Conservation in action of our maritime cultural and natural treasures
Slow navigation and gaff rig sailing
MEDTOP - Basic concepts of navigation and gaff rig sailing

- Mercator projection – navigating by angles
- Position: GPS vs traditional systems
- Course
- Drift and currents
- Wind
- Sailing
- Toftevaag – evolution of sailing
Using nautical charts

Nautical charts – Mercator projection
Using nautical charts

Nautical charts – Mercator projection

1 nautical miles = 1.852 meters

One minute of latitude, which is equivalent to one sixtieth of a degree of latitude.
Using nautical charts

Wind rose

Take a course

Take bearings.

Adjusting to variation (on chart)

Adjusting to compass deviation (deviation graph)

West is negative / East is positive
From True to False  SUBTRACT
From False to True  ADD
Using nautical charts

Taking three bearings we can get our position
Measuring our speed

The ‘Chip Log’ apparatus consisted of a small weighted wood panel that was attached to the reel of rope, and a time measuring device: a half-minute sand glass.

1.852m  3.600’ (1 knot)
15.4 m  30”
Measuring our speed

1 knot is 1 nautical mile (1.852m) per hour (60)

Toftevaag has a Length Over All (LOA) of 18.5 m

If we drop a log at the bow and time how long it takes to reach the stern we can find our speed by..

100th of a mile (18.5m) Time in seconds

So if a log takes 10'' to do 18.5m
It would take 1.000'' (16.6’) to do one nautical mile

16.6’ 1 nmi

60’ 3.6 knots
Dead reckoning (every hour an estimated position)

**Speed (distance travelled)**
We are measuring our speed on the surface. We must correct for currents.

**VECTORS**

**Course / route covered**
Wind and waves can make us drift.

**ANGLE**
Dead reckoning (every hour an estimated position)

Speed (distance travelled)
We are measuring our speed on the surface.
We must correct for currents.

VECTORS

Course / route covered
Wind and waves can make us drift.

ANGLE
Transporting angles
Capable arcs (sextant)
Sailing