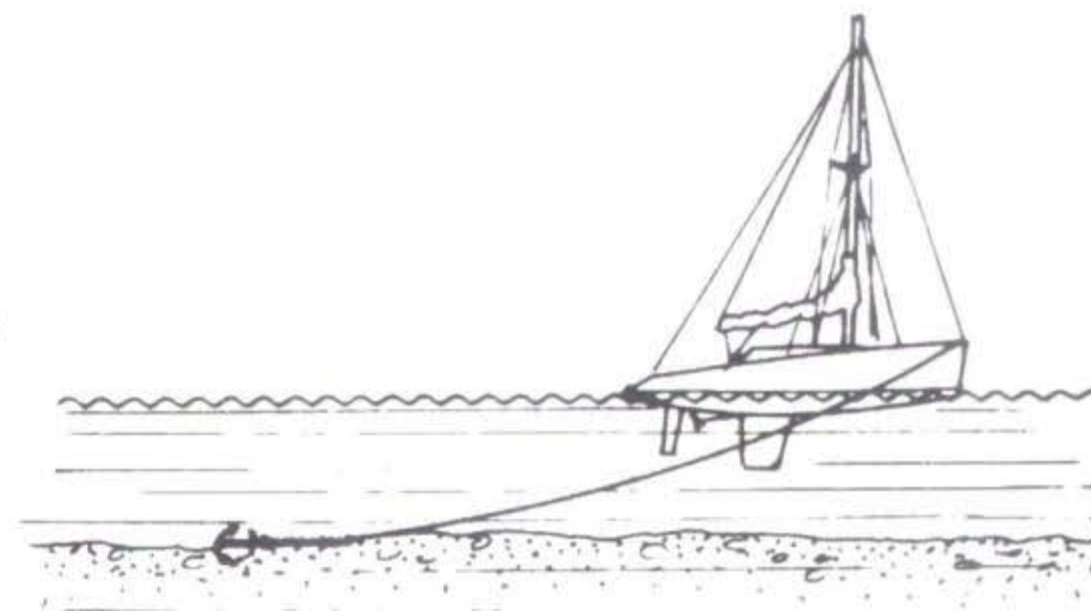


Anchoring



FUNDEADOURO

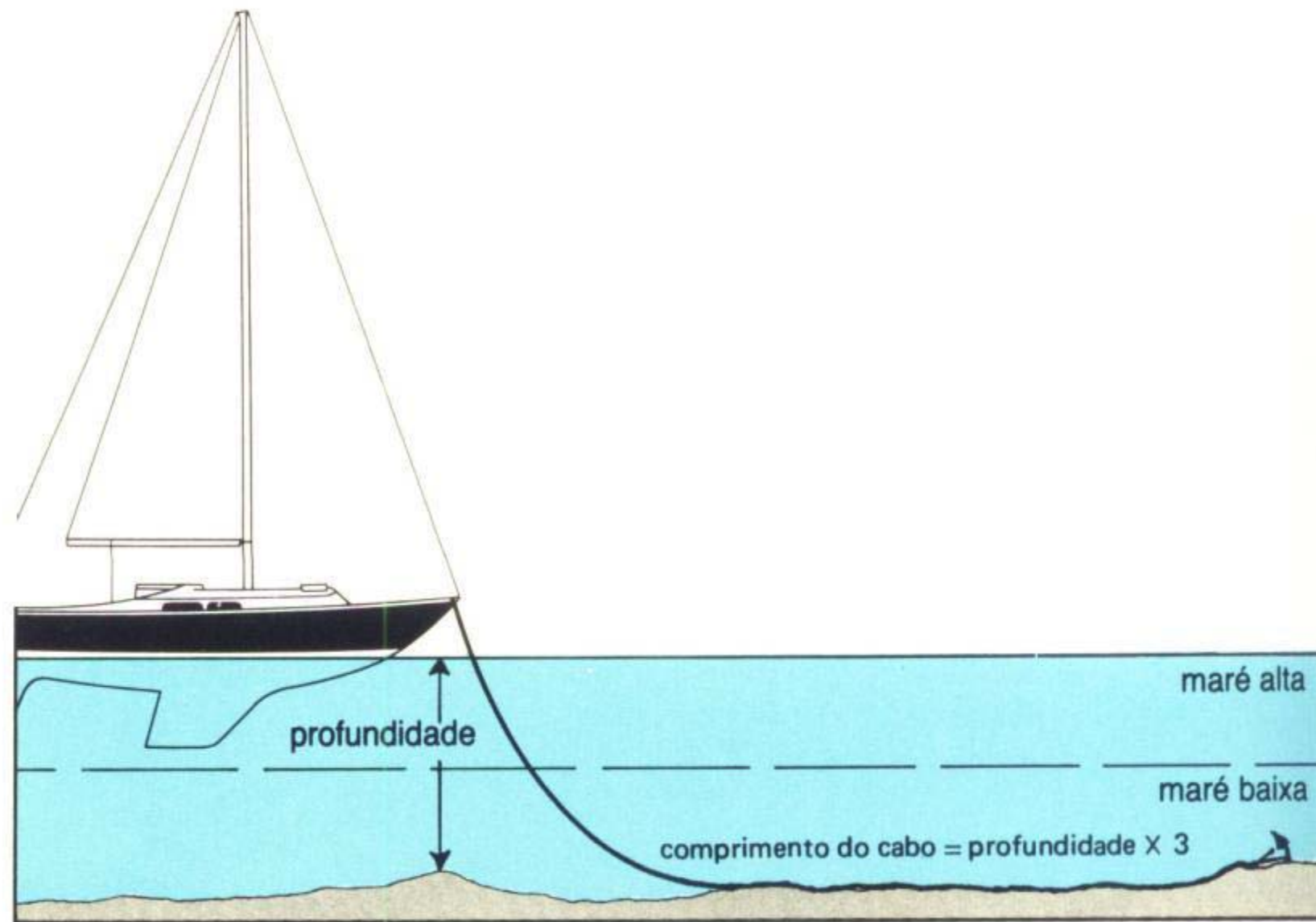
- l = quantidade de amarra largada
- c = comprimento da embarcação
- r = raio de giro quando fundeada



Ao escolhermos um local de fundeio devemos evitar o fundo de pedra, para evitarmos perder o ferro ou a própria amarra, devido a um provável "entocamento" nas pedras.



Anchoring





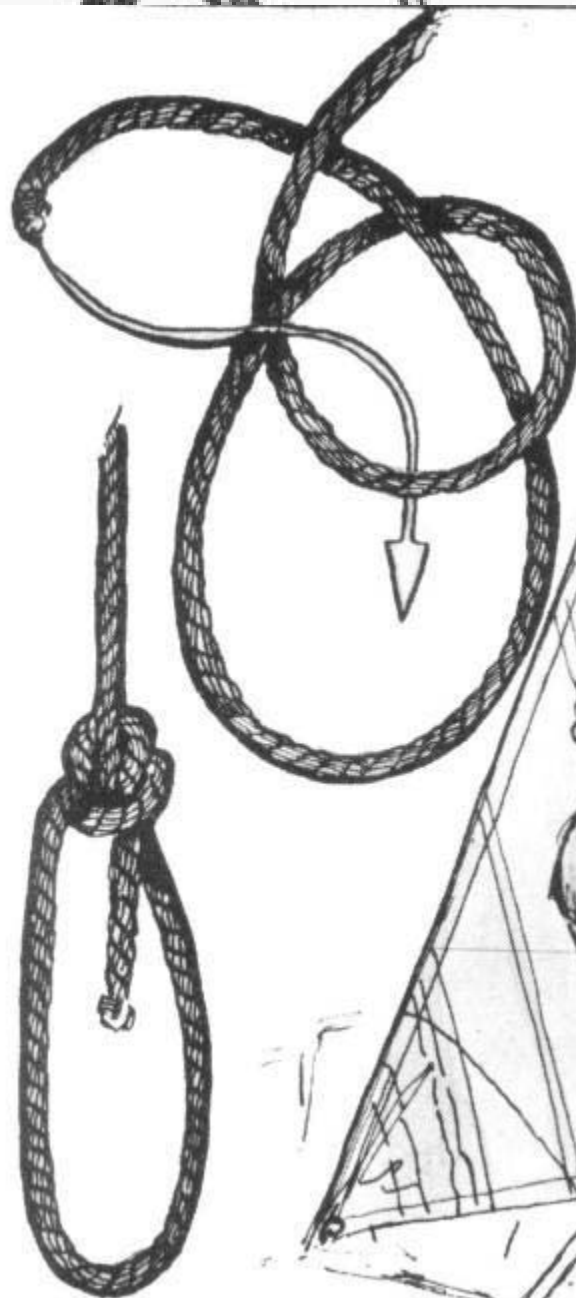
Knots



Lais de quia

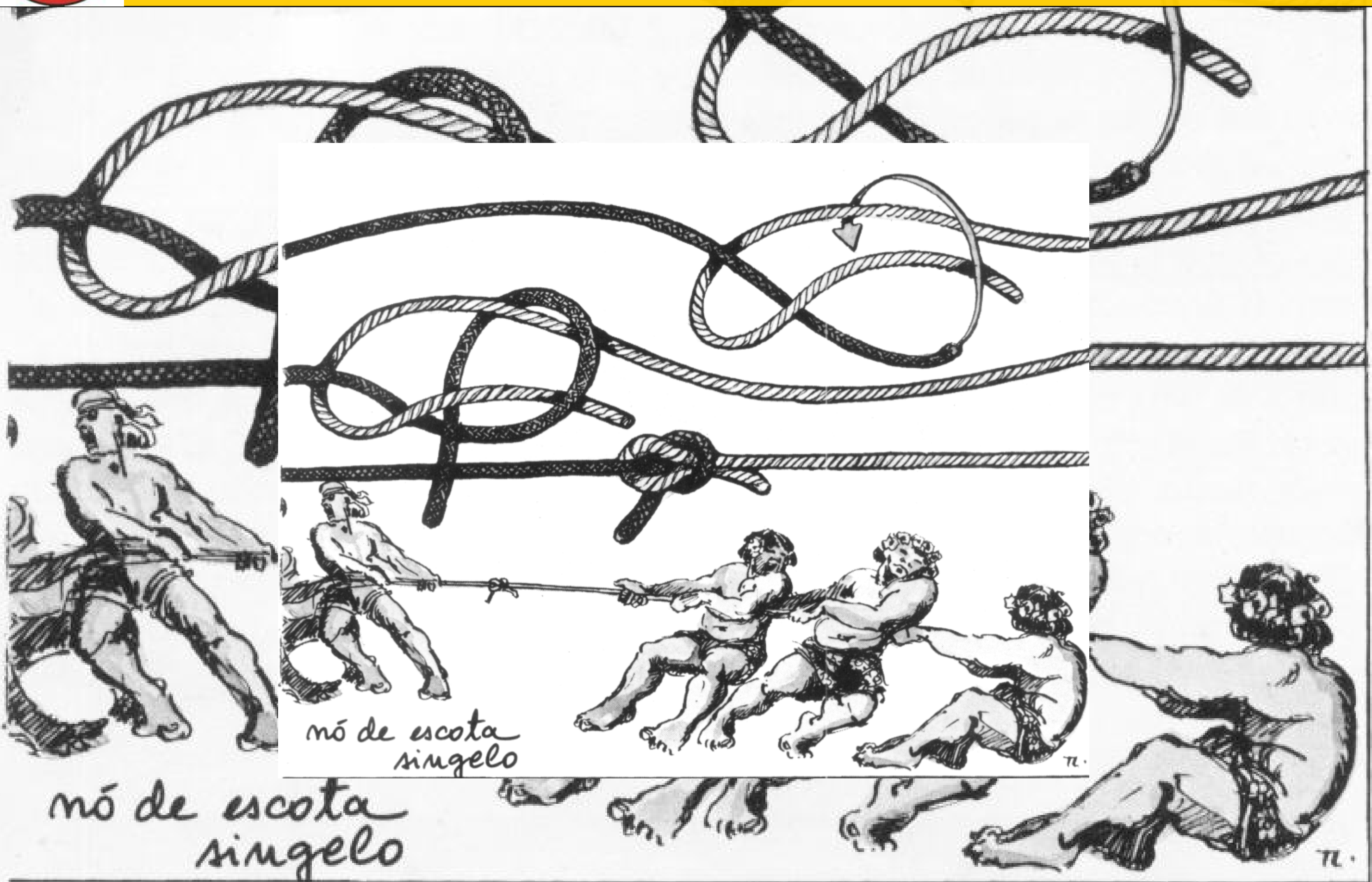


Lais de quia





Knots



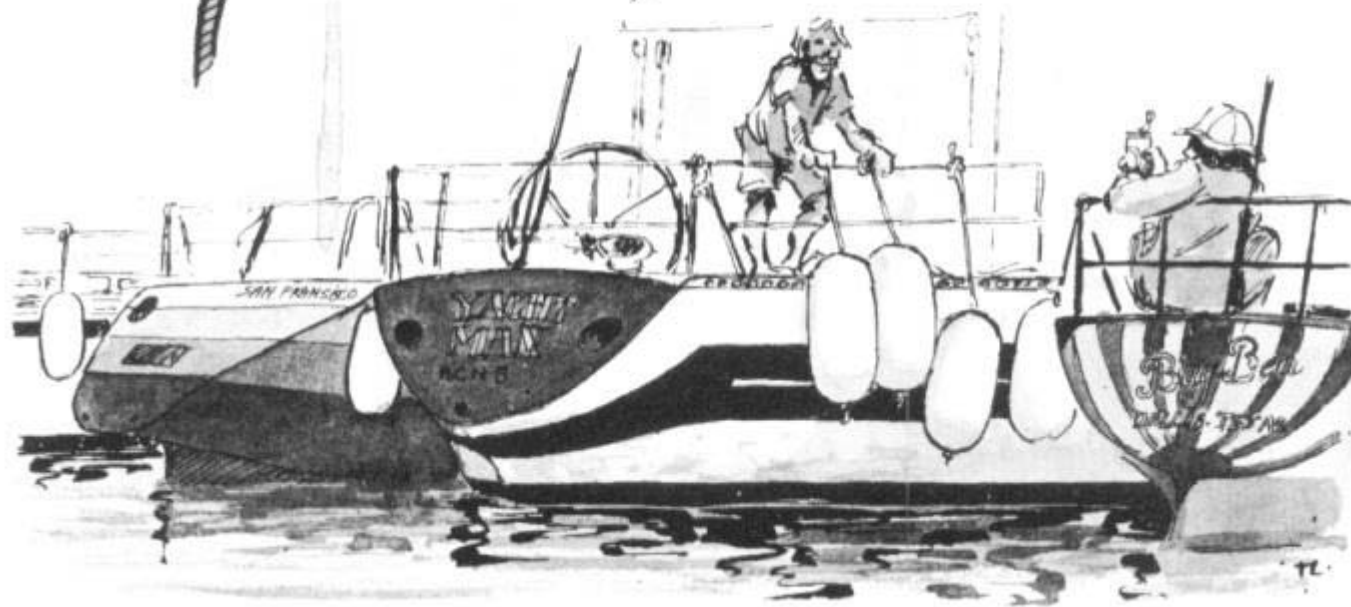
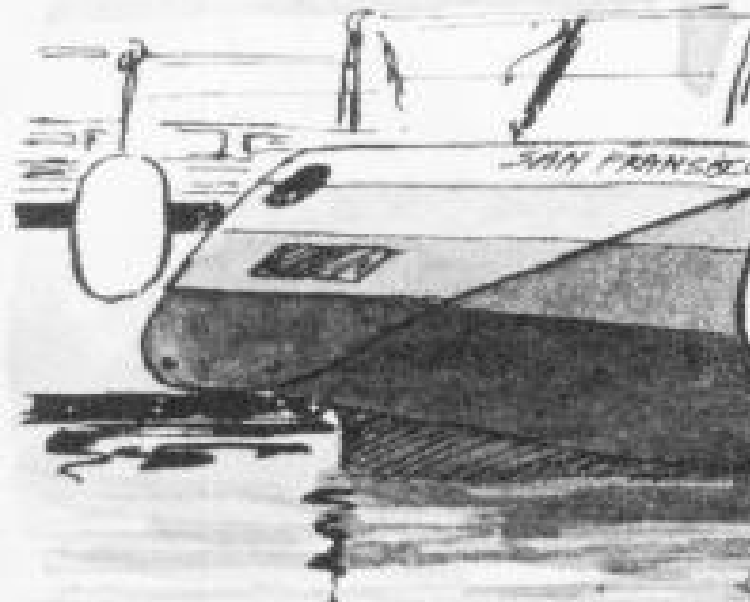
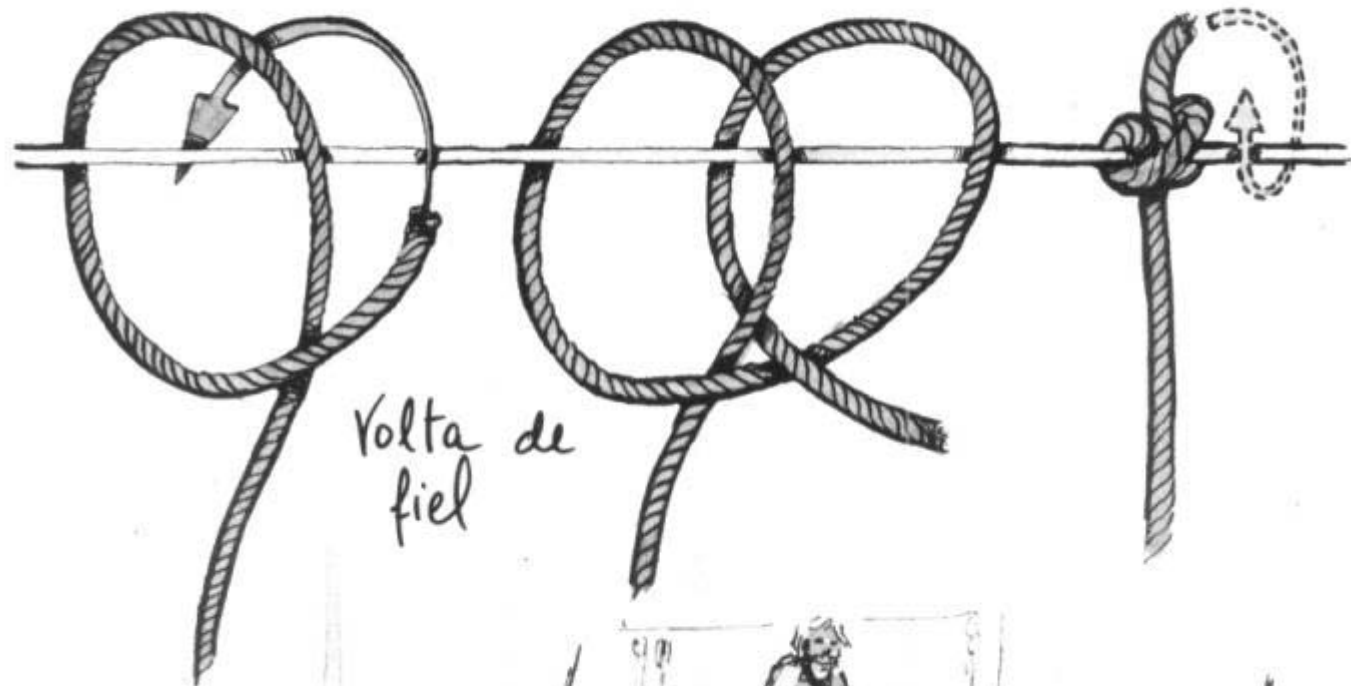
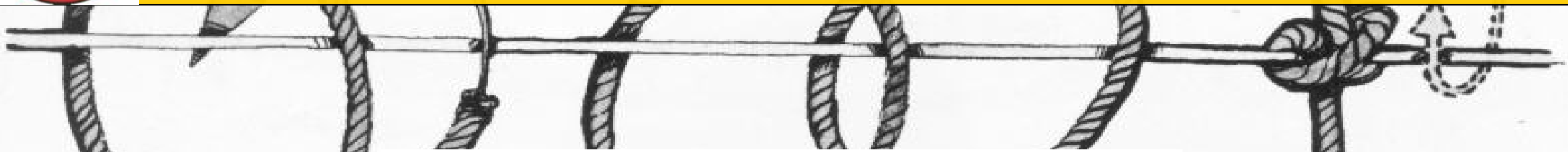
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singelo*

*nó de escota
singelo*

TL.



Knots





MISTRALIS

Have a good training,

a good sailing,

and

always good winds!!!

