NAORA

Wind · Current · Season · Systems

# Global Route Intelligence

ROUTING INTELLIGENCE & OPERATIONAL FRAMEWORK

# NAORA Route Intelligence Key Principles

Our NAORA methodology rests on five immutable operating principles. We apply them to every segment, every passage, and every route decision we make.

### Timing is Absolute

Seasonal windows are not guidelines they are operational limits. When we miss them, risk does not rise gradually; it rises exponentially.

### Routing is System-Logic

Every route decision we make is traceable to meteorological or oceanographic data. We do not rely on intuition without data-backed justification.

### Redundancy Always

Communications, navigation, propulsion, & sail power: every system must have a working backup. We accept no single point of failure on ocean passages.

### Technical Condition is Safety

Preventive maintenance is the only safety variable we can control on open ocean. Deferred maintenance is delayed risk.

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# NAORA Route — Complete Sequence

Our world route follows the global wind and current systems, moving with the seasons from the Mediterranean all the way around and back.

01. **Mediterranean** — Departure, spring/summer prep

02. **Canary Islands** — Atlantic staging, Nov–Jan window

03. **Caribbean** — Trade wind arrival, Dec–May

04. **Panama Canal** — Atlantic to Pacific transition

05. **Galápagos** — Pacific entry, ITCZ crossing

06. **Pacific** — Marquesas, Polynesia passage

07. **Solomon Islands & Fiji** — Western Pacific, cyclone avoidance

08. **South-East Asia** — Regional cruising, refit

09. **Maldives** — Indian Ocean entry, NE monsoon

10. **Seychelles** — Indian Ocean waypoint

11. **Madagascar** — Southern Indian Ocean routing

12. **South Africa** — Cape of Good Hope, major hub

13. **Mediterranean (return)** — Via Dakar, Gibraltar

14. **Red Sea & Turkey** — Suez south, Marsa Alam, final destination

## Total Distance: Approx. 40,000 – 42,000 NM · Recommended Duration: 30 – 42 MONTHS

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# Total Overview — Distances & Schedule

Our complete NAORA route overview, showing each leg in sequence with approximate distances, typical durations, & optimal seasonal windows.

| Segment | Distance (NM) | Duration | Optimal Window |
| --- | --- | --- | --- |
| Mediterranean (departure point) → Canary Islands | 500–800 | 4–7 days | Apr – Oct |
| Canary Islands → Caribbean | 2,700 | 14–21 days | Nov – Jan |
| Caribbean → Panama | 800–1,200 | 6–10 days | Dec – Apr |
| Panama → Marquesas (Pacific) | 3,000 | 22–30 days | Mar – Jun |
| Polynesian island legs (Tuamotu, Tahiti, Tonga, Fiji) | 3,500–5,000 | 3–6 months | May – Oct |
| Fiji/Tonga → Australia/New Zealand | 1,200–1,800 | 8–14 days | Jun – Sep |
| Australia/NZ → Maldives (Indian Ocean) | 3,500–4,500 | 25–35 days | Nov – Mar |
| Maldives → Seychelles | 1,500–2,000 | 10–16 days | Nov – Mar |
| Seychelles → South Africa (Cape Town) | 2,500–3,000 | 18–25 days | Nov – Mar |
| South Africa → Dakar (West Africa) | 3,500–4,500 | 25–35 days | Dec – Apr |
| Dakar → Gibraltar / Mediterranean | 1,200–1,800 | 8–14 days | Mar – May |
| Mediterranean transit | 1,500–2,500 | 12–20 days | Apr – Oct |
| Suez Canal → Red Sea southward → Marsa Alam | 1,400–1,900 | 12–20 days | Oct – Mar |

# Mediterranean — Departure & Atlantic Preparation

## 01.

### Mediterranean Departure

We weigh anchor in Bodrum, Turkey, and begin our world voyage westward. From February through April, we use the season to prepare the vessel, complete final checks, and sail through the Greek islands and along the Mediterranean toward Gibraltar.

## 02.

### Gibraltar — Atlantic Gateway

Gibraltar is our transition point from the Mediterranean to the Atlantic. We time our exit to avoid the strong easterly Levanter winds and the busy shipping lane, then head south along the Moroccan coast toward the Canary Islands.

## 03.

### Canary Islands — Atlantic Staging

Las Palmas, Gran Canaria, is our primary Atlantic staging port. We complete final provisioning, technical checks, and weather briefings there, then depart in the November to January window with the northeast trade winds for the Atlantic crossing.

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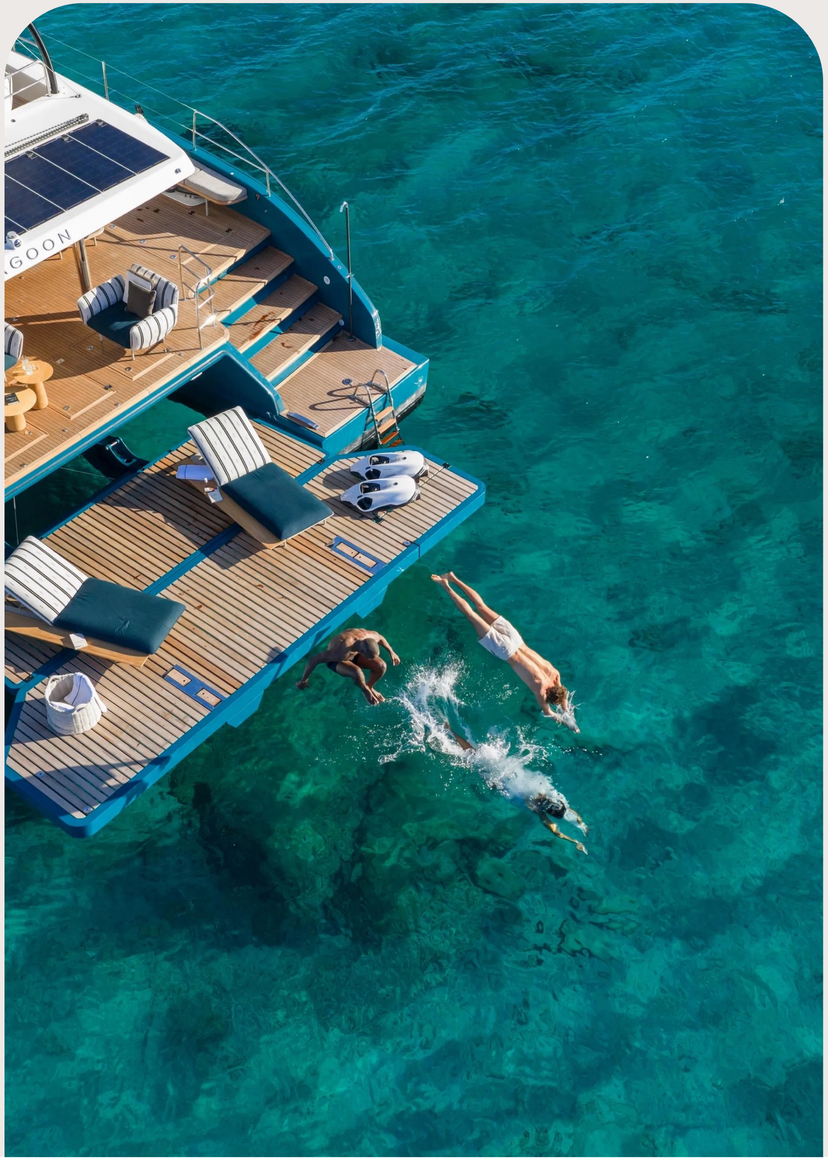
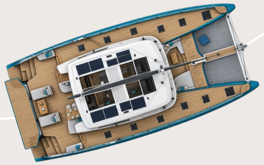


# Atlantic Ocean Route & Meteorology

The North Atlantic passage is where we begin the classic NAORA world route. We rely on one of the most documented and predictable wind patterns in offshore sailing: the northeast trade winds and the North Equatorial Current.



# Atlantic Passage Technical Parameters

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## Departure Zone: Canary Islands

We use the Canary Islands as our standard departure point for the Atlantic crossing. The best window is November to January, when the northeast trades are more frequent and hurricane activity is lower outside the formal season.

## Route Distance & Duration

From Las Palmas to Barbados or Saint Lucia, we plan for about 2,700 nautical miles. At an average passage speed of 6–8 knots, we expect 14–21 days underway, with current and wind effects adding 2–3 days of variation.

## Trade Wind Corridor

We rely on the northeast trade winds, typically 15–25 knots once we are south of 20°N. Sea state is usually a steady 1.5–3.0 meters, with regular swell that suits consistent offshore sailing.

## ITCZ Crossing & Arrival in the Caribbean

The main challenge is the ITCZ around 8°–12°N, where we can encounter squalls and unsettled conditions. Late-season disturbances near the Cape Verde zone also matter, and we stay alert on the windward approach to the Caribbean islands.

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# Caribbean Operational Phase

### Meteorological Profile

We plan around the northeast trade winds, typically 15–20 knots, with seasonal variability influenced by tropical waves moving west from Africa.

### Cyclone Avoidance

During June through November, we treat cyclone risk as elevated and stay below 12°N or fully outside the hurricane zone whenever possible.

### Island Hopping Strategy

We use Barbados, Martinique, Guadeloupe, Sint Maarten, and the BVI as transit nodes, allowing 2–5 days per stop for clearance and weather windows.

### Panama Preparation

We keep our passage plan flexible so we can position the boat safely, avoid seasonal exposure, and prepare the next leg toward Panama from a secure Caribbean staging point.

# Panama Canal Transit & Operational Requirements

The Panama Canal transit marks our transition from the Atlantic to the Pacific operating phase. The logistical and operational requirements of the canal passage are significant, so we plan at least 2–4 weeks in advance.

# Panama Technical Transit Requirements

## 01. ACP Registration

We register with the ACP at least 7–14 working days before our intended transit date. We keep all required paperwork ready in advance, and our NAORA crew holds the certifications and documentation needed for a smooth submission.

## 02. Measurement Certificate

We carry a valid measurement certificate, such as ITC 69 or an accepted national equivalent, to confirm our vessel details for canal processing.

## 03. Line Handlers

We arrange for 4 certified line handlers to be aboard during lock transit. We can hire them through authorized agents in Colón or Balboa, with typical costs of $150–250 USD per person.

## 04. Transit Fees

We budget for canal transit fees based on vessel length and tonnage, along with related operating costs and service charges.

## 05. Timing

We plan the transit carefully, allowing 2–4 weeks ahead for coordination. Total passage time is typically 8–12 hours, or it may be split across two days with an anchorage stop in Gatun Lake if needed.

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# Pacific Ocean
# Pacific Passage Strategy

We treat the Pacific Ocean as the largest and most operationally demanding basin on the NAORA route. Our routing strategy combines trade-wind optimization with cyclone avoidance through a southward passage via Polynesia.

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# Pacific Route Architecture

01.

### Panama / Galapagos

We start here. Galapagos is our first stop, with routing through the Ecuadorian zone and its ITCZ risk at northern latitudes.

02.

### Marquesas

We run this as a 3,000 NM southeast trade-wind passage, typically taking 20–25 days. Hiva Oa is our primary clearing port in French Polynesia.

03.

### Tuamotu / Tahiti

We move through the Tuamotu atolls and on to Tahiti, keeping local routing precise and atoll by atoll.

04.

### Tonga / Fiji

We continue through Tonga and Fiji, adjusting the route to conditions and regional passage windows.

05.

### Australia / New Zealand

We close the Pacific phase here, then position for the Indian Ocean via the Torres Strait or around Tasmania depending on season.

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# Polynesian Archipelagos Operational Details

### Tuamotu Atolls

We navigate the low-lying atolls with careful tide awareness and the best possible light conditions. Coral hazards are real, and we keep passages to the two-hour window around low tide.

### Tahiti

We treat Tahiti as our provisioning hub, where we can restock, reset, and prepare for the next leg with reliable support and supplies.

### Tonga

We plan Tonga around cyclone season, which runs from November to April. Our ideal departure window toward New Zealand is May to June, after careful weather analysis.

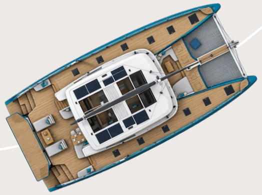
### Fiji

We use Fiji as our final Pacific staging point. Routing through reef areas requires precision, and we rely on local pilot services for inner waters.

# Indian Ocean — Monsoon Dynamics & Routing

We route the Indian Ocean as a strictly seasonal system: from Australia or Sri Lanka, we transit via the Maldives, then the Seychelles, continue south to South Africa at the Cape of Good Hope, head north via Dakar on the West African coast, enter the Mediterranean, and finally transit the Suez Canal and head southward down the Red Sea to our final destination, Marsa Alam.

The Indian Ocean is the only major ocean basin with a fully seasonal wind reversal system, so the monsoon dictates our absolute timing for every leg. There is no operational alternative.



# Monsoon Cycle Technical Specifications

### SW Monsoon (Summer)

June–September. We face southwest winds at 20–35 knots, with gusts up to 50 knots in the active phase. Westbound routing is blocked, so we remain in Asian waters or Australian waters.

### NE Monsoon (Winter)

November–March. We work with northeast winds at 15–25 knots. This is our primary transit window for the westbound passage: Maldives → Seychelles → South Africa → Dakar → Mediterranean → Suez Canal → southward down the Red Sea to Marsa Alam.

### Transition Periods

April–May and October. These are wind-shift months: unpredictable, with calms and squalls. Shorter passages may still be possible, but we proceed with extra caution.

# Routing is System-Driven

At NAORA, we treat global sailing routing not as a series of destinations, but as an integrated system of meteorological and oceanographic forces. Every route decision we make is directly derived from measurable, repeatable parameters not intuition.

### Wind Systems

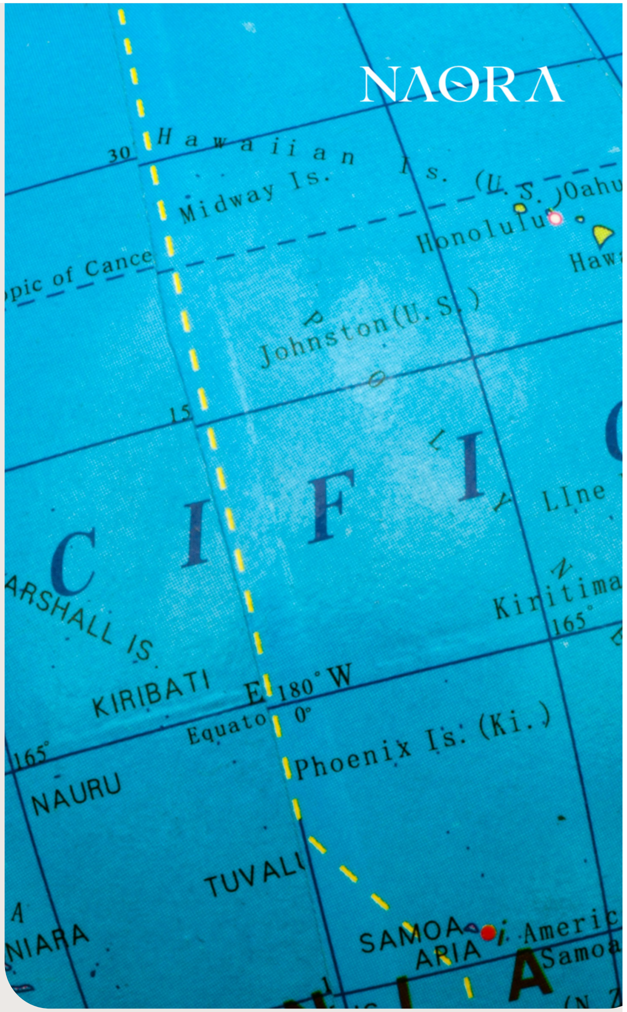
Trade winds, westerlies, and monsoons shape the primary routing logic across every ocean basin.

### Ocean Currents

Gyre structures and equatorial currents determine speed, fuel planning, and safety margins.

### Seasonal Timing

Each basin has defined entry and exit windows, cyclical avoidance periods, and critical transit timing.



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# Primary Wind Systems Global Overview

At NAORA, we map four large-scale atmospheric systems that define the architecture of our routing. Understanding their geographic reach, seasonal behavior, and transition windows is essential to how we operate.

# The Four Primary Wind Drivers

## Trade Winds

We rely on the steady northeast and southeast trades between 5° and 25° latitude. They are our most dependable drivers across Atlantic and Pacific routes, typically holding 15–25 knots.

## Westerlies

We see the strongest west-to-east flow above 40° latitude south. They bring speed and consistency, but also heavy seas, making them critical on southern ocean passages.

## Monsoons

We plan around the Indian Ocean's seasonal wind reversal. The southwest monsoon from June to September and the northeast monsoon from November to March define our regional transit windows.

## Polar Easterlies and High-Pressure Systems

We account for polar easterlies and nearby high-pressure systems that shape cold-region routing. These patterns influence coastal approaches, compression zones, and transitions near the edges of major weather systems.

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# Seasonal Windows

Each ocean basin on the NAORA route has its own seasonal structure with hard operational boundaries. We route to these windows not the other way around. If we exceed a window, our risk rises exponentially.

### Entry Window

Our optimal arrival period, shaped by wind direction, cyclone season, and the availability of anchorages and services.

### Transit Window

Our active passage phase, using live routing based on current synoptic patterns and seasonal averages.

### Exit Window

Our departure limit for the next basin, defined by weather systems that signal incoming hazard periods.

### Avoidance Window

Our absolute non-operational phase. Cyclone or hurricane season, extreme monsoon, or polar lows. We do not recommend transit.

# Ocean Basin Windows At a Glance

We route each basin on NAORA’s seasonal window, not against it. Our timing is based on basin-specific weather patterns, transit limits, and no-go periods that define safe passage.

## Atlantic Ocean

We target Canary Islands departures from November to January. We use the ARC window as our reference, and we avoid hurricane season from June to November.

## Indian Ocean

We plan Sri Lanka to Red Sea transits from October to April. The southwest monsoon fully blocks westbound passage from May to September, so our timing is absolute.

## Pacific Ocean

We work the North Pacific westbound from April to June and the South Pacific from May to August. We also avoid the Coral Sea cyclone season from November to April.

## Red Sea

We treat the Red Sea as a tightly managed transit corridor, with routing set to stay ahead of seasonal hazards and linked basin constraints.

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# Seasonal Calendar — Critical Basin Transits

01. **Mediterranean**
April–October
Depart Oct–Nov

02. **Atlantic**
Depart Nov–January
Trade wind season

03. **Caribbean**
December–May
Avoid Jun–Nov (hurricane)

04. **Panama Canal**
Year-round
Transit any time

05. **South Pacific**
May–August
Avoid Nov–Apr (cyclone)

06. **Indian Ocean**
October–April
Avoid May–Sep (monsoon)

07. **Red Sea**
October–April
Avoid May–Sep (northerlies)

08. **Mediterranean Return**
April–October
Complete circuit

We use this calendar to define the operational limits for each basin. Colored segments mark the active transit windows; the remaining periods are classified meteorologically as elevated risk or operationally unsound.

# The Global Current Systems


Ocean currents are not a passive backdrop they are an operational variable that directly affects transit time, fuel consumption, and safety margin. At NAORA, we integrate gyre structures and equatorial currents into every route calculation.

# Primary Currents on the NAORA Route

## North Equatorial Current

We use this westward flow between 5° and 20° N to support Atlantic and Pacific crossings. Depending on the route, it can add 0.5–1.5 knots of favorable current.

## South Equatorial Current

We account for this mirrored current in the Southern Hemisphere, especially on passages from the Pacific toward Australia and the Indian Ocean.

## Agulhas Current

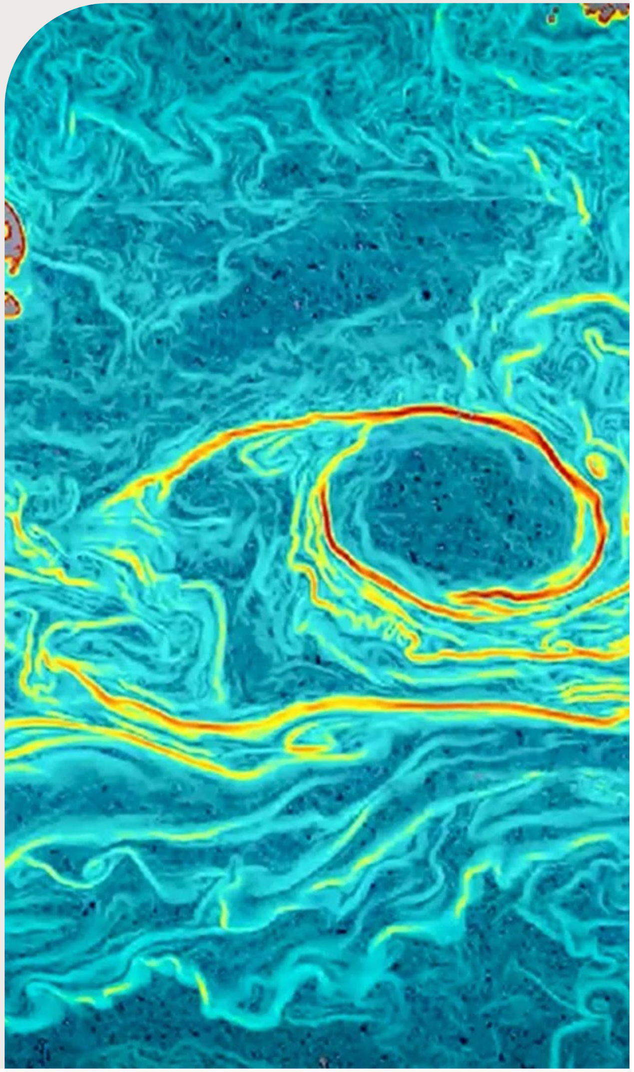
We treat this fast southwest-flowing current along the east coast of Africa with special care. It can reach up to 5 knots, and its interaction with westerly winds near the Cape of Good Hope can create hazardous sea conditions.

## Somali Current

We factor in this seasonally reversing current in the western Indian Ocean. Its direction can shift dramatically between the southwest and northeast monsoon phases.

## Major Gyres and Boundary Currents

We also track the surrounding gyre systems and boundary currents that shape regional drift, route efficiency, and fuel planning across long-haul passages.



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# Operational Impact of Currents

## 01.

### Speed Gain & Loss

We can gain up to 30 hours on a 3,000 NM passage with a 1.5-knot helping current. A current of equal strength against us can increase our effective distance by 10–15%.

## 02.

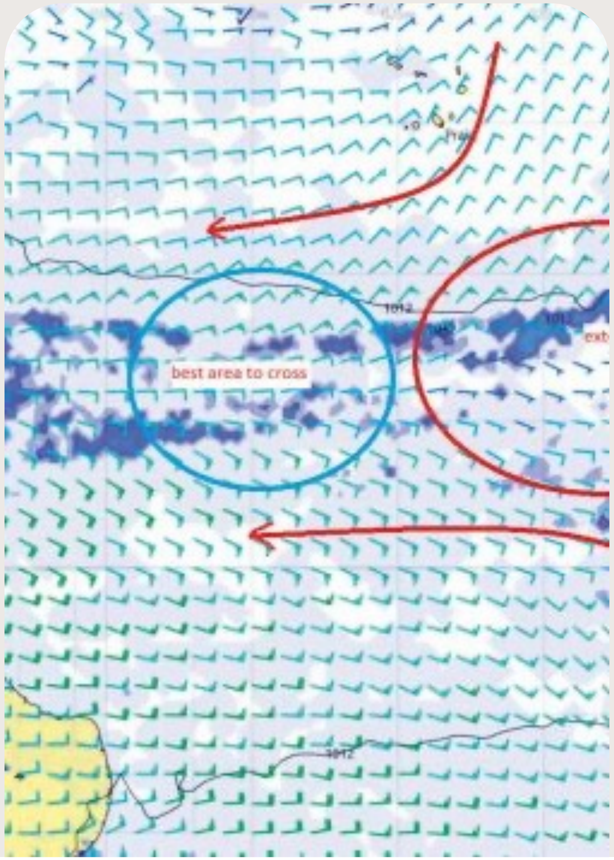
### Fuel Impact

When we motor against a strong current, fuel burn rises disproportionately. We actively avoid major adverse current segments in our NAORA routing whenever wind conditions allow.

## 03.

### Safety Considerations

Convergence zones between warm and cold currents can produce higher seas and unexpected conditions. We pay special attention to the Agulhas Current and Gulf Stream retroflection areas.




# ITCZ — Intertropical Convergence Zone

The ITCZ is the most meteorologically unpredictable zone we encounter on a world voyage. Centered around the equator, it shifts seasonally between 5° N and 10° S in the Atlantic, and spans a broader band in the Pacific.

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# ITCZ — Meteorological Characteristics

## 01. Low Wind

We often see average wind speeds below 5 knots. Long calm periods can force us to motor or significantly extend the passage.

## 02. High Humidity

We experience relative humidity up to 95%, which affects crew comfort, instrumentation, and corrosion-prone systems.

## 03. Convective Instability

We encounter strong vertical air movement driven by thermal heating, building fast-moving squall cells with sudden gusts above 35 knots.

## 04. Heavy Rain and Calms

We move through bursts of intense rain followed by glassy calms, where visibility drops and progress can slow dramatically.

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# ITCZ — Operational Risks

We need active, adaptive routing through the ITCZ. On average, we spend 2–5 days crossing it in the Atlantic; in the Pacific, it can take 7–14 days.

### Squall Exposure

We can face sudden wind increases from 0 to 30+ knots within minutes, requiring immediate sail reduction and constant radar and visual monitoring.

### Erratic Wind Direction

Wind direction can rotate 180° within an hour, so we need a wind-aware sail handling strategy at all times.

### Extended Calms

We often encounter glassy calm periods that can drain fuel quickly as we motor through low-wind stretches and lose progress.

### Crew Fatigue

Long, unstable weather patterns and repeated sail changes increase workload and fatigue, especially during extended passages through the zone.

ⓘ ITCZ position shifts daily. We need current GRIB data and satellite imagery whenever we approach the zone.

# ITCZ — Crossing Strategies

01.

### Preparation

We analyze GRIBs, identify the best window, and check fuel.

02.

### Entry

We time the narrowest band and plan a motor-sailing strategy.

03.

### Transit

We keep radar watch, avoid squalls, and update our position daily.

04.

### Exit

We confirm the trade winds have re-established before we relax the plan.

ⓘ We can often cut the transit time by 30–50% with a well-timed ITCZ crossing compared with an uncoordinated passage. We usually prefer routing through narrower zones in the Atlantic (around 5°–8° latitude) over wider Pacific crossings.

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# Squall Systems Convective Cells

Squall systems are the short-term weather threat we take most seriously on tropical ocean passages. They move fast, form convective structures, and can cause significant damage if we do not prepare adequately.

# The Squall Identification & Characteristics

## Visual Identification

We look for tall cumulonimbus clouds with a dark, flat base. Rain often appears beneath the cloud as a gray curtain, and the system can move quickly at 15–25 knots.

## Radar Signature

On weather radar, convective cells appear as sharp, compact echoes. Modern chartplotter color coding helps us read the intensity gradient, and cells above 45 dBZ call for active avoidance.

## Wind Behavior

We typically see wind build from 0–10 knots to 25–45 knots within 3–8 minutes, peak at the squall core, and then drop off quickly after passage. The strengthening phase is the critical operational window.

## Rain Intensity

Rain can intensify rapidly as the squall approaches, with heavy bursts often concentrated near the core. We treat any sudden increase in rainfall as a sign to tighten watch and prepare for the wind shift.

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# Squall Protocols Operational Response

### Detection & Assessment

We scan radar every 10–15 minutes in squall-prone areas. We assess movement direction and speed, then estimate the intersection point.

### Helm & Course Adjustment

We favor leeward avoidance when possible. We avoid a direct crossing through the most intense part of the cell.

### Sail Reduction

When we detect a squall within 10–15 NM, we act immediately to reduce sail. We use one reef as standard, and two reefs for a stronger cell or at night.

### Post-Squall Check

After every significant squall, we inspect the system and rigging, reset the sail plan, and log the wind peak and duration.

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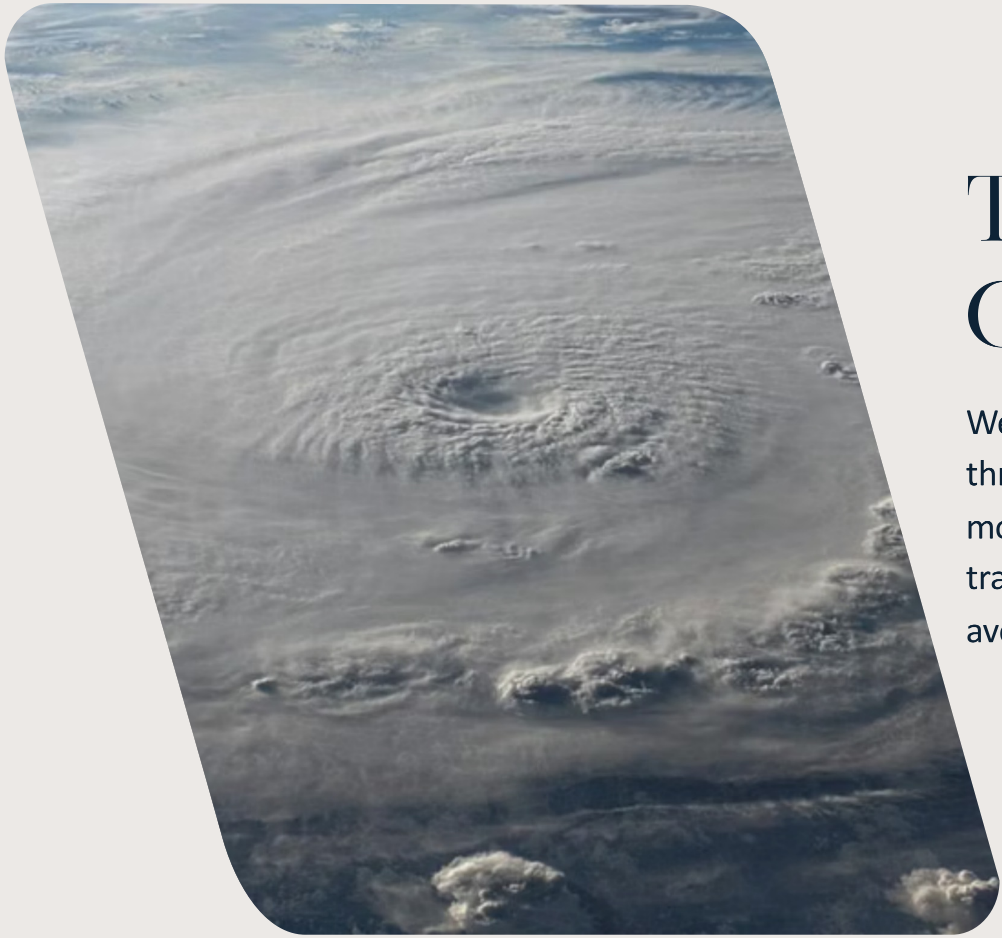

# Tropical Cyclones Classification & Threat

We treat tropical cyclones as the most critical meteorological threat on the NAORA route. Timely seasonal routing removes most cyclone risk operationally, but residual exposure during transit windows still requires constant monitoring and a clear avoidance protocol.

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# Cyclone Avoidance Rules 1-2-3 Rule & Saffir-Simpson

01.

## Our 1-2-3 Avoidance Rule

We keep at least 100 NM away at 24 hours, 200 NM at 48 hours, and 300 NM at 72 hours from the forecast position. We add an operational buffer to account for uncertainty in the cone of uncertainty.

02.

## Saffir-Simpson Scale

- Category 1: 64–82 kn — limited damage
- Category 2: 83–95 kn — significant damage
- Category 3+: 96+ kn — severe.

We do not consider offshore operations viable  at Category 2 or higher within 500 NM.

03.

## Our Operational Response

If a forecast Category 1+ storm is within 72 hours and inside 400 NM, we immediately evaluate the nearest sheltered anchorage or hurricane-ready port for refuge.

# Offshore Risk Response Operational Protocol

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## Level 1 — Routine Monitoring

We download GRIB files daily, review synoptic charts, and monitor NAVTEX. We recalibrate the route using 48-hour and 96-hour forecasts.

## Level 2 — Elevated Alert

We move to enhanced watch when a system is within 500 NM. We increase updates to twice daily, identify diversion ports, pre-select anchorage options, and calculate fuel margin.

## Level 3 — Active Response

When the system is within 200 NM or poses an immediate threat, we alter course toward shelter, contact MRCC, keep SAT communications active, and brief the crew.

## Level 4 — Emergency Protocol

If conditions escalate beyond safe passage, we activate emergency procedures, secure the vessel, maintain distress communications, and execute the pre-planned contingency response.

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# The Offshore Communication Systems

We treat reliable communication as an operational requirement, not a comfort feature, on long passages. For the NAORA route, I maintain redundant communication capability across multiple frequency bands and networks.


# Communication Infrastructure Technical Specifications

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## SSB / HF Radio

We rely on long-range communication through SSB (4–22 MHz), with coverage up to 3,000 NM. It is essential for Pactor modem GRIB downloads and Winlink email. We keep it onboard with the required license, tuner, and all necessary radio operator certifications held by the NAORA crew.

## Satellite Phone (Iridium / Inmarsat)

We maintain global connectivity with satellite communications through Iridium, with Inmarsat as backup. Iridium GO! or a direct handset gives us dependable voice and data access offshore. GRIB data transfer is limited, but sufficient for operational use.

## AIS Transponder

We use at least a Class B AIS transponder as the minimum standard for ocean passages. In busier shipping lanes, we prefer Class A. Real-time integration with the chartplotter gives us better situational awareness and safer watchkeeping.

## EPIRB

We carry a 406 MHz EPIRB as a mandatory safety device. Before departure, we ensure it is properly registered with NOAA SARSAT and installed with the correct hydrostatic release mechanism.

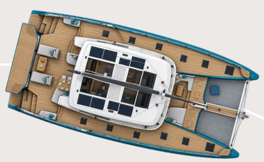
## Class A AIS

We always use Class A AIS, not Class B. Class A transmits at 12.5W versus 2W for Class B, updates position every 2–10 seconds underway, & is visible to all commercial traffic & MRCC stations. It is mandatory for SOLAS vessels, but we choose it for maximum offshore visibility & collision avoidance on NAORA route.

## VHF Radio

We keep VHF onboard for short-range ship-to-ship and ship-to-shore communication. It is part of our core bridge communication setup and supports routine traffic, harbor coordination, and emergency calls.

# Navigation Electronics Operational Stack



## 01. Primary Navigation Systems

We rely on a multi-GNSS chartplotter (GPS/GLONASS/Galileo) with redundant units on separate circuits. We also keep the NAORA crew’s required certifications current for safe operation.

## 02. Backup Navigation

We carry a backup navigator on a tablet with offline vector charts (Navionics / C-MAP), plus a sextant and reduction tables as our analog reserve.

## 03. Weather Data Systems

We use GRIB downloads and NAVTEX to maintain reliable weather awareness offshore and support passage planning.

## 04. Radar

We carry radar as a core situational-awareness tool for watchkeeping, traffic detection, and safer navigation in reduced visibility.

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# Technical Condition & Maintenance Pre-Departure

The vessel’s technical reliability is the most controllable safety variable on the NAORA route. Before departure, we follow NAORA’s standard inspection program and ensure that all required certifications are current.

### Engine & Mechanical Systems

We complete a full engine service, including the impeller, filters, fuel pump, and cooling-water checks. We inspect the propeller and shafting, and confirm the drivetrain is ready for passage.

### Hull & Rigging Inspection

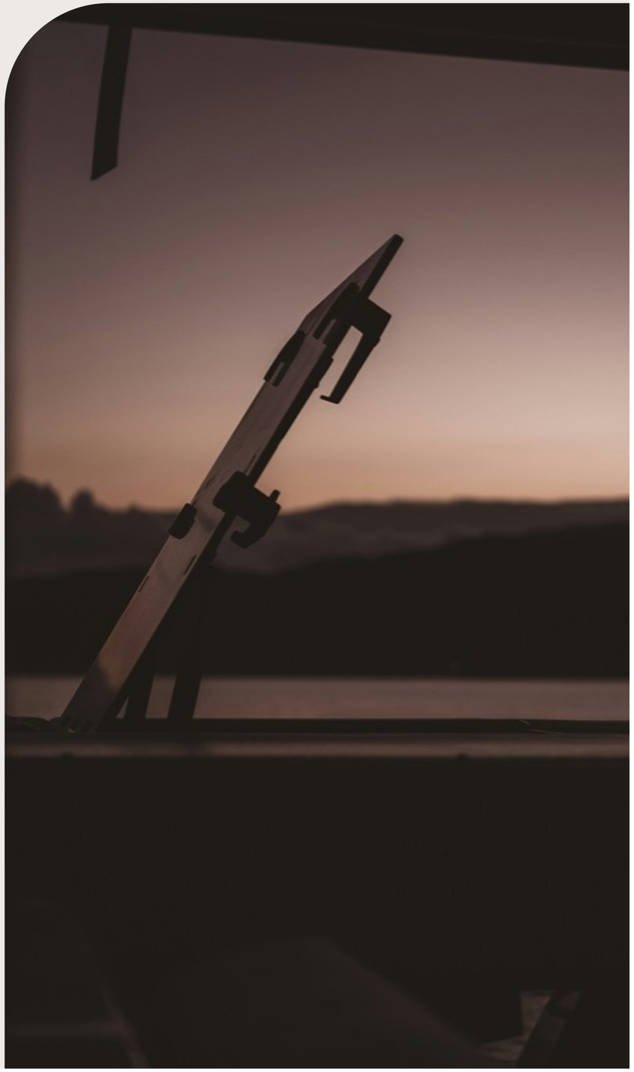
We inspect the standing rigging for cracks at swages and terminals. We check the running rigging for wear and broken strands, and we verify sail condition, seam repairs, and UV protection.

### Electrical Systems

We test the electrical installation, batteries, charging system, wiring, navigation circuits, and backup power sources to confirm dependable operation underway.

### Safety Equipment

We inspect all through-hulls, seacocks, and gland seals, renew antifouling as needed, check anodes for corrosion, and confirm that the liferaft and hydrostatic release are certified and ready.



# Logistics Network Ports & Services

I plan the NAORA route around a network of maritime logistics hubs that can provide technical support, provisioning, and document services. The quality and reliability of these hubs vary significantly by region.

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# Logistics Hubs — By Region

### Atlantic
### Las Palmas
We rely on a fully equipped marina for technical support, chandlery, provisioning, diesel, and a wide range of ARC-prep services. During peak season, we plan ahead because berths can be limited.

### Pacific
### Tahiti
We use Papeete as a dependable logistics hub in French Polynesia. It gives us access to imported parts, service providers for all onboard systems, and excellent provisioning, even if costs are high.

### Indian Ocean
### Maldives
We plan our Indian Ocean logistics around a practical resupply stop in the Maldives, where we can restock essentials and prepare for the next offshore leg with greater confidence.

### Caribbean
### Barbados / Martinique
We count on the Caribbean for strong provisioning, repair support, and easy access to cruising services. Barbados and Martinique both work well as reliable hubs as we move through the region.

### Panama
### Colón / Balboa
We treat Panama as a major transition point, with Colón and Balboa giving us access to canal support, spares, maintenance, and efficient logistics on both sides of the crossing.

### Indian Ocean
### Seychelles
We use the Seychelles as a strategic stop for restocking and light maintenance, with a sheltered setting that supports both short stays and route planning across the Indian Ocean.

### South Africa
### Cape Town / Durban
We depend on South Africa for high-quality technical services, spares, and haul-out options. Cape Town and Durban are key hubs when we need serious maintenance before continuing offshore.

### Atlantic
### Dakar
We see Dakar as an important Atlantic logistics point, where we can arrange support, provisions, and route preparation before heading south or making a longer passage.

### Mediterranean
### Gibraltar / Malta
We use Gibraltar and Malta as dependable Mediterranean hubs for clearance, repairs, chandlery, and final preparations before major crossings or seasonal moves.

### Red Sea
### Marsa Alam
We rely on Marsa Alam as a practical Red Sea stop for anchorage, supplies, and route coordination as we move through one of my more demanding cruising regions.

# Fuel & Water Planning Offshore Calculations

## 01. Power System — No Shortage

We generate all primary power through our solar panel array, which covers daily hotel loads and watermaker operation under normal conditions. We also have two generators as backup, so we are never dependent on shore power or fuel for electricity. The combination of solar plus two generators makes our power and water fully self-sufficient on all passages.

## 02. Fuel Strategy

We plan for a baseline fuel burn of 5–7 liters per hour when our engines are running at 60–70% power. We also keep a 30% reserve margin above the calculated motor-sailing requirement, so we have a comfortable buffer for the passage.

## 03. Water Production

Water is never a problem on board. We run two water makers at 200 liters per hour each, for a total capacity of 400 liters per hour, which far exceeds any crew demand. That gives us abundant water on every passage with a wide safety margin.

## 04. Provisioning Planning

For our longest passage, Panama to the Marquesas at about 3,000 NM, we plan for 25–30 days of provisions. We use a 1.4× safety factor to make sure our stores match the real demands of offshore watchkeeping.

# Medical Preparation Offshore Protocol

On the longer passages of the NAORA route, professional medical response time can extend to 48–72 hours. We treat a high level of medical preparation as an operational requirement, not an option.

## Crew Medical Training

Our crew holds all required medical certifications and training. At least one crewmember has an official STCW Medical First Aid certificate or equivalent. We also maintain regular CPR refresher training.

## Offshore Medical Kit

We carry a comprehensive medical kit in line with ISAF Offshore Special Regulations Category 1. It includes broad-spectrum antibiotics, morphine-equivalent pain relief, suturing materials, IV fluids, trauma supplies, and diagnostic instruments.

## Telemedical Support

We keep a contract with a telemedical service such as MedLink via ARINC or DAN for 24/7 satellite medical advice. That gives us access to doctor consultation by phone when treatment decisions need to be made remotely.

# Documentation & Legal Framework


International offshore routing requires precise legal and administrative preparation. At NAORA, we ensure all documentation is complete and current before departure incomplete paperwork is the most common cause of operational delays and financial penalties at international borders.

NAORA

# Core Documentation Requirements by Category

### Vessel Documents

We ensure the vessel’s flag registration is in order, along with the ITC-69 measurement certificate, radio license, safety equipment certificate, and insurance certificate with at least Third-Party Liability coverage.

### Personal Documents

We verify that every crew member has a valid passport with at least 6 months remaining beyond the planned return date. We also maintain an English crew list with at least 5 copies, plus vaccination certificates when required by the destination country.

### Clearance Procedures

We fly the yellow Q-flag upon arrival in foreign waters and complete official clearance at the first port of call. Customs, Immigration, Health, and Port Authority procedures are followed in the required order for each country.

### Weapons & Firearms

NAORA does not carry firearms on board. We comply fully with international maritime law and the regulations of every country we visit. Many countries, including French Polynesia, prohibit firearms on board entirely. Our policy is no firearms — this is non-negotiable and part of our operational standard.

NAORA

# Crew Requirements and Watch Plan

### Minimum Crew Composition

For offshore passages longer than 7 days, the NAORA crew handles all watches. Guests and members are welcome to participate in watches if they wish, but there is no obligation. The professional crew ensures the vessel is always safely manned regardless of guest participation.

### Skipper Qualifications

Our NAORA captain holds a commercial license up to 500 gross tons. This means we operate at a professional maritime standard — well above recreational certification requirements. The captain is responsible for all navigation, safety decisions, and passage planning.

### Watch Schedule

We run a standard 3-hour watch system with a 2-person watch. The crew runs the watch rotation independently, so guests can rest, observe, or join at their own discretion. At night, we maintain extra vigilance in converging shipping traffic, and we never let the full crew sleep at the same time.

### Crew Certifications

Our NAORA crew holds all required certifications, including STCW, first aid, and radio operator credentials.

NAORA

NAORA

This is how we plan. This is how we sail. Every decision on the NAORA route is grounded in data, driven by experience, and executed with precision. Wind, current, season, and systems these are the four pillars of our route intelligence.

# Wind · Current

# Season · Systems

ROUTING INTELLIGENCE · OPERATIONAL FRAMEWORK · WORLD SCALE

N W E S