

Operator Guide

For officers of the watch, engineers, the Master and the Chief Engineer: signing in, making entries, approving, signing with a PIN, countersigning, checklists, orders, tanks, reports and settings.

Anchoring

14:44:56 Z
9 Oct 2026

DECK

ANCHORING

PENDING

Operation

Let go

OFFICER

Anchor

Port

OFFICER

Anchorage

Izmir outer anchorage, area B

OFFICER

Depth m

85.3 m

NMEA 0183

Latitude

36.6052 deg

NMEA 0183

Longitude

27.8526 deg

NMEA 0183

Completed by

co

RULE VIOLATION · SIGNING BLOCKED

shackles: required when operation is 'Let go'

Correct the line, then approve and sign.

Dismiss

Approve

✓ Approve & Sign

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1 Key ideas

In Pelorus a log line is written first and then read and signed by the responsible officer, just as in the paper book. The difference: once signed, a line cannot be changed, and the system checks every line against the rules.

The life of an entry



State	Meaning
PENDING	A draft, opened by a quick action, the manual form, a checklist or the engine log. Not yet a record.
APPROVED	The officer approved it with one tap. The line is in the log but not locked.
SIGNED	The officer signed with their PIN. The line is locked. Any later change is a correction with its own signature; the old value stays readable.
DISMISSED	The draft was refused with a reason. It is not deleted; it stays on record as dismissed.

Where a value comes from

Every field carries a tag saying where its value came from:

Tag	Meaning
NMEA 0183	Taken from the sensor feed at the moment the draft was opened.
OFFICER	Typed by the officer.
CHECKLIST	Taken from the note on a checklist item.

The golden rule

Sensors and voice notes only fill the draft. What makes the official record is the officer's signature after reading, with their own PIN. An old sensor value is never shown as current.

PIN

- Every officer has a personal 4–6 digit PIN. It is kept only on this ship and never sent to the office.
- You **sign in** to the screen with your own PIN.
- **Approve** needs no PIN. **Sign**, countersign, issuing or reading orders and changing settings ask for the PIN again.
- 5 wrong PINs in a row (at sign-in or signing) lock the account: first for 5 minutes, then 15 minutes, then 1 hour. The right PIN or a reset by the Master clears the count.
- Nobody shares their PIN. A signature belongs to the PIN's owner.

2 Signing in and out

The bridge screen opens on the sign-in page. Every officer and engineer on board picks their own name and signs in with **their own PIN**. Whoever signed in is that station's user.

Sign in

- 1 Pick your name from the list on the left.
- 2 Type your PIN on the keyboard or the on-screen keypad.
- 3 **Sign in.** The home screen opens with you as the officer on watch.

SIGN IN
Choose your name and enter your own PIN. The same PIN signs your entries.

CREW MEMBER	PIN (4–6 DIGITS)
☐ Emre Şahin, Second Engineer	
☐ Deniz Aksoy, Third Engineer	
☒ Can Öztürk, Third Officer	
☐ Ali Arslan, Second Officer	
☐ Hasan Kaya, Chief Engineer	
☐ Mehmet Yılmaz, Chief Officer	
☐ Capt. Ahmet Demir, Master	

On-screen keypad layout:

1	2	3
4	5	6
7	8	9
Clear	0	⌫

Sign in

Figure 1 · The sign-in screen.

SIGN IN
Choose your name and enter your own PIN. The same PIN signs your entries.

CREW MEMBER

- ☐ Emre Şahin, Second Engineer
- ☐ Deniz Aksoy, Third Engineer
- ☒ Can Öztürk, Third Officer
- ☐ Ali Arslan, Second Officer
- ☐ Hasan Kaya, Chief Engineer
- ☐ Mehmet Yılmaz, Chief Officer
- ☐ Capt. Ahmet Demir, Master

PIN (4-6 DIGITS)

PIN not accepted. 4 attempts left before the account is locked.

1 2 3

4 5 6

7 8 9

Clear 0 <X>

Sign in

Figure 2 · Wrong PIN: the attempts left are shown. After 5 the account locks (5 min, 15 min, 1 h). The Master can set a **New PIN**.

CHOOSE YOUR OWN PIN

Deniz Aksoy: your PIN was set by the office. It cannot sign anything; choose your own PIN to continue.

NEW PIN (4-6 DIGITS, NOT 1111 OR 1234)

.....

REPEAT NEW PIN

.....

Cancel Save PIN

Figure 3 · First sign-in with a temporary PIN from the office: choose your own PIN first. A temporary PIN cannot sign anything.

Signing out and handing over the watch

When handing over the watch, click your name at the top right and press **Sign out**. The relieving officer signs in with their own name and PIN. A session also ends by itself after 12 hours unused, when the browser is closed or when the server restarts (e.g. after an update). The screen returns to the sign-in page; nothing saved is lost.

ACCOUNT ×

Signed in on this station as **Can Öztürk, Third Officer**

Sign out

Rank	Third Officer
Roles	Officer of the watch
User id	3o

NAME ON SIGNATURES

Can Öztürk

YOUR PIN

Save name

CURRENT PIN

NEW PIN (4–6 DIGITS)

REPEAT NEW PIN

Change PIN

Close

Figure 4 · Account window: “Signed in on this station as ...” and **Sign out**.

Do not work under someone else's session. Approve and dismiss are recorded under the officer on watch shown on screen; signatures are always made with the signer's own PIN.

3 The screen

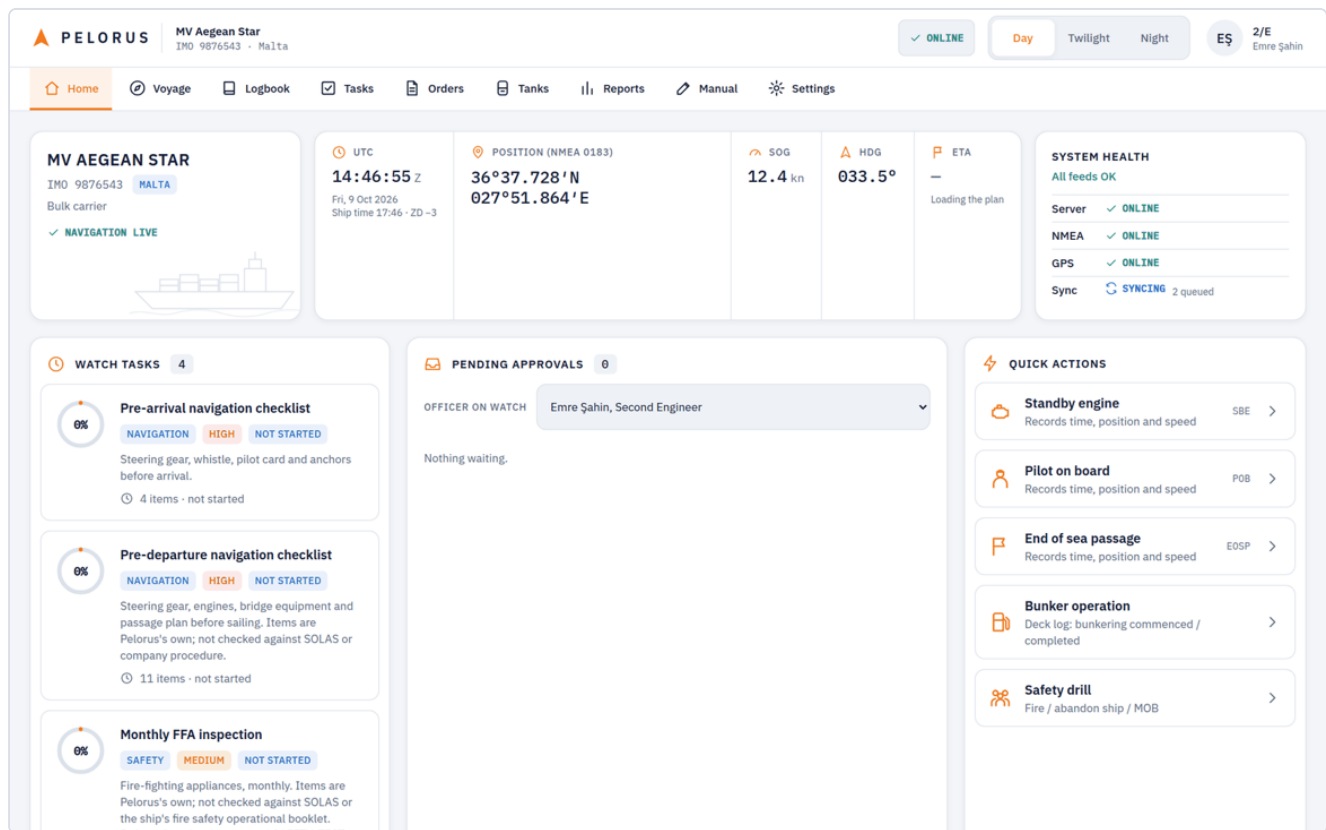


Figure 5 · Home. At the top: ship, time, navigation and system health. Below: watch tasks, drafts waiting for approval and quick actions.

Top bar

- **Ship name, IMO, flag;** on the right the server connection (**ONLINE**).
- **Day / Twilight / Night:** display mode (see *Night and twilight mode*).
- **Account:** who is signed in on this station. Click it to open the account window.

Menu

Tab	Contents
Home	Navigation status, watch tasks, pending approvals, quick actions, the day's log page, manual entry, recent activity, the Master's countersignature
Voyage	Navigation data, vessel, manual position without NMEA, voyage plan
Logbook	The books (Deck, Engine, ORB I/II, Garbage, BWRB, Annex VI, Cargo, Compass, Radar, GMDSS), page status, filling instructions
Tasks	Checklists (pre-arrival, pre-departure, monthly LSA/FFA)
Orders	The Master's standing orders and night orders
Tanks	Tank soundings and ROB

Reports	The day's state of every book and the inspector PDF
Manual	The manual entry form
Settings	Vessel particulars, NMEA, crew, software update (Master)

System health

The **Server**, **NMEA**, **GPS** and **Sync** lines show only what the screen can actually see. With all **ONLINE** it reads "All feeds OK". If a feed is lost, its line turns **OFFLINE**, position/speed/heading are blanked and the reason is shown (see *Trouble states*).

Night and twilight mode

To protect night vision on the bridge there are three modes: **Day** (bright bridge), **Twilight** (dusk and dawn, no blue light) and **Night** (dark canvas, amber text, no white and no blue). The choice is remembered per station; a reload never flashes white.

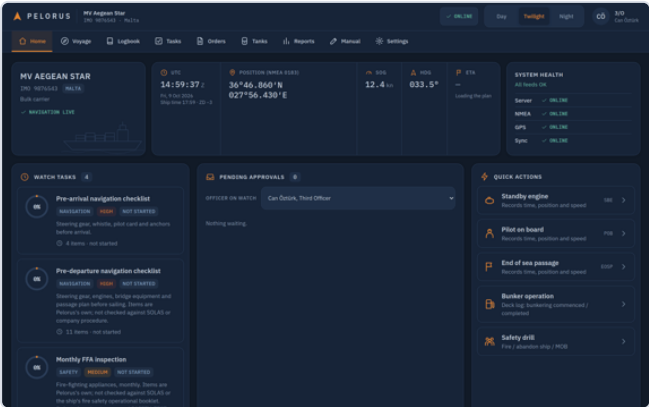


Figure 6 · Twilight mode.

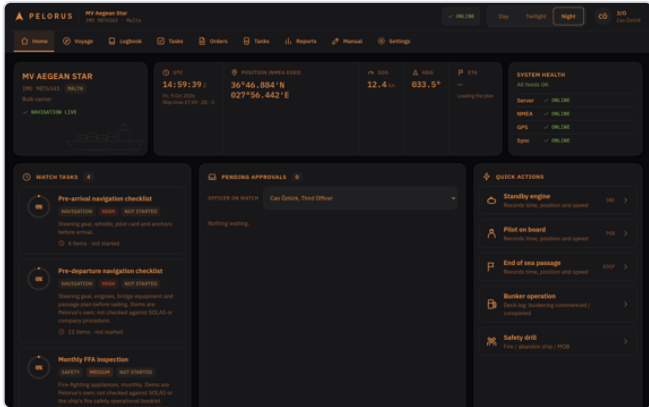


Figure 7 · Night mode.

4 Starting the watch

Officer on watch

Whoever signs in is set as the officer on watch. If needed it can be changed under **Pending approvals** › **Officer on watch**. Approve and dismiss are recorded under this person. Quick actions do not work until an officer is chosen.

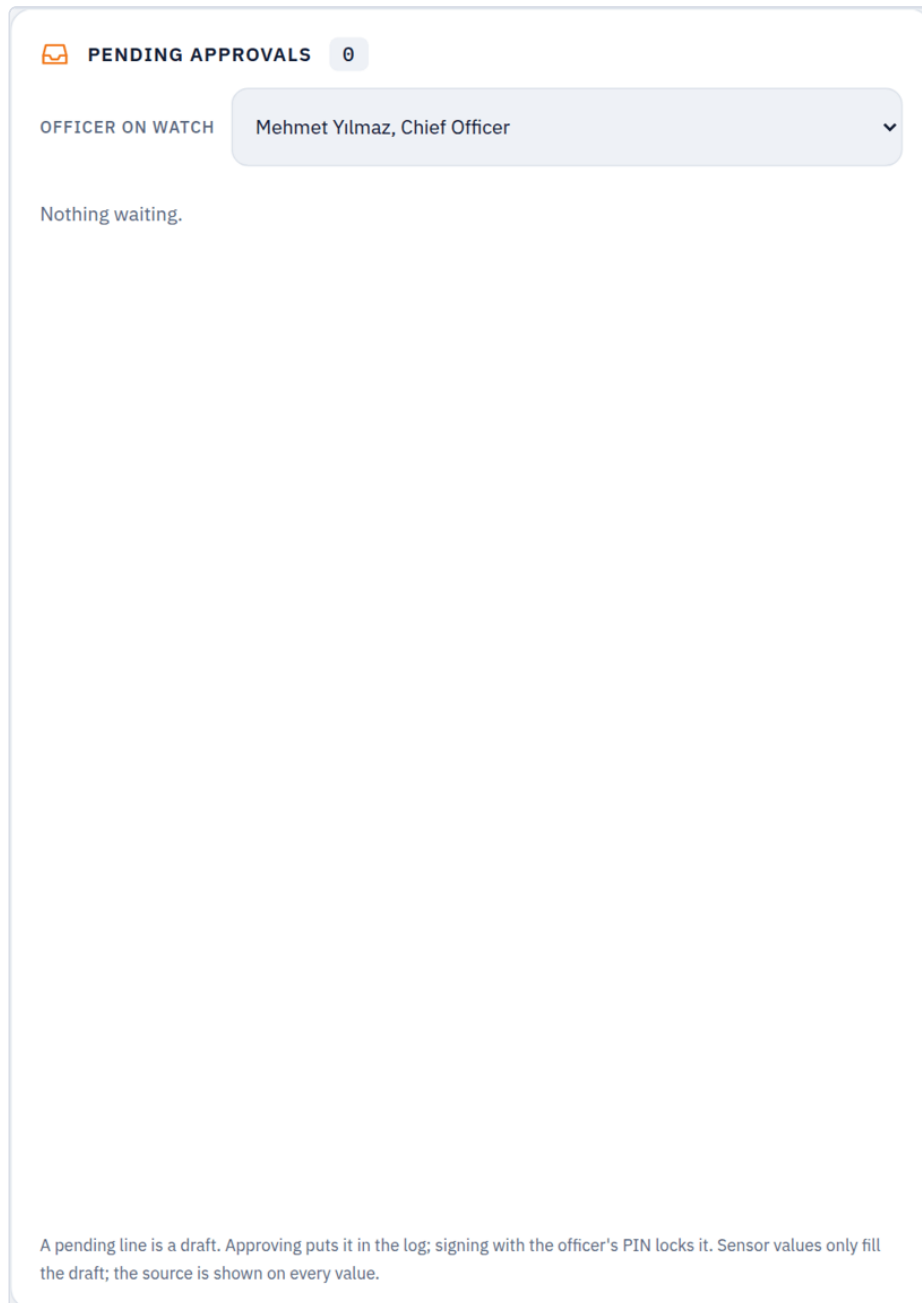


Figure 8 · Officer on watch set; their name also shows at the top right.

My account: name and PIN

Click your name at the top right. The **Account** window shows rank, roles and user id. Here you change the name printed with your signature (**Name on signatures**) and your PIN (**Change PIN**), and **Sign out**.

Watch tasks

Watch tasks in the left column lists the checklists assigned to this watch with their priority and progress (see *Checklists*).

5 Making entries

A log line opens in one of two ways: a one-tap **quick action** or the detailed **manual form**. Both open a draft waiting for approval.

Quick actions

The buttons in the right column record frequent events with the time, position and speed of the moment they are pressed: **Standby engine (SBE)**, **Pilot on board (POB)**, **End of sea passage (EOSP)**. One press opens one draft; a double press does not open a second one. If the server cannot be reached nothing is queued, and the panel says so.

 **PENDING APPROVALS** 1

OFFICER ON WATCH Mehmet Yilmaz, Chief Officer

Stand by engine

14:39:44 Z
9 Oct 2026

DECK

SBE

PENDING

Latitude

36.5428 deg

NMEA 0183

Longitude

27.8214 deg

NMEA 0183

Sog

12.4 kn

NMEA 0183

Cog

34 deg

NMEA 0183

Heading

33.5 deg

NMEA 0183

Completed by

co

Dismiss

Approve

✓ Approve & Sign

A pending line is a draft. Approving puts it in the log; signing with the officer's PIN locks it. Sensor values only fill the draft; the source is shown on every value.

Figure 9 · “Standby engine” opened a draft. Position, course, speed and heading are filled with the **NMEA 0183** tag.

Manual entry: example “Hourly position and weather”

In the **Manual entry** card on Home (or on the Logbook / Manual tab), pick the book and press **New entry**.

- 1 Entry:** the kind of entry, e.g. *Hourly position and weather (HOURLY_POS)*. The form shows that code's fields.
- 2 Entered by:** who makes the entry. **Time (UTC)** empty means “now”; type the time for an earlier event.
- 3** Fields tagged **NMEA** (latitude, longitude, course, speed, heading, depth, wind direction) are filled from the sensors if left empty. A typed value wins over the sensor.
- 4** Fill the fields tagged **MANUAL**: wind force (Beaufort), sea, swell, weather/cloud, visibility, barometer, air and sea temperature.
- 5** Fields marked * are mandatory. Add text in **Remarks**.
- 6 Open draft:** the draft opens and appears under *Pending approvals*.

The screenshot shows the 'MANUAL ENTRY: DECK LOG' form. At the top, a dropdown menu shows 'Deck log'. Below it, the 'ENTRY' dropdown is set to 'Hourly position and weather (HOURLY_POS)'. The 'ENTERED BY' field shows 'Mehmet Yilmaz'. The 'TIME (UTC), EMPTY FOR NOW' field is empty. The form is for the vessel 'MV Aegean Star' (IMO 9876543, Malta). The status is 'ONLINE'. The time is 'Day'. The user is 'MY C/O Mehmet Yilmaz'.

The form contains several fields with labels and tags:

- NMEA if empty** (NMEA tag)
- Course (COG) (deg) *** (NMEA tag)
- Speed (SOG) (kn) *** (NMEA tag)
- Heading (gyro) (deg)** (NMEA tag)
- Depth (echo sounder) (m)** (NMEA tag)
- Wind direction (true) (deg)** (NMEA tag)
- Wind force (Beaufort)** (MANUAL tag, value: 5)
- Sea** (MANUAL tag, value: Moderate)
- Swell** (MANUAL tag, value: Low NW)
- Weather / cloud** (MANUAL tag, value: bc, 3/8 Cu)
- Visibility** (MANUAL tag, value: Good, >10 nm)
- Barometer (hPa)** (MANUAL tag, value: 1014)
- Air temperature (°C)** (MANUAL tag, value: 23)
- Sea temperature (°C)** (MANUAL tag, value: 21)

The **REMARKS** field contains the text: 'Proceeding to Izmir, all well.'

At the bottom right, there are two buttons: 'Cancel' and 'Open draft'.

Opens a pending draft. Fields marked NMEA are filled from the sensors when left empty; ports, tanks and names can be picked from what the ship already knows. The officer checks and signs the line. Codes are Pelorus codes, not IMO codes.

Figure 10 · Hourly position and weather. NMEA fields left empty (“NMEA if empty”); weather observations typed in.

Deck and engine codes are Pelorus's own codes, not IMO codes. The MARPOL books (ORB, Garbage, BWRB, Cargo, Annex VI) use the official codes and item numbers of the printed books.

Other books

The book choice in the manual entry card is the same as the one on the Logbook tab. For the engine log the form offers the engine codes (*ER_WATCH_HANOVER*, *ME_OPS*, *AE_OPS*, *FO_CHANGEOVER*, *MARPOL_REF*, *ER_TESTS_DRILLS*). For the Garbage Record Book it offers the Annex V codes (*DISCHARGE_SEA*, *DISCHARGE_RECEPTION*, *INCINERATION*, *ACCIDENTAL_LOSS*) with categories A–K.

MANUAL ENTRY: ENGINE LOG

Engine log

ENTRY

Fuel oil changeover (FO_CHANGEOVER)

ENTERED BY

Emre Şahin

TIME (UTC), EMPTY FOR NOW

gg.aa.yyyy --:--

From fuel *

HFO

To fuel *

VLSFO

Sulphur content of the new fuel (% m/m) *

0.50

Reason *

ECA entry

ECA (e.g. North Sea, Baltic, North American)

North Sea SECA

Exhaust gas cleaning system in use

—

Latitude (deg) *

NMEA if empty

Longitude (deg) *

NMEA if empty

REMARKS

Cancel

Open draft

Opens a pending draft. Fields marked NMEA are filled from the sensors when left empty; ports, tanks and names can be picked from what the ship already knows. The officer checks and signs the line. Codes are Pelorus codes, not IMO codes.

Figure 11 · Engine log: fuel oil changeover (FO_CHANGEOVER) form.

6 Approving and signing

Every draft appears in the **Pending approvals** card. Read the line, check the values and their sources, then:

Button	What it does
Approve	One tap, no PIN. The line enters the log but is not locked.
Approve & Sign	Approves and opens the signing window at once. If the window is closed, the line stays approved and unsigned.
Sign	Signs an approved line with the PIN and locks it.
Dismiss	Refuses the draft with a reason. It is not deleted.

Signing with your PIN

- 1 Pick the signing officer. Only those who may sign this book are listed; the officer on watch is preselected.
- 2 Enter your PIN on the keyboard or the on-screen keypad.
- 3 **Sign**. The line becomes **SIGNED** and is locked.

SIGN ENTRY ✕

Hourly position and weather

14:40:17Z · deck · HOURLY_POS · rev 1

SIGNING OFFICER

☐ Can Öztürk, Third Officer · OOW

☐ Ali Arslan, Second Officer · OOW

☒ Mehmet Yılmaz, Chief Officer · OOW

☐ Capt. Ahmet Demir, Master · Master

Signing locks revision 1. A later change is a correction with its own signature; the signed values stay readable.

PIN (4–6 DIGITS)

1 2 3

4 5 6

7 8 9

Clear 0

Cancel Sign

Figure 12 · Signing window: signing officer and PIN.

SIGN ENTRY ✕

Hourly position and weather

14:40:17Z · deck · HOURLY_POS · rev 1

SIGNING OFFICER

☐ Can Öztürk, Third Officer · OOW

☐ Ali Arslan, Second Officer · OOW

☒ Mehmet Yılmaz, Chief Officer · OOW

☐ Capt. Ahmet Demir, Master · Master

Signing locks revision 1. A later change is a correction with its own signature; the signed values stay readable.

PIN (4–6 DIGITS)

PIN not accepted. 4 attempts left before signing is locked.

1 2 3

4 5 6

7 8 9

Clear 0

Figure 13 · Wrong PIN: "PIN not accepted. 4 attempts left before signing is locked." Nothing is written.

If the server cannot be reached, the signature is not queued; the line stays unsigned. If another station changed the line meanwhile, the window shows a *stale revision* warning with a reload button.

DECK LOG: 09-OCT-2026 2

Ship's date 09-OCT-2026 · ZD -3

TIME	ENTRY	CODE	STATUS	REV.
17:39	Stand by engine	SBE	SIGNED	1
17:40	Hourly position and weather	HOURLY_POS	SIGNED	1

Figure 14 · The day's deck log page: two lines signed.

Dismissing a draft

A wrong or unneeded draft is refused with **Dismiss** and a written reason. It stays on record as dismissed and never enters the log. A signed line cannot be dismissed, only corrected.

DISMISS DRAFT
Anchoring
The draft stays on record as dismissed, with your reason. It does not enter the log.
REASON

Opened without cable length; re-entered with shackles and depth.

Cancel

Dismiss

Figure 15 · Dismiss window: the reason is mandatory.

7 Wrong entries and the rule engine

Pelorus checks every line against the rules before approval and signature. A wrong line is saved as a draft but **cannot be approved or signed**; the red box says exactly what is missing or wrong. The aim is to stop a line that would cause trouble in a PSC inspection from ever being signed.

Warning	Meaning	What to do
RULE VIOLATION · SIGNING BLOCKED	A mandatory field is missing or a rule is broken.	Dismiss the draft with a reason and enter it again correctly.
WRONG OR INCOMPLETE ENTRY · SAVED AS A DRAFT ONLY	The same check, run when the form was sent. The draft is saved but cannot be approved.	The same.
LATE ENTRY	The line's time is before the last approved line in the book.	Write the reason for the late entry; it goes on record with the approval.

Example 1: Anchoring without the cable length

In the deck log, *Anchoring* with operation **Let go** and the cable (*shackles*) left empty.

Figure 16 · Wrong entry: “Cable (shackles)” empty.

Figure 17 · Result: “shackles: required when operation is 'Let go'”. Approve and Approve & Sign are disabled.

Fix: **Dismiss** the draft with a reason (e.g. “Opened without cable length; re-entered.”) and open it again with the cable length. The check passes and the buttons open:

Anchoring

14:45:22 Z
9 Oct 2026

DECKANCHORINGPENDING

Operation	Let go	OFFICER
Anchor	Port	OFFICER
Shackles	5 shackles	OFFICER
Anchorage	Izmir outer anchorage, area B	OFFICER
Depth m	85.3 m	NMEA 0183
Latitude	36.6106 deg	NMEA 0183
Longitude	27.8553 deg	NMEA 0183
Completed by	co	

DismissApprove✓ Approve & Sign

Figure 18 · Correct entry: 5 shackles, depth from NMEA. Approve and sign are open.

Example 2: Entering an ECA on high-sulphur fuel (engine)

Engine log, *Fuel oil changeover*: HFO to VLSFO, sulphur 0.50 %, reason “ECA entry”, ECA “North Sea SECA”, scrubber (EGCS) not in use.

MANUAL ENTRY: ENGINE LOG

Engine logNew entry

WRONG OR INCOMPLETE ENTRY · SAVED AS A DRAFT ONLY

Fuel oil changeover draft saved at 14:45 Z, but it cannot be approved yet. Complete it under Pending approvals:

- Sulphur 0.5% m/m is above the ECA limit of 0.1% m/m (MARPOL Annex VI reg. 14.4); enter ECA only on compliant fuel or with the EGCS in use

Dismiss

Opens a pending draft. Fields marked NMEA are filled from the sensors when left empty; ports, tanks and names can be picked from what the ship already knows. The officer checks and

Figure 19 · On sending the form: “Sulphur 0.5% m/m is above the ECA limit of 0.1% m/m (MARPOL Annex VI reg. 14.4)”. Saved as a draft only.

Fuel oil changeover

14:45:59 Z
9 Oct 2026

ENGINEFO_CHANGEOVERPENDING

From fuelHFOOFFICER

To fuelVLSFOOFFICER

Sulphur pct0.5 % m/mOFFICER

ReasonECA entryOFFICER

EcaNorth Sea SECAOFFICER

Latitude36.6178 degNMEA 0183

Longitude27.8589 degNMEA 0183

Completed by2e

RULE VIOLATION · SIGNING BLOCKED

Sulphur 0.5% m/m is above the ECA limit of 0.1% m/m (MARPOL Annex VI reg. 14.4); enter ECA only on compliant fuel or with the EGCS in use

Correct the line, then approve and sign.

Dismiss

Approve

✓ Approve & Sign

Figure 20 · The same violation on the approval card. The line cannot be signed.

Fix: dismiss the draft and enter the real changeover (e.g. ULSFO, 0.09 %). If the EGCS really is running, tick *Exhaust gas cleaning system in use*; the rule engine then allows the higher sulphur.

Example 3: Garbage into the sea inside a special area

A discharge of category **A (plastics)** into the sea, inside the Mediterranean (a special area), 14 nautical miles from land:

MANUAL ENTRY: GARBAGE RECORD BOOK

ENTRY

Discharge into the sea (DISCHARGE_SEA)

ENTERED BY

Can Östrik

TIME UNTIL EMPTY FOR NOW

00:00:00

Category *

A

Position of the ship *

36°40.87N 027°55.8E

Estimated amount discharged into sea (t/d) *

0.2

Distance from nearest land (nm) *

14

Ship on route *

yes

Special area *

Mediterranean Sea

Food waste contributed or ground (25 min screen) *

no

Clearing agents or substances in wash water, not harmful to the marine environment *

no

Cargo residues in a special area (e.g. 6.3.2 conditions met) *

no

Remarks

Plastic bags discharged onboard

CancelOpen draft

MANUAL ENTRY: GARBAGE RECORD BOOK

New entry

WRONG OR INCOMPLETE ENTRY · SAVED AS A DRAFT ONLY

Discharge into the sea draft saved at 14:52 Z, but it cannot be approved yet. Complete it under Pending approvals:

A Plastics may not be discharged into the sea inside a special area (Annex V); if it happened, record it as ACCIDENTAL_LOSS with the circumstances

Dismiss

Opens a pending draft. Fields marked NMEA are filled from the sensors when left empty; ports, tanks and names can be picked from what the ship already knows. The officer checks it

Figure 21 · Garbage Record Book: DISCHARGE_SEA, category A.

Figure 22 · “A Plastics may not be discharged into the sea inside a special area (Annex V)”. If it really happened, record it as ACCIDENTAL_LOSS with the circumstances.

A wrong category letter is caught too. Choosing **D (cooking oil)** instead of food waste:

Discharge into the sea

14:53:28 Z
9 Oct 2026

GARBAGE

DISCHARGE_SEA

PENDING

Category	D	OFFICER
Position	36°40.8'N 027°55.8'E	OFFICER
Amount m3	0.3 m3	OFFICER
Distance land nm	14 nm	OFFICER
En route	true	OFFICER
Special area	Mediterranean Sea	OFFICER
Comminuted	true	OFFICER
Completed by	3o	

RULE VIOLATION · SIGNING BLOCKED

D Cooking oil may not be discharged into the sea inside a special area (Annex V); if it happened, record it as ACCIDENTAL_LOSS with the circumstances

Correct the line, then approve and sign.

Dismiss

Approve

✓ Approve & Sign

Figure 23 · “D Cooking oil may not be discharged into the sea inside a special area”. The correct category B (food waste, comminuted, more than 12 miles from land) passes the check.

If a violation really happened

A discharge against the rules can still be recorded: under the book's exceptional code (Garbage *ACCIDENTAL_LOSS*, ORB *G*, ORB Part II *N*, Cargo Record Book *I*, BWRB *E*) with the circumstances. The system never hides what happened; it makes sure it is recorded under the right code.

Example 4: Late entry (chronology)

The “Standby engine” draft was opened at 14:39, but the 14:40 hourly position line was approved before it. The order of the book is broken, so the system asks for a reason:

Stand by engine

14:39:44 Z
9 Oct 2026

DECK SBE PENDING

Latitude	36.5428 deg	NMEA 0183
Longitude	27.8214 deg	NMEA 0183
Sog	12.4 kn	NMEA 0183
Cog	34 deg	NMEA 0183
Heading	33.5 deg	NMEA 0183
Completed by	co	

LATE ENTRY

Chronological error: 2026-10-09T14:39:44.576927+00:00 is before the last approved deck entry (HOURLY_POS at 2026-10-09T14:40:17.257697+00:00). A late entry needs a written reason.

Reason for the late entry (goes on record with the approval)

Dismiss Approve ✓ Approve & Sign

Figure 24 · LATE ENTRY: "... is before the last approved deck entry ... A late entry needs a written reason." Once written, approval opens and the reason goes on record.

Example 5: A tank reading above capacity

Sound Ballast tank 1 P

Capacity 500.0 m³

Volume (m³)

620

Reason

Daily sounding

Recorded by

Can Öztürk

Note (optional)

620 m³ is more than the 500 m³ capacity of Ballast tank 1 P

Cancel

Record

Figure 25 · 620 m³ entered for a 500 m³ ballast tank: “620 m³ is more than the 500 m³ capacity”. The reading is not saved.

What the rule engine checks (summary)

- Mandatory fields, value ranges, negative quantities, a time in the future.
- Deck: cable and depth for *ANCHORING* Let go/Brought up; whether a boat was lowered at an abandon ship drill; defects for a failed *SAFETY_TEST*; the zone on *TIME_ZONE_CHANGE*; remarks on an *INCIDENT*.
- Engine: the 0.10 % sulphur limit in an ECA (unless the EGCS is in use), changeover between different fuels, readings when main/auxiliary engines are “Running”, subject, participants or result for drills, training and tests.
- MARPOL: the Annex V garbage discharge matrix (distance, en route, special area, comminution), incineration rules (PVC, e-waste), ORB Part II and Cargo Record Book discharge conditions, ballast water exchange (200 nm / 200 m).

8 The Master's countersignature

A **page** is one book's entries on one ship's day. Once every line on the page has been signed by the responsible officer, the Master countersigns the page. For the engine log the Chief Engineer may do it too.

- 1 In the **Master's countersignature** card pick the book and the day (< > for earlier days).
- 2 **1 · Officer in charge signs** must show every line signed (e.g. 3/3). Unsigned lines are listed and the countersign button stays disabled.
- 3 **Countersign day** > the Master's PIN > **Countersign**.

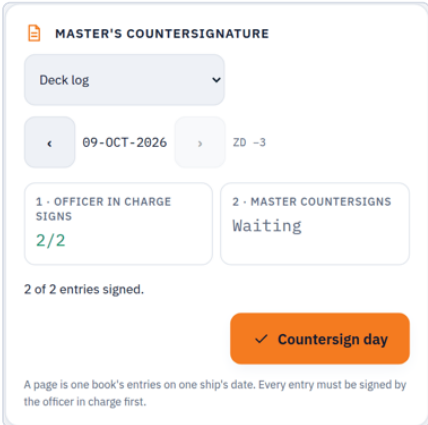


Figure 26 · All lines signed, waiting for the countersignature.

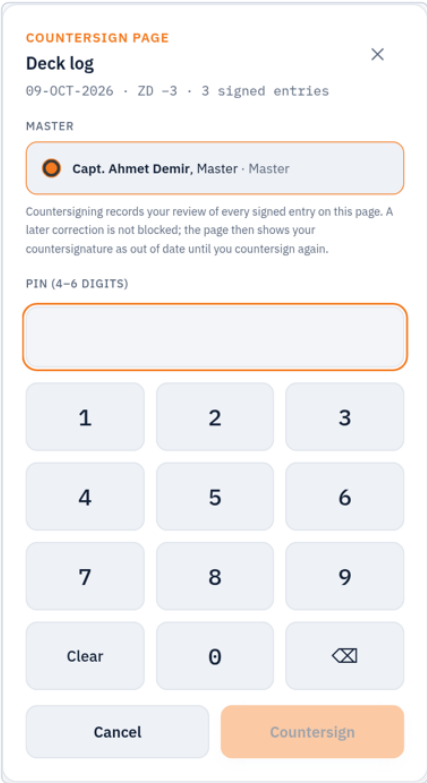


Figure 27 · Countersign window.

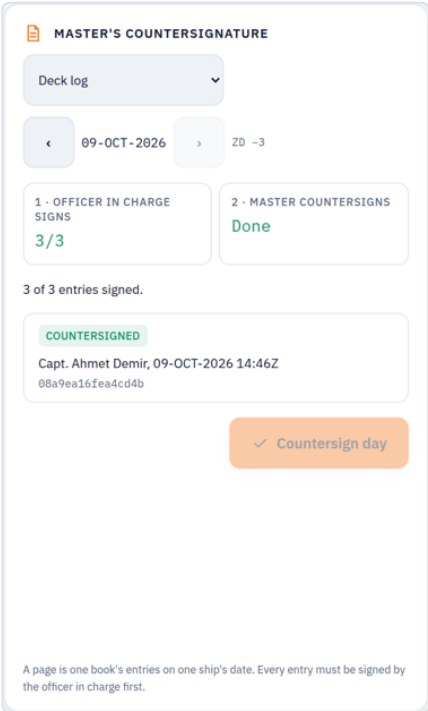


Figure 28 · COUNTERSIGNED: the Master's name, time and SHA-256 digest.

When the page changes after the countersignature

If a line is added to a countersigned day or a correction is made, the countersignature no longer covers the page. It shows "OUT OF DATE" and the PDF prints **NOT VALID** on the Master's line. The Master countersigns the page again; the new countersignature is chained to the earlier one.

 **MASTER'S COUNTERSIGNATURE**

< 09-OCT-2026 > ZD -3

1 · OFFICER IN CHARGE SIGNS
6/6

2 · MASTER COUNTERSIGNS
Re-sign needed

6 of 6 entries signed.

OUT OF DATE

 Capt. Ahmet Demir, 09-OCT-2026 14:46Z
08a9ea16fea4cd4b
The page changed after the countersignature (a correction or a new entry). Countersign it again.

✓ Countersign day

A page is one book's entries on one ship's date. Every entry must be signed by the officer in charge first.

Figure 29 · Three lines added after the countersignature: "OUT OF DATE", "Re-sign needed".

 **MASTER'S COUNTERSIGNATURE**

Engine log ▼

< 09-OCT-2026 > ZD -3

1 · OFFICER IN CHARGE
SIGNS
1/1

2 · MASTER COUNTERSIGNS
Done

1 of 1 entry signed.

COUNTERSIGNED

 Hasan Kaya, 09-OCT-2026 14:46Z
08a4b9a660f05e69

✓ Countersign day

A page is one book's entries on one ship's date. Every entry must be signed by the officer in charge first.

Figure 30 · Engine log page countersigned by the Chief Engineer.

9 The Logbook screen

The **Logbook** tab shows every book as a tab: **Deck log, Engine log, Oil Record Book I, Oil Record Book II, Garbage Record Book, Ballast Water RB, Annex VI, Cargo Record Book, Compass, Radar, GMDSS**. For each book the day's page status (lines, unsigned, drafts waiting, countersignature), the page table, the countersignature card and manual entry for that book are on one screen.

The screenshot shows the Pelorus Logbook interface for the ship MV Aegean Star (IMO 9876543, Malta). The 'Logbook' tab is selected, and the 'Garbage Record Book' is active. The page status for 09-OCT-2026 shows 1 entry on page, 0 not signed, 0 drafts waiting, and a countersignature. The entry table shows a discharge into the sea at 17:55, signed. The master's countersignature is provided by Capt. Ahmet Demir. The interface includes a 'New entry' button and a 'Countersign day' button.

PELORUS MV Aegean Star
IMO 9876543 · Malta

ONLINE Day Twilight Night CÖ 3/0 Can Öztürk

Home Voyage Logbook Tasks Orders Tanks Reports Manual Settings

LOGBOOK
Every entry is signed first by the officer in charge, then countersigned by the Master (Chief Engineer for the engine log) on the page.

Deck log Engine log Oil Record Book I Oil Record Book II **Garbage Record Book** Ballast Water RB Annex VI Cargo Record Book Compass Radar GMDSS

GARBAGE RECORD BOOK · PAGE STATUS · 09-OCT-2026

ENTRIES ON PAGE 1 NOT SIGNED 0 DRAFTS WAITING 0 MASTER'S COUNTERSIGNATURE COUNTERSIGNED

0 to approve · 0 to sign

GARBAGE RECORD BOOK: 09-OCT-2026 1
Ship's date 09-OCT-2026 · ZD -3 · countersigned

TIME	ENTRY	CODE	STATUS	REV.
17:55	Discharge into the sea	DISCHARGE_SEA	SIGNED	1

MASTER'S COUNTERSIGNATURE
09-OCT-2026 ZD -3

1 · OFFICER IN CHARGE SIGNS 1/1 2 · MASTER COUNTERSIGNS Done

1 of 1 entry signed.

COUNTERSIGNED Capt. Ahmet Demir, 09-OCT-2026 14:57Z
aaec0f3a4b685975

✓ Countersign day

A page is one book's entries on one ship's date. Every entry must be signed by the officer in charge first.

FILLING INSTRUCTIONS: GARBAGE RECORD BOOK Show

MANUAL ENTRY: GARBAGE RECORD BOOK
New entry

Opens a pending draft. Fields marked NMEA are filled from the sensors when left empty; ports, tanks and names can be picked from what the ship already knows. The officer checks and signs the line. Codes are Pelorus codes, not IMO codes.

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Figure 31 · Deck log page, countersigned.

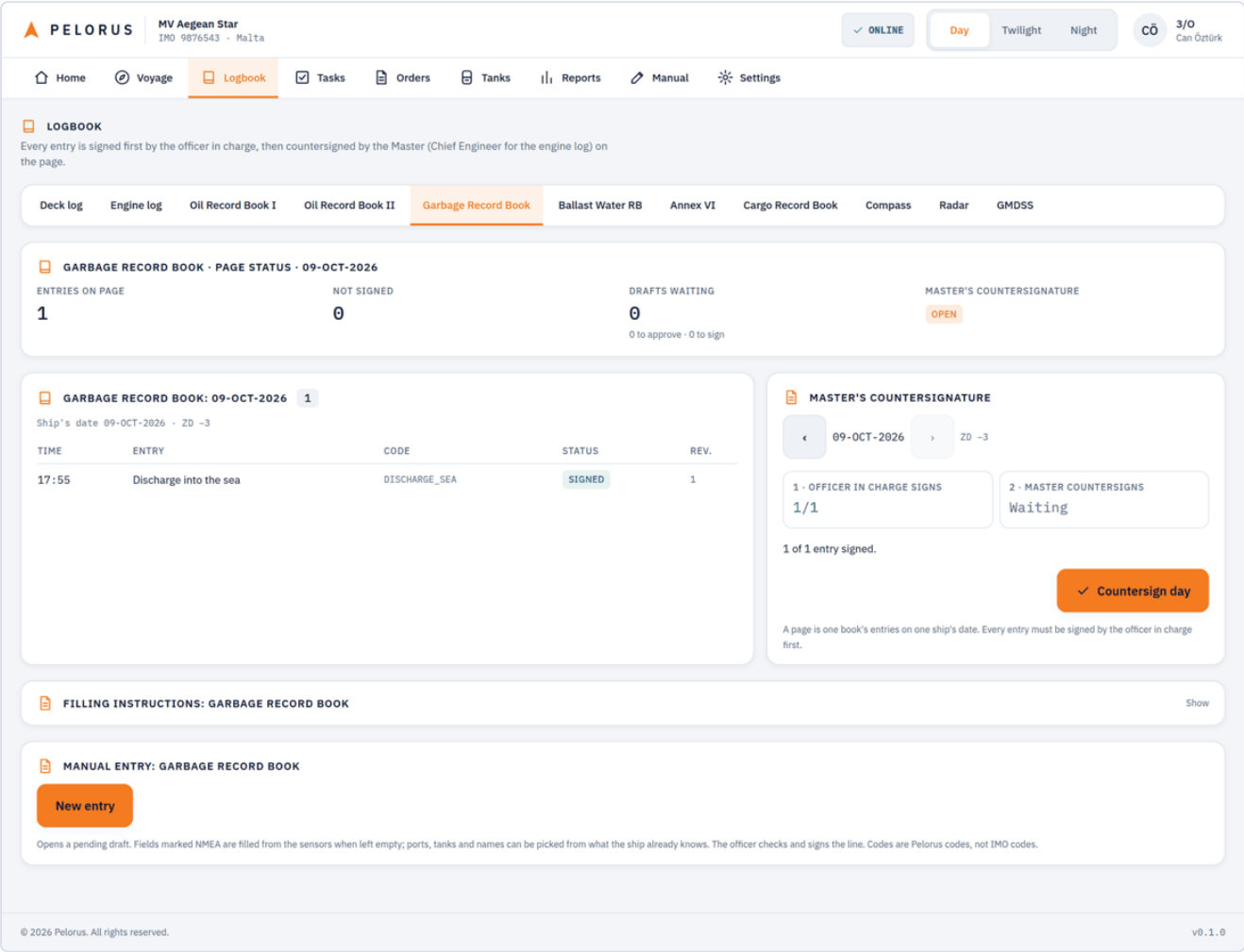


Figure 32 · Garbage Record Book: a signed line, waiting for the Master's countersignature.

Filling instructions

Under every book is a **Filling instructions** card; **Show** opens how that book is filled in.

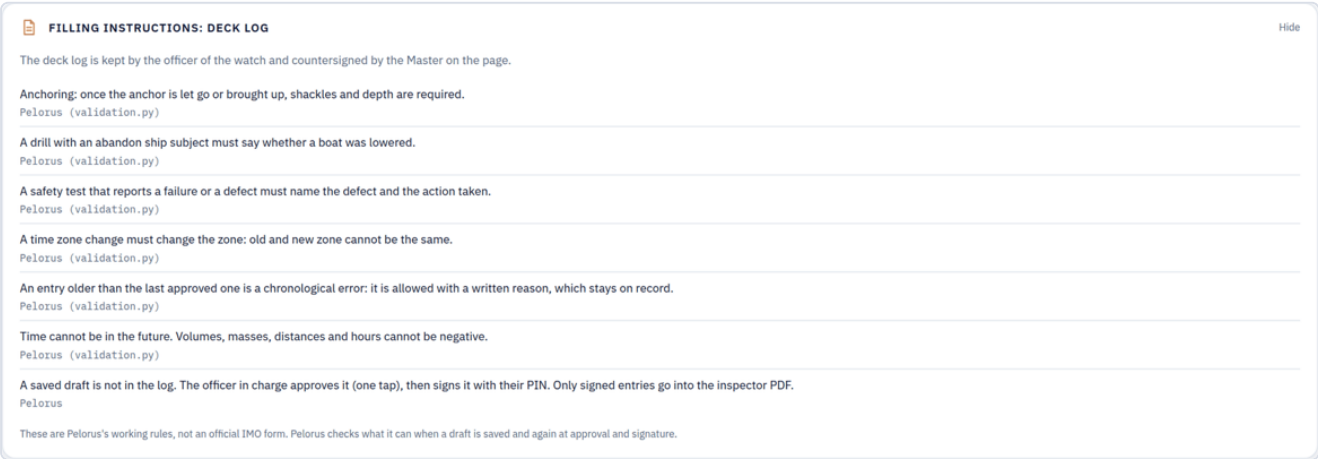


Figure 33 · Deck log filling instructions.

10 Checklists (Tasks)

Built-in checklists: **Pre-arrival navigation checklist**, **Pre-departure navigation checklist**, **Monthly FFA inspection**, **Monthly LSA inspection**. The items are Pelorus's own drafts; the company can replace them with its own procedure.

- 1 Tap the task card > **Start checklist**.
- 2 For each item **Done** or **N/A** (with a reason). Items marked "Writes a log line when ticked" (e.g. steering gear test, whistle test) ask for a result note and open a log draft; they cannot be N/A.
- 3 When every required item is done, **Complete checklist**. Completing it also opens a log draft.
- 4 To finish later, **Close, continue later**. To abandon, **Stop checklist** (with a reason).

CHECKLIST

Pre-arrival navigation checklist

Started by Can Öztürk · in progress

Steering gear tested: both pumps, emergency steering communication checked

Writes a log line when ticked.

Done

OPEN

Whistle tested

Writes a log line when ticked.

Done

OPEN

Pilot card prepared

Done

N/A

OPEN

Anchors cleared and ready

Done

N/A

OPEN

RESULT (GOES IN THE LOG LINE)

Both pumps tested, emergency steering comms OK

Back

Done

Stop checklist

3 required left

Figure 34 · An item that writes a log line: enter the result note.

CHECKLIST

Pre-arrival navigation checklist

Started by Can Öztürk · completed

Steering gear tested: both pumps, emergency steering communication checked

DONE

Both pumps tested, emergency steering comms OK

Whistle tested

DONE

Whistle tested, OK

Pilot card prepared

DONE

Anchors cleared and ready

N/A

A draft was opened in Pending approvals.

Close

Figure 35 · Completed: "A draft was opened in Pending approvals."

PENDING APPROVALS 4

OFFICER ON WATCH

Can Öztürk, Third Officer

Steering gear tested before arrival

14:49:23 Z
9 Oct 2026

DECK
 STEERING_GEAR_TEST
 PENDING

Latitude 36.6586 deg NMEA 0183
 Longitude 27.8793 deg NMEA 0183
 Result Both pumps tested, emergency steering comms OK
 Checklist CHECKLIST
 Checklist ref deck.pre_arrival / steering_gear_test
 Completed by 3o

Dismiss
 Approve
 Approve & Sign

Whistle tested

14:49:25 Z
9 Oct 2026

DECK
 WHISTLE_TEST
 PENDING

Result Whistle tested, OK
 Checklist CHECKLIST
 Checklist ref deck.pre_arrival / whistle_test
 Completed by 3o

Dismiss
 Approve
 Approve & Sign

Pre-arrival checklist completed

14:49:44 Z
9 Oct 2026

DECK
 PRE_ARRIVAL_CHECKLIST
 PENDING

Latitude 36.6628 deg NMEA 0183
 Longitude 27.8814 deg NMEA 0183
 Sog 12.4 kn NMEA 0183
 Checklist deck.pre_arrival v1 FIXED
 Checklist ref deck.pre_arrival
 Completed by 3o

Dismiss
 Approve
 Approve & Sign

Discharge into the sea

14:54:18 Z
9 Oct 2026

GARBAGE
 DISCHARGE_SEA
 PENDING

Category D OFFICER
 Position 36°40.8'N 027°55.8'E OFFICER
 Amount m3 0.3 m3 OFFICER
 Distance land nm 14 nm OFFICER
 En route true OFFICER
 Special area Mediterranean Sea OFFICER
 Comminuted true OFFICER
 Completed by 3o

Dismiss
 Approve
 Approve & Sign

RULE VIOLATION - SIGNING BLOCKED
 D Cooking oil may not be discharged into the sea inside a special area (Annex V); if it happened, record it as ACCIDENTAL_LOSS with the circumstances
 Correct the line, then approve and sign.

A pending line is a draft. Approving puts it in the log; signing with the officer's PIN locks it. Sensor values only fill the draft; the source is shown on every value.

Figure 36 · Drafts from the checklist (steering gear test, whistle test, checklist completed) go through the normal approve and sign flow.

Pelorus · v0.1.0 · October 2026

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11 The Master's orders

The Master's **standing orders** and **night orders** are issued here. Every officer of the watch signs with their PIN that they have read the order. The text never changes: a new text is a new order that replaces the old one and must be read again.

Issuing an order (Master)

New order (Master): kind (Night order / Standing order), the night it starts for a night order, title, text, the Master's PIN > **Sign and publish**.

NEW ORDER (MASTER)

Kind

Night order

▼

Night starting on

09.10.2026

📅

Title

Night order 09/10

Order

Course as per passage plan to Izmir pilot station. Keep CPA min 1.5 nm. Call me at any doubt, when visibility drops below 3 nm, and 1 h before pilot station (ETA 0400 LT).

Master

Capt. Ahmet Demir

▼

Master's PIN

....

Sign and publish

Figure 37 · Writing a night order.

"I have read" signature (officer of the watch)

TONIGHT

Night order 09/10 NIGHT ORDER · 09-OCT-2026

Capt. Ahmet Deniz, Master · Issued 09-OCT-2026 17:49 ZD -3 · fa75476cad86

Course as per passage plan to Izmir pilot station. Keep CPA min 1.5 nm. Call me at any doubt, when visibility drops below 3 nm, and 1 h before pilot station (ETA 0400 LT).

READ 1 OF 3

☒	Can Öztürk	09-OCT-2026 17:50 ZD -3
☐	Ali Arslan	NOT READ YET
☐	Mehmet Yılmaz	NOT READ YET

Read / Okudum

Figure 38 · Tonight's order: "Read 0 of 3", who has not read it is listed.

SIGN: I HAVE READ THIS ORDER ×

Night order 09/10

OFFICER OF THE WATCH

☒ **Can Öztürk, Third Officer**

☐ **Ali Arslan, Second Officer**

☐ **Mehmet Yılmaz, Chief Officer**

Your signature is on this exact text. If the Master replaces the order, you read the new one and sign again.

PIN (4–6 DIGITS)

1	2	3
4	5	6
7	8	9
Clear	0	⌫

Cancel **Read / Okudum**

Figure 39 · **Read / Okudum**: the officer picks themselves and signs with their PIN.

The office sees orders still unread by everyone 2 hours after issue as an alert.

12 Tanks (ROB)

The **Tanks** tab shows the latest reading of the HFO, MDO, fresh water and ballast tanks, product totals and alerts. Levels are not read from sensors; they are entered from soundings.

- 1 Press **Sound** next to the tank.
- 2 For a tank with a sounding table enter the sounding (cm); the volume comes from the table. For the others enter the volume (m³).
- 3 Reason (Daily sounding, etc.), who recorded it, an optional note > **Record**.

Sound HFO service tank P

Capacity 160.0 m³

Sounding (cm); the volume comes from the tank table

Reason

Daily sounding

Recorded by

Can Öztürk

Note (optional)

Cancel Record

Figure 40 · Entering a sounding.

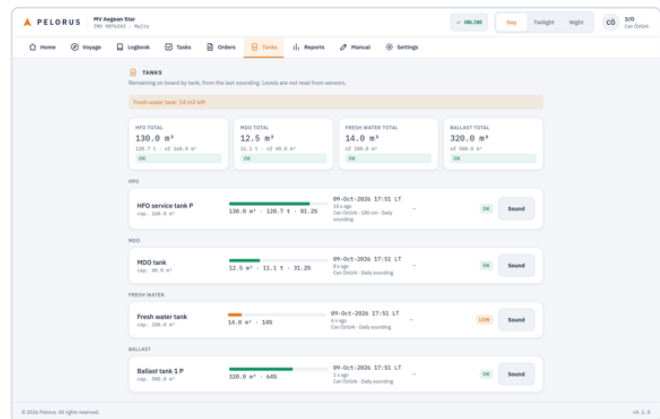


Figure 41 · Tank overview: the fresh water tank is LOW.

Alerts: **low / critical low** (below threshold), **unexplained gain** (an unexplained rise on a daily reading), **stale reading** (not sounded for too long). A wrong reading is never deleted; a new reading replaces it.

13 Voyage

Voyage plan

Set voyage plan: voyage no., departure, ETA, distance and the ports in order (load, discharge, bunker, other at each). The ETA is typed in; nothing is calculated. The ETA on Home comes from this plan.

Voyage No. V-2026/41

DEPARTURE (SHIP'S TIME) 08.10.2026 04:00

ETA (SHIP'S TIME) 10.10.2026 04:00

DISTANCE (NM) 118

Times are ship's time (ZT 07:07 LT). The ETA is typed in; nothing is calculated for you. At the present 12.4 is the distance takes about 10%, a lot only.

Izmir, TR

ETA (ARRIVAL) 10.10.2026 04:00

DEPARTURE 12.10.2026 18:00

Load Discharge Bunker Other

Piraeus, GR

ETA (ARRIVAL) 13.10.2026 20:00

DEPARTURE 22.10.2026 18:00

Load Discharge Bunker Other

Add port

Cancel Save plan

Figure 42 · Voyage plan form.

Voyage No. V-2026/41 - set by Cap-Design

DEPARTURE 08.10.2026 04:00 LT

ETA 10.10.2026 04:00 LT

DISTANCE 118 NM

1. Izmir, TR Load PLANNED

ETA 10.10.2026 04:00 LT - Day 12.10.2026 18:00 LT

2. Piraeus, GR Load PLANNED

ETA 13.10.2026 20:00 LT

Edit plan

Ports in order, with what is done at each. The cargo form offers the next planned stop first, a call that is not in the plan can still be entered.

Figure 43 · The saved plan.

Manual position without NMEA

Without a feed, **Position without NMEA** takes position, course and speed by hand. For 3 hours they show on the status bar and fill new drafts, marked with the `manual` source. A working NMEA feed always wins.

POSITION WITHOUT NMEA

No feed connected? Type the position, course and speed. They show on the status bar and fill new drafts, always marked manual, for 3 hours. A working NMEA feed is delivering now and takes precedence.

Latitude *	Minutes '	N / S	Longitude *	Minutes '	E / W
40	30.500	N	029	15.000	E

COG *	Heading *	SOG kn

Entered by

Can Öztürk (Third Officer)

Use this position

Figure 44 · Manual position entry (disabled while a feed is delivering).

14 Reports and the inspector PDF

The **Reports** tab lists every book of the day (lines, unsigned, page state). **Inspector export (PDF)** downloads a book over chosen days as a sealed PDF in the layout of the printed book. Only **signed** lines go into the official report.

- 1 Book, start and end date (ship's date).
- 2 **Requested by:** pick your name and enter your PIN. Any crew member may download.
- 3 **Generate PDF.**

INSPECTOR EXPORT (PDF)

Sealed, chained pages for the chosen days (ship's date). Only signed entries are included in the official report. Choose your name and enter your PIN to download.

Book

Deck log

From

09.10.2026

To

09.10.2026

Requested by

Capt. Ahmet Demir (Master)

PIN

....

Generate PDF

Figure 45 · Downloading the inspector PDF.

DECK LOG BOOK

No IHD form is prescribed for the deck log; layout follows the common printed deck log.

MV Aegean Star · IMO 9876543 · Flag Malta · Call sign 9HA1234 · Port of registry Valletta

Period 09-OCT-2026 to 09-OCT-2026, times UTC+3 · Date Friday 09 October 2026

Not shown (not records): 0 unsigned draft(s), 1 dismissed draft(s), 0 correction(s) awaiting signature.

Time	Event	Course	Speed kn	Position	Wind dir / force	Sea / swell	Weather	Vis.	Baro hPa	Air °C	Remarks	Signed
17:39	Stand by engine	034° [N]	12.4 [N]	36°32.6'N [N] 027°49.3'E [N]							heading: 33.5° [N]	Mehmet Yilmaz rev 1 - d15e2f80
17:40	Hourly position and weather	034° [N]	12.4 [N]	36°33.0'N [N] 027°49.5'E [N]	078° [N] / 5	Moderate / Low NW	bc, 3/8 Cu	Good, >10 nm	1014	23	sea temp c: 21 °C; depth m: 85.3 m [N]; Proceeding to Izmir, all well.	Mehmet Yilmaz rev 1 - 52bfe0a2
17:45	Anchoring			36°36.6'N [N] 027°51.3'E [N]							operation: Let go; anchor: Port; shackles: 5 shackles; anchorage: Izmir outer anchorage, area B; depth m: 85.3 m [N]	Mehmet Yilmaz rev 1 - 30450229
17:49	Steering gear tested before arrival			36°39.5'N [N] 027°52.8'E [N]							result: Both pumps tested, emergency steering comms OK [CL]	Can Öztürk rev 1 - 6cc04257
17:49	Whistle tested										result: Whistle tested, OK [CL]	Can Öztürk rev 1 - d3e7a09e
17:49	Pre-arrival checklist completed		12.4 [N]	36°39.8'N [N] 027°52.9'E [N]							checklist: deck_pre_arrival v1 [C]	Can Öztürk rev 1 - 4bdc60d6

Watch	0000-0400	0400-0800	0800-1200	1200-1600	1600-2000	2000-2400
Officer of the watch (signed electronically)	—	—	—	—	Mehmet Yilmaz (Chief Officer), Can Öztürk (Third Officer)	—

Master: countersigned electronically (PIN) by **Capt. Ahmet Demir**, Master on 09-OCT-2026 17:57 (UTC+3)
SHA-256 559a7eea6b8b0c0cc47aaf9d0fee9296d687c0419fed417eb87369e1ede4e5

Page 1 of 1 · Page seal (SHA-256):
a280412b8c768f819bdd338483697c90e0afe73b1e41ddcb0207601037f84940
Previous page seal none (first page) · Ship chain through event 53, hash c32b0bf4f4851bd0... · Exported 2026-10-09 15:04 UTC
Verify: <http://localhost:5174/v1/vessels/9876543/reports/verify?book=deck&from=2026-10-09&to=2026-10-09&tz=180&through=53&page=1&seal=a280412b8c768f819bdd338483697c90e0afe73b1e41ddcb0207601037f84940>
Electronic record export. Only entries signed by the responsible officer are shown; drafts are not records. A struck-through value was replaced by a signed correction and stays legible. Source tags: N NMEA 0183, N2 NMEA 2000 via gateway, SK Signal K, V voice note, CL checklist, Q quick event, EL engine log, C constant. Sensor data only fills the draft; the officer's signature makes the record.

Figure 46 · Deck Log Book PDF: watch signature table, the Master's electronic countersignature (SHA-256), page seal and verification QR code. (The test installation prints a “DEV – LICENCE BYPASSED” stamp.)

What is in the PDF

- **Source tags:** [N] NMEA, [SK] Signal K, [V] voice note, [CL] checklist, [C] constant.
- **Corrections:** the replaced value prints struck through but legible, then the new value; who, when and why are in the footnote.
- **Countersignature:** if valid, the Master's name, time and digest; if the page changed since, **NOT VALID**.
- **Page seal and QR:** every page is sealed with SHA-256 and chained to the one before. The QR opens the office verification page, which answers “match / no match / unverifiable”.

DECK LOG BOOK
No IMO form is prescribed for the deck log; layout follows the common printed deck log.

MV Aegean Star · IMO 9876543 · Flag Malta · Call sign 9HA1234 · Port of registry Valletta
Period 09-OCT-2026 to 09-OCT-2026, times UTC+3 · Date Friday 09 October 2026
Not shown (not records): 0 unsigned drafts(s), 1 dismissed draft(s), 0 correction(s) awaiting signature.

Time	Event	Course	Speed kn	Position	Wind dir / force	Sea / swell	Weather	Vis.	Baro hPa	Air °C	Remarks	Signed
17:39	Stand by engine	034° [N]	12.4 [N]	36°32.6'N [N] 027°49.3'E [N]							heading: 33.5° [N]	Mehmet Yilmaz rev 1 - d5fae605
17:40	Hourly position and weather	034° [N]	12.4 [N]	36°33.0'N [N] 027°49.5'E [N]	078° [N] / 5	Moderate	bc, 3/8 Cu	Good, >10 nm	1014	23	sea temp c: 21 °C; depth m: 85.3 m [N]; Proceeding to Izmir, all well.	Mehmet Yilmaz rev 1 - 52d326a3
17:45	Anchoring			36°36.6'N [N] 027°51.3'E [N]							operation: Let go; anchor: Port; shackles: 5 shackles; anchorage: Izmir outer anchorage, area B; depth m: 85.3 m [N]	Mehmet Yilmaz rev 1 - 2d432228
17:49	Steering gear tested before arrival			36°39.5'N [N] 027°52.8'E [N]							result: Both pumps tested, emergency steering comms OK [CL]	Can Öztürk rev 1 - 6cd94257
17:49	Whistle tested										result: Whistle tested, OK [CL]	Can Öztürk rev 1 - d377ad8a
17:49	Pre-arrival checklist completed		12.4 [N]	36°39.8'N [N] 027°52.9'E [N]							checklist: deck_pre_arrival v1 [C]	Can Öztürk rev 1 - d6d605d6

NOT VALID: master's countersignature of the 09-OCT-2026 page by **Capt. Ahmet Demir**, Master on 09-OCT-2026 17:46 (UTC+3) no longer matches the page; entries changed after it was countersigned and master must countersign again.
SHA-256 <http://localhost:5174/v1/livesu/9876543/reports/verify/book=deck&from=2026-10-09&to=2026-10-09&tz=+180&through=50&page=1&seal=791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce>
Electronic record export. Only entries signed by the responsible officer are shown; drafts are not records. A struck-through value was replaced by a signed correction and stays legible. Source tags: N NMEA 0183, N2 NMEA 2000 via gateway, SK Signal K, V voice note, CL checklist, Q quick event, EL engine log, C constant. Sensor data only fills the draft; the officer's signature makes the record.

Master: Signature _____ Date _____

Page 1 of 1 · Page seal (SHA-256):
791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce
Previous page seal none (first page) · Ship chain through event 50, hash f6a1402b2649b313... · Exported 2026-10-09 14:57 UTC
Verify: <http://localhost:5174/v1/livesu/9876543/reports/verify/book=deck&from=2026-10-09&to=2026-10-09&tz=+180&through=50&page=1&seal=791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce>
Electronic record export. Only entries signed by the responsible officer are shown; drafts are not records. A struck-through value was replaced by a signed correction and stays legible. Source tags: N NMEA 0183, N2 NMEA 2000 via gateway, SK Signal K, V voice note, CL checklist, Q quick event, EL engine log, C constant. Sensor data only fills the draft; the officer's signature makes the record.



Figure 47 · The PDF warning when the page changed after the countersignature: “NOT VALID: master's countersignature ... no longer matches the page”.

ENGINE LOG BOOK
No IMO form is prescribed for the engine log; layout follows the common printed engine log.

MV Aegean Star · IMO 9876543 · Flag Malta · Call sign 9HA1234 · Port of registry Valletta
Period 09-OCT-2026 to 09-OCT-2026, times UTC+3 · Date Friday 09 October 2026
Not shown (not records): 0 unsigned drafts(s), 1 dismissed draft(s), 0 correction(s) awaiting signature.

Time	Event	IME open	IME run h	Log. dist. Ship %	Consumed	Remaining on board	Readings / remarks	Signed
17:45	Feed oil changerover	Yes					From fuel WFO to fuel LS SFO. Adapter gpi1 6.09 % min. (Sensor SCA, entry: sea North Sea SCA, Latitude 36.432° [N] Longitude 27.48° [E])	

NOT VALID: master's countersignature of the 09-OCT-2026 page by **Rezan Kayan**, Chief Engineer on 09-OCT-2026 17:46 (UTC+3)
SHA-256 <http://localhost:5174/v1/livesu/9876543/reports/verify/book=engine&from=2026-10-09&to=2026-10-09&tz=+180&through=50&page=1&seal=791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce>
Electronic record export. Only entries signed by the responsible officer are shown; drafts are not records. A struck-through value was replaced by a signed correction and stays legible. Source tags: N NMEA 0183, N2 NMEA 2000 via gateway, SK Signal K, V voice note, CL checklist, Q quick event, EL engine log, C constant. Sensor data only fills the draft; the officer's signature makes the record.

Master: Signature _____ Date _____

Page 1 of 1 · Page seal (SHA-256):
791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce
Previous page seal none (first page) · Ship chain through event 53, hash c3b644443d40... · Exported 2026-10-09 15:04 UTC
Verify: <http://localhost:5174/v1/livesu/9876543/reports/verify/book=engine&from=2026-10-09&to=2026-10-09&tz=+180&through=50&page=1&seal=791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce>
Electronic record export. Only entries signed by the responsible officer are shown; drafts are not records. A struck-through value was replaced by a signed correction and stays legible. Source tags: N NMEA 0183, N2 NMEA 2000 via gateway, SK Signal K, V voice note, CL checklist, Q quick event, EL engine log, C constant. Sensor data only fills the draft; the officer's signature makes the record.



Figure 48 · Engine Log Book PDF.

GARBAGE RECORD BOOK
From other sources, Annex V, Appendix II, 2017/03, Electronic record format designed in line with MEDC 32/2016.

MV Aegean Star · IMO 9876543 · Flag Malta · Call sign 9HA1234 · Port of registry Valletta
Period 09-OCT-2026 to 09-OCT-2026, times UTC+3 · Date Friday 09 October 2026
Not shown (not records): 0 unsigned drafts(s), 1 dismissed draft(s), 0 correction(s) awaiting signature.

Garbage categories	A Plastic	B Food wastes	C Domestic wastes	D Cooling oil	E Incinerator ashes	F Operational wastes	G Animal carcasses	H Fishing gear	I E-waste	J Large residuals	K Cargo residues
Discharge into sea (Article 10)	No	No	No	No	No	No	No	No	No	No	No
Discharge into water (Article 11)	No	No	No	No	No	No	No	No	No	No	No
Discharge into air (Article 12)	No	No	No	No	No	No	No	No	No	No	No

Record no.	Date	Time	Position of the ship (Latitude/longitude or port if adjacent to shore or name of ship if discharged to another ship)	Can. Special / Polar area?	Discharge / Retain (solid / liquid)	To sea / To reception facility	Estimated amount (kg)	Signature of officer
1	09-OCT-2026	17:55	36°40.8'N 027°55.8'E	Yes, MedArea 1.4 (except 1.4)	Discharge	To sea	Estimated amount (kg)	Rezan Kayan, Chief Engineer, rev 1 - 7771d3d801

Discharge into sea mode: Yes, Food waste comminuted or ground (25 mm screen): Yes

NOT VALID: master's countersignature of the 09-OCT-2026 page by **Capt. Ahmet Demir**, Master on 09-OCT-2026 17:57 (UTC+3)
SHA-256 <http://localhost:5174/v1/livesu/9876543/reports/verify/book=gab&from=2026-10-09&to=2026-10-09&tz=+180&through=50&page=1&seal=791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce>
Electronic record export. Only entries signed by the responsible officer are shown; drafts are not records. A struck-through value was replaced by a signed correction and stays legible. Source tags: N NMEA 0183, N2 NMEA 2000 via gateway, SK Signal K, V voice note, CL checklist, Q quick event, EL engine log, C constant. Sensor data only fills the draft; the officer's signature makes the record.

Master: Signature _____ Date _____

Page 1 of 1 · Page seal (SHA-256):
791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce
Previous page seal none (first page) · Ship chain through event 53, hash c3b644443d40... · Exported 2026-10-09 15:04 UTC
Verify: <http://localhost:5174/v1/livesu/9876543/reports/verify/book=gab&from=2026-10-09&to=2026-10-09&tz=+180&through=50&page=1&seal=791cc08a3ed4afe61309deb4737ab4a518088f3ed95e9714a5d2b49dc68ce>
Electronic record export. Only entries signed by the responsible officer are shown; drafts are not records. A struck-through value was replaced by a signed correction and stays legible. Source tags: N NMEA 0183, N2 NMEA 2000 via gateway, SK Signal K, V voice note, CL checklist, Q quick event, EL engine log, C constant. Sensor data only fills the draft; the officer's signature makes the record.



Figure 49 · Garbage Record Book PDF (Annex V layout).

15 TMSA evidence

TMSA (Tanker Management and Self-Assessment, published by OCIMF) is the company's own self-assessment programme for tanker operators. Pelorus does **not** assess a ship against TMSA. It does one thing: it shows which **signed** records on board can stand as evidence for each of the 13 TMSA 3 elements, so the company finds them quickly when it prepares its own assessment or a vetting inspection.

What it is not. The percentage is called *evidence coverage (internal)*. It is not a TMSA stage, not a score, not a SIRE or vetting result and not a statement of compliance. The four TMSA stages and the KPIs are the company's own judgement and are not calculated by Pelorus.

How a record becomes evidence

Way	What happens
By mapping	Pelorus maps its own entry codes to elements, for example watch handovers to element 3, hourly positions and passage plans to element 5, bunker operations to element 6, drills and safety tests to element 9, MARPOL record book entries to element 10. Only signed records count. Drafts and dismissed drafts never do.
By an officer's tag	An officer can point a signed entry or an order at an element by hand, for example a Master's order or a drill record. The tag is saved as a separate record with the officer's name. The entry or order itself and its hash chain do not change.

Elements 2 (shore-based personnel) and 7 (management of change) have no shipboard record type; they receive evidence only through officers' tags.

Tagging a record (officer)

- 1 On **Home**, in **Recent activity** or **Operational notes**, press **TMSA** on the line you want to tag.
- 2 Choose the **TMSA element** and, if useful, write a short note.
- 3 Choose the signing officer, enter the PIN > **Sign**. The dialog lists the elements the line is already tagged with.

A tag signed with a wrong PIN is not written. A tag can be removed through the ship server with a stated reason; the removal is also a record and the old tag stays readable.

The TMSA evidence tab (office)

In the office dashboard, the **TMSA evidence** tab shows, for one ship and a chosen period (up to 31 days, ship's time):

- the 13 elements with a coverage bar, the number of signed records and the number tagged by officers;
- for each element the rules behind it, coloured by whether records exist, and the latest signed records with who signed them;

- **Recurring** rules (watch handovers, hourly positions, monthly LSA/FFA inspections, drills) set the percentage. **Event-driven** rules (an incident, a bunkering, an inspection) are listed but nothing to show is never counted as a gap.

The office sees the read-only mirror of signed records only. If the office copy's hash chain is broken, nothing is shown.

Pelorus's TMSA mapping uses its own entry codes and its own one-line wording of each element. It does not reproduce OCIMF's text or KPIs. A ship or company should not describe itself as TMSA compliant on the strength of this view.

16 Settings (Master)

Changes on the **Settings** tab need the Master's PIN.

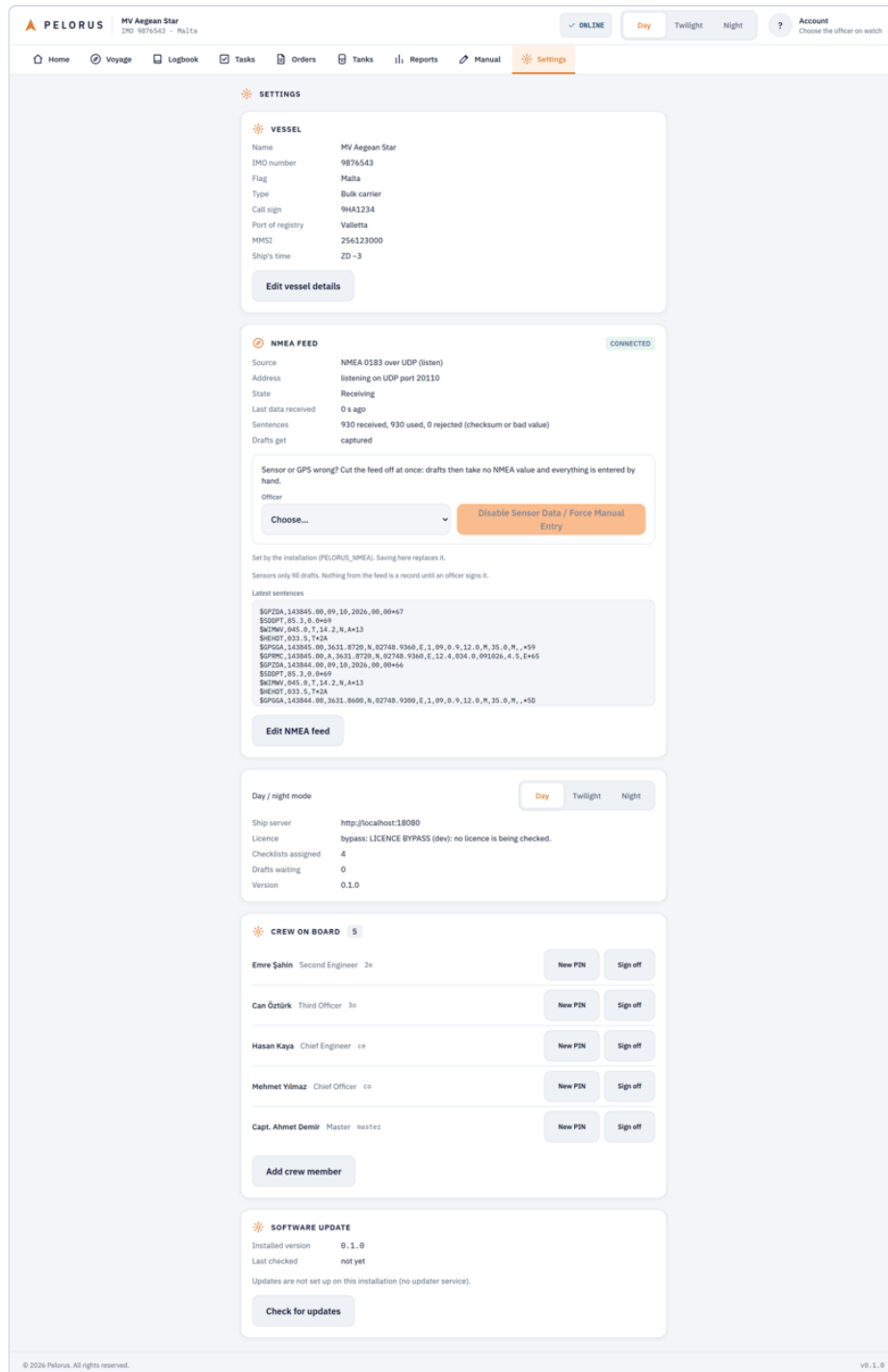
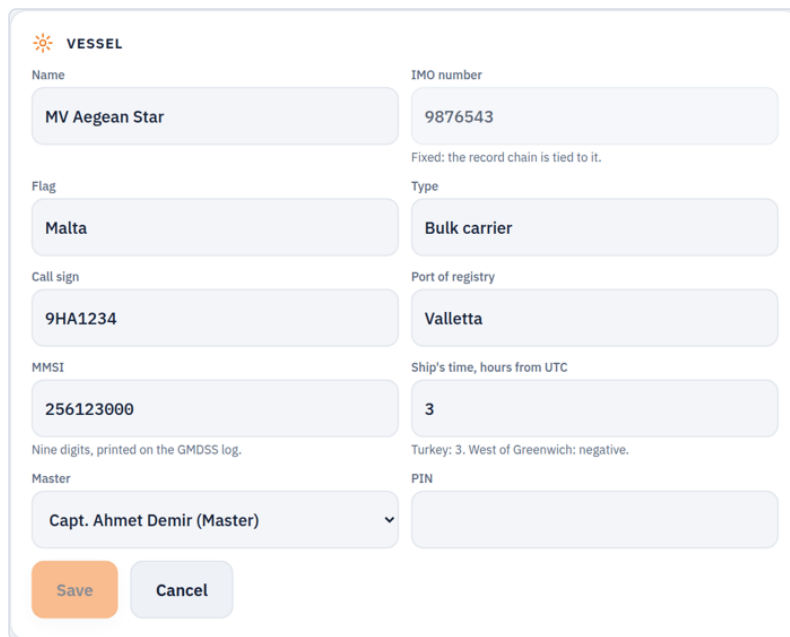


Figure 50 · The Settings screen.

Vessel particulars

Edit vessel details: name, flag, type, call sign, port of registry, MMSI, ship's time (UTC offset). Ship's time decides the day of a log page. The IMO number cannot be changed.



VESSEL

Name: MV Aegean Star

IMO number: 9876543

Flag: Malta

Type: Bulk carrier

Call sign: 9HA1234

Port of registry: Valletta

MMSI: 256123000

Ship's time, hours from UTC: 3

Nine digits, printed on the GMDSS log.

Turkey: 3. West of Greenwich: negative.

Master: Capt. Ahmet Demir (Master)

PIN:

Save Cancel

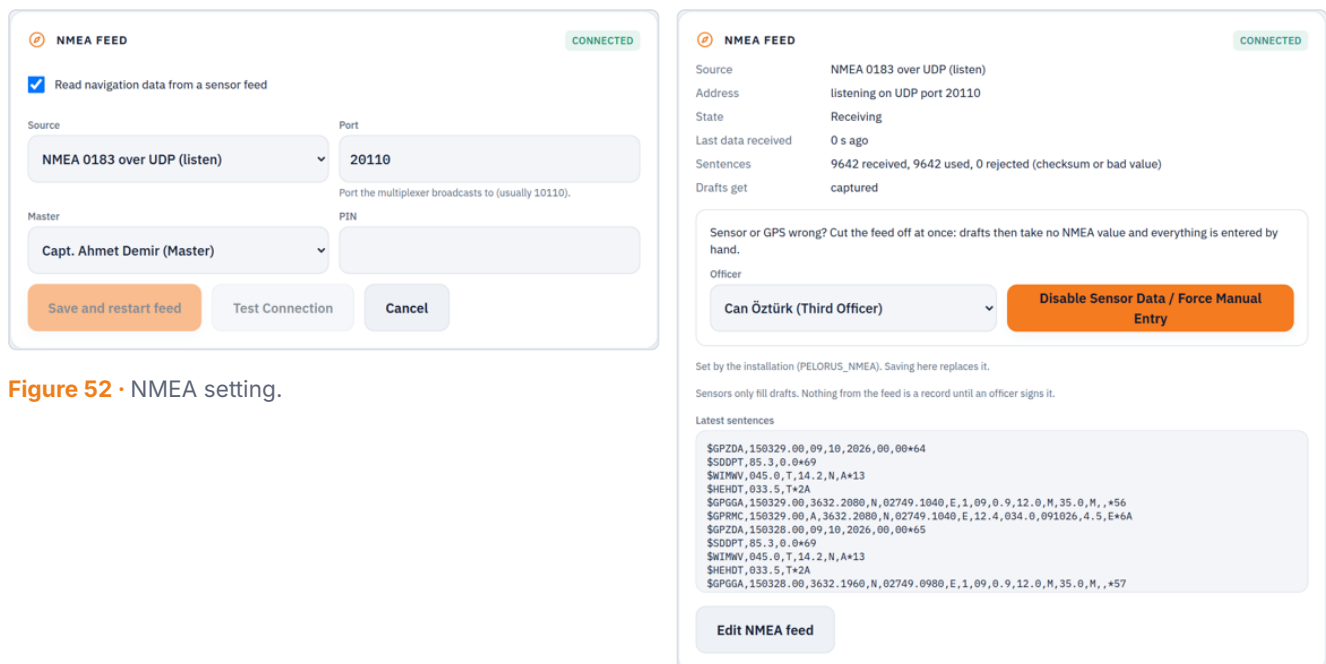
Figure 51 · Editing the vessel particulars.

NMEA feed

Edit NMEA feed: source (UDP, TCP, Signal K WebSocket/TCP, serial port), port/address, on/off. Try it first with **Test Connection**, save with **Save and restart feed**.

If a sensor gives wrong data

Any officer can cut the feed off with one tap: **Disable Sensor Data / Force Manual Entry**. Drafts then take no NMEA value and everything is entered by hand until the feed is switched back on.



NMEA FEED CONNECTED

☒ Read navigation data from a sensor feed

Source: NMEA 0183 over UDP (listen)

Port: 20110

Port the multiplexer broadcasts to (usually 10110).

Master: Capt. Ahmet Demir (Master)

PIN:

Save and restart feed Test Connection Cancel

NMEA FEED CONNECTED

Source: NMEA 0183 over UDP (listen)

Address: listening on UDP port 20110

State: Receiving

Last data received: 0 s ago

Sentences: 9642 received, 9642 used, 0 rejected (checksum or bad value)

Drafts get: captured

Sensor or GPS wrong? Cut the feed off at once: drafts then take no NMEA value and everything is entered by hand.

Officer: Can Öztürk (Third Officer)

Disable Sensor Data / Force Manual Entry

Set by the installation (PELORUS_NMEA). Saving here replaces it.

Sensors only fill drafts. Nothing from the feed is a record until an officer signs it.

Latest sentences

```
$GPZDA,150329.00,09,10,2026,00,00+64
$SDPT,85,3,0,0+69
$XDRMV,045.0,T,14.2,N,A*13
$HEHDT,033.5,T*2A
$GPGGA,150329.00,3632.2080,N,02749.1040,E,1,09,0.9,12.0,M,35.0,M,,+56
$GPRMC,150329.00,A,3632.2080,N,02749.1040,E,12.4,034.0,091026,4.5,E+6A
$GPZDA,150328.00,09,10,2026,00,00+65
$SDPT,85,3,0,0+69
$XDRMV,045.0,T,14.2,N,A*13
$HEHDT,033.5,T*2A
$GPGGA,150328.00,3632.1960,N,02749.0980,E,1,09,0.9,12.0,M,35.0,M,,+57
```

Edit NMEA feed

Figure 52 · NMEA setting.

Figure 53 · Feed state and the cut-off button.

Crew

- **Add crew member:** name, rank, first PIN. The Master confirms with their own PIN.
- **New PIN:** gives a new PIN to someone who forgot theirs or is locked out.
- **Sign off:** deactivates someone who left the ship (their session ends; past signatures stay). **Sign on** undoes it.

The left screenshot (Figure 54) shows the 'Add crew member' form. It has a header 'CREW ON BOARD 5'. Below it, a list of crew members is shown: Emre Şahin (Second Engineer 2e), Can Öztürk (Third Officer 3o), Hasan Kaya (Chief Engineer ce), Mehmet Yılmaz (Chief Officer co), and Capt. Ahmet Demir (Master master). Each member has 'New PIN' and 'Sign off' buttons. Below the list, there is a form to add a new crew member. It has fields for Name (Ali Arslan), Rank (Second Officer), First PIN (4 to 6 digits, not 1111 or 1234), Master (Capt. Ahmet Demir), and PIN. There are 'Add' and 'Cancel' buttons at the bottom.

The right screenshot (Figure 55) shows the 'Crew on Board' list with 7 members. The list includes: Emre Şahin (Second Engineer 2e), Deniz Aksoy (Third Engineer 3E-AKSOY), Can Öztürk (Third Officer 3o), Ali Arslan (Second Officer ali.arslan), Hasan Kaya (Chief Engineer ce), Mehmet Yılmaz (Chief Officer co), and Capt. Ahmet Demir (Master master). Each member has 'New PIN' and 'Sign off' buttons. At the bottom, there is an 'Add crew member' button.

Figure 54 · Adding a crew member.

Figure 55 · Crew on board (Deniz Aksoy assigned by the office).

Software update

Check for updates > a newer release shows with its notes > **Install** + the Master's PIN. The database is backed up first; if the new version does not come up, the old one is put back. After an update everyone signs in again.

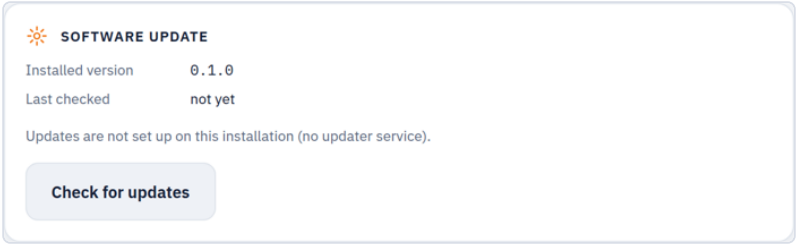


Figure 56 · Software update card.

17 The office dashboard (company)

The office sees an exact, read-only copy of the ship's records. It cannot change a ship record; a correction, when needed, goes to the ship as a separate "office revision".

Tab	Contents
Fleet overview	Per ship: last sync, missing watch entries, overdue countersignatures, unread orders. Most urgent first.
Fleet log	The chosen book and dates; who entered and who signed. Save as PDF / Print.
Alerts	Missing watch alerts: for each ship's day, the 4-hour watches (six a day) with no entry.
Inspection mode	Read-only view for an auditor: hash chain check, signed lines, countersignature state, page seals, the Inspection package PDF.
Crew	Creates crew accounts for a ship (with a temporary PIN).
TMSA evidence	Evidence coverage (internal) of the 13 TMSA elements from signed records. Not a TMSA assessment.

PELORUSOFFICE

Vessel or IMO

FLEET · 1

MV Aegean StarIMO 98765434 min ago

Sign out

Fleet overviewFleet logAlertsInspection modeCrew

Office mirror through event #53Last received 4 min ago

Save as PDFPrint

BOOKDeck LogFROM (SHIP'S DATE)03.10.2026TO09.10.2026SHIP'S TIMEUTC+3SEARCHCode, entry, remarks, officerSigned entries only

PAGES1

SIGNED ENTRIES6

AWAITING SIGNATURE0

COUNTERSIGNED1

COUNTERSIGN NOT VALID0

OFFICE REVISIONS0

TIME	CODE	ENTRY	DATA	POSITION	SIGNED BY	STATUS
09-OCT-2026	UTC+3	Countersigned	Capt. Ahmet Demir, Master · 09-OCT-2026 17:57 · 559a7eea_e4e5			
17:39	SBE	Stand by engine	latitude 36.5428 deg longitude 27.8214 deg sog 12.4 kn cog 34 deg heading 33.5 deg	36°32.57'N 027°49.28'E	Mehmet Yilmaz Chief Officer · 09-OCT-2026 17:43 d1fe1f06_5a9c	Signed r1
17:40	HOURLY_POS	Hourly position and weather Proceeding to Izmir, all well.	wind force bft 5 sea Moderate swell Low NW weather bc, 3/8 Cu visibility Good, >10 nm barometer hpa 1014 hPa air temp c 23 °C sea temp c 21 °C latitude 36.5494 deg longitude 27.8247 deg course deg 34 deg speed kn 12.4 kn heading deg 33.5 deg depth m 85.3 m wind dir true deg 78.5 deg	36°32.96'N 027°49.48'E	Mehmet Yilmaz Chief Officer · 09-OCT-2026 17:43 52bfdda2_4b8b	Signed r1
17:45	ANCHORING	Anchoring	operation Let go anchor Port shackles 5 shackles anchorage Izmir outer anchorage, area B depth m 85.3 m latitude 36.6106 deg longitude 27.8553 deg	36°36.64'N 027°51.32'E	Mehmet Yilmaz Chief Officer · 09-OCT-2026 17:45 30450229_1388	Signed r1
17:49	STEERING_GEAR_TEST	Steering gear tested before arrival	latitude 36.6586 deg longitude 27.8793 deg result Both pumps tested, emergency steering comms OK	36°39.52'N 027°52.76'E	Can Öztürk Third Officer · 09-OCT-2026 17:55 6cc04257_8c2e	Signed r1
17:49	WHISTLE_TEST	Whistle tested	result Whistle tested, OK	36°39.54'N 027°52.77'E	Can Öztürk Third Officer · 09-OCT-2026 17:55 d317a09e_c10f	Signed r1
17:49	PRE_ARRIVAL_CHECKLIST	Pre-arrival checklist completed	latitude 36.6628 deg longitude 27.8814 deg sog 12.4 kn checklist deck.pre_arrival v1	36°39.77'N 027°52.88'E	Can Öztürk Third Officer · 09-OCT-2026 17:55 4bdc60d6_e41f	Signed r1

Figure 57 · Fleet log: ship records, signers and SHA-256 digests.

The screenshot shows the Pelorus Office dashboard for the vessel **MV Aegean Star** (IMO 9876543). The interface is in **Inspection mode**. The left sidebar shows the vessel name and a 'Sign out' button. The main content area displays the **Deck Log** for the period from 03.10.2026 to 09.10.2026, ship's time UTC+3. A message states: **INSPECTION MODE - READ-ONLY**. Deck Log - 03-OCT-2026 to 09-OCT-2026 - ship's time UTC+3. Shows what the ship's signed record proves. The office cannot change it here; a correction from the office is a separate revision. This view does not rate the ship against any inspection scheme. Below this, a **Hash chain verified** message indicates all 53 events in the office copy link and hash correctly, with a head hash of #53 c32bf4b27c. A summary row shows: SIGNED ENTRIES: 6, COUNTERSIGNED DAYS: 1, COUNTERSIGN NOT VALID: 0, NOT COUNTERSIGNED: 0, CORRECTED ENTRIES: 0, and AWAITING SIGNATURE: 0. A table of events follows, including SBE, HOURLY_POS, ANCHORING, STEERING_GEAR_TEST, WHISTLE_TEST, and PRE_ARRIVAL_CHECKLIST, each with a timestamp, description, location, and officer name. At the bottom, a PDF page seals summary shows 1 page through event #53.

Figure 58 · Inspection mode: “Hash chain verified”, countersigned day, signed lines.

Creating a crew account from the office

- 1 On the **Crew** tab enter user id, name, rank and signing right > **Assign to**
- 2 A six-digit temporary PIN shows **once**. The office does not keep it. Give it to the person by phone or in person, never by e-mail.
- 3 The ship adds the account at its next sync (about a minute when online). The status becomes “Applied”.
- 4 On board the person signs in with the temporary PIN and the sign-in screen asks them to choose their own PIN first. A temporary PIN cannot sign.

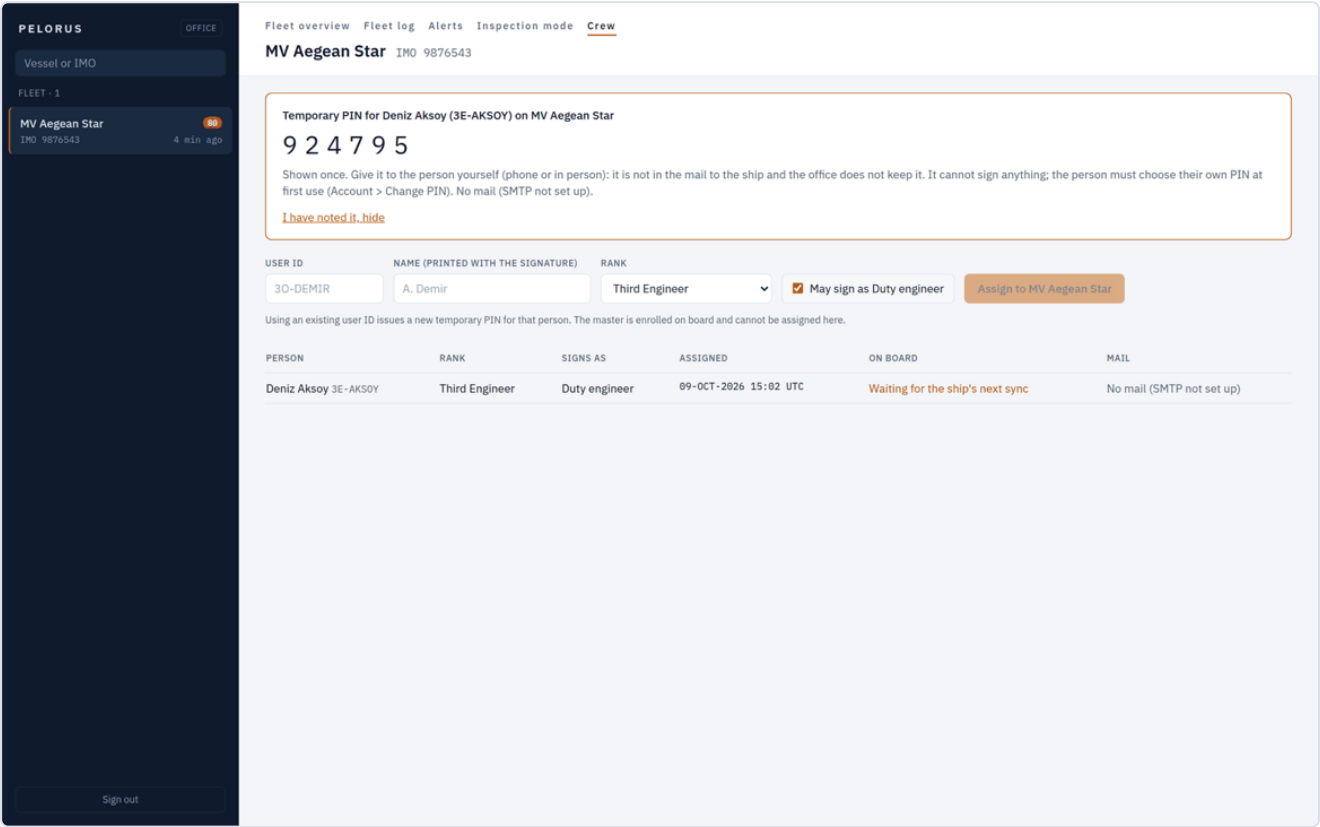


Figure 59 · The temporary PIN is shown once; the row says “Waiting for the ship's next sync”.

The Master's account cannot be created or changed from the office; the Master is enrolled on board.

18 Trouble states

On screen	Meaning and what to do
NO FEED instead of the position, NMEA/GPS OFFLINE	No sensor feed. Drafts get no sensor values. Enter the position by hand (Voyage > Position without NMEA) and tell the IT officer/ETO.
NO FIX	The GPS gives no position (no fix or dead reckoning). Enter the position by hand.
Sync Offline	No link to the office. Everything on board works; records go when the link returns.
Sync Halted	Ship and office records disagree. Tell the Master and the company; do not reset anything.
"PIN not accepted. N attempts left"	Wrong PIN. After 5 the account locks (5 min, 15 min, 1 h). The Master can reset it with New PIN .
Screen went back to the sign-in page	The session ended (12 hours unused, or the server restarted). Sign in again.
Licence banner at the top, no entries accepted	The licence expired or is invalid. The system is read-only; history and PDFs stay open. The Master tells the company.
"Demo data" banner	The screen is not connected to the ship server. Nothing can be signed.

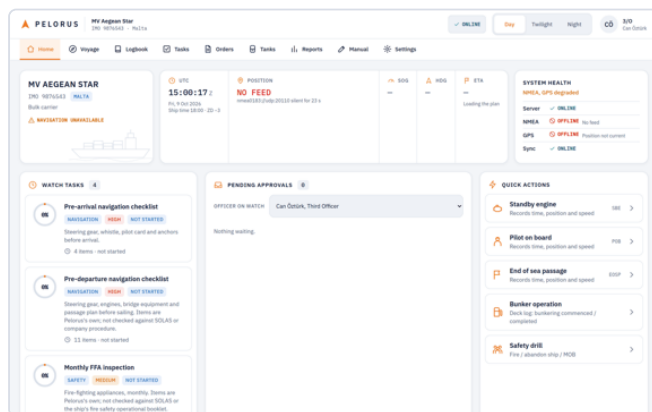


Figure 60 · Feed lost: position, SOG and HDG blank, "silent for 23 s".

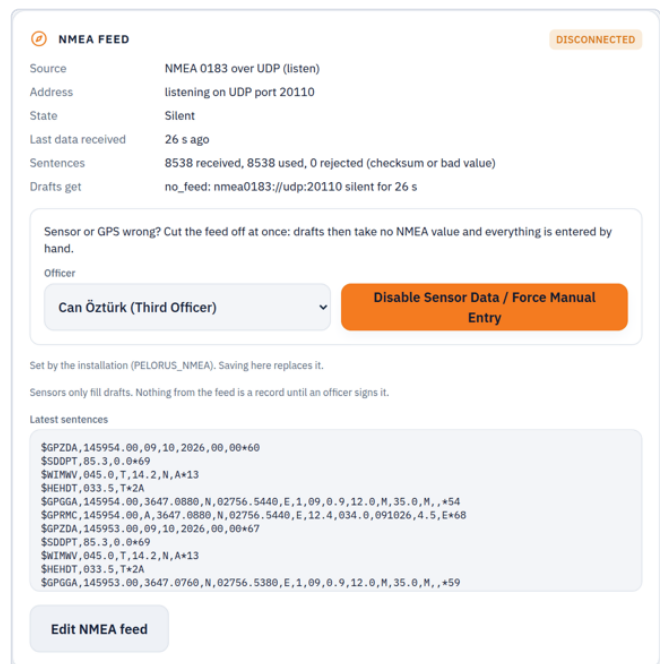


Figure 61 · NMEA card: DISCONNECTED.

19 Quick reference

I want to	Where
Open the station	Sign-in screen › your name › PIN › Sign in
Hand over the watch	Account (top right) › Sign out, then the relieving officer signs in
Record SBE / POB / EOSP	Home › Quick actions
Hourly position, anchoring, a drill, etc.	Home › Manual entry › New entry
Engine log / ORB / Garbage entry	Pick the book in Manual entry › New entry
Approve and sign a draft	Pending approvals › Approve & Sign › PIN
Refuse a wrong draft	Pending approvals › Dismiss › reason
Countersign a page (Master / Chief Eng.)	Master's countersignature › Countersign day › PIN
Run a checklist	Tasks › checklist › Start checklist
Sign a night order as read	Orders › Read / Okudum › PIN
Sound a tank	Tanks › Sound
Inspector PDF	Reports › Inspector export › PIN › Generate PDF
Tag a record as TMSA evidence	Home › Recent activity / Operational notes › TMSA › element › PIN
Change my PIN	Account (top right) › Change PIN
Night mode	Top bar › Night
Switch the sensors off	Settings › NMEA feed › Disable Sensor Data

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