

S06 — Daily Log — Screen Spec (MVP)

Status: Draft (fundamentals locked)

P26-02-20

Naming: **VOS** = product/platform name (Vessel Operations Suite). **DOS** = Daily Operations Status (daily hub screen).

Official meter source for PM: **Daily Log is the single source of truth for meter readings.**

Depends on: E&M; (Equipment & Machinery), S05 PM Matrix

Feeds: S05 PM Matrix scheduling, S01 Faults & Defects, S02 Tasks & Work Orders, DOS counters, Reports & History, Notifications

1) Purpose

Daily Log is the highest-frequency engineer input screen. It must:

- Capture the vessel's **daily operational context** and **official meter readings** (hours/production).
- Provide a fast place to tick routine checks and record "rounds".
- Capture key system state snapshots without turning into a 200-field form (modular widgets).
- Drive long-term **performance/usage analytics** (consumption baselines, running profiles).
- Produce immediate downstream effects: PM scheduling updates, DOS status counters, defect creation.

Engineer-first intent:

- Default view is fast and minimal.
- Deeper plant readings live in system tabs, enabled per vessel (no forced clutter).

2) Inputs (what the user captures here)

A) Operational context (daily snapshot)

- Vessel status: Underway / Anchor / Dock / Shipyard
- Location (optional): lat/long or marina/anchorage name
- Program status: Charter / Private / Off charter
- People: crew mode (full/half/skeleton) + guests yes/no (+ count optional)

I) Sea Service (Engineer Logbook tracking)

Daily Log also supports “engineer-first motivation” by tracking **Sea Service time**:

- Derived from the daily operational status:
 - Underway / Anchor / Dock / Shipyard
- Increments counters **only when the Daily Log is submitted** (not on draft saves).

Optional (MVP-light):

- “Signed on” date (profile/crew module later)
- Personal notes per day (optional)

B) Official meters (source of truth)

Hours-based meters (configurable counts):

- Main engines hours (default 2; up to 4)
- Generators hours (default 2; up to 4) + “which is running” toggle
- Tenders hours (default 2–4; up to 6)
- Other equipment hours (configurable list; optional)

Production meters (optional MVP):

- Watermaker production today (L/gal) and/or totalizer reading (if available)

C) Tanks & consumables (configurable)

- Fuel (diesel): total + per tank (1–6)
- **Fuel day tank** level
- Fresh water: total + per tank (1–4)
- Waste: black/grey/combined/treatment (as configured)
- Oils/fluids (optional): clean oil, dirty oil/sludge, hydraulics, bilge, etc.
- “Diesel cleaned today” (L/gal) + optional notes (which purifier)

D) Utilities snapshot (MVP essentials)

- Shore power: on/off + legs + basic readings (volts/Hz/amps or load %)
- ER ventilation: supply/extract on/off (optional speed/frequency)

E) Quick defect capture (fast)

- Area/system + short description + “reported by”
- Optional equipment link (if known)

- Save → creates Defect in S01 immediately

F) Routine Checklists (tick-as-you-go)

- Daily checklist (primary)
- Weekly / Biweekly / Monthly / 6m / 12m / 24m appear when in due window
- Save progress throughout the period
- Submit period (locks and stores to Reports & History)

G) Plant Readings (modular; enabled per vessel)

Chiller plants (1–6):

- On/off
- Mode: heat / cool
- CHW loop pressure
- Supply temp / return temp

Fresh water system:

- System pressure

Boilers (1–6):

- On/off per boiler

Hot water circulation pumps:

- On/off per pump (configurable count)

Air compressors:

- On/off
- Delivery pressure

Cathodic protection:

- VDC readings (by zone; MVP can be Port/Stbd or Zone A/B/C)

H) Bilges & Sea Strainers (modular)

Bilges (layout/zone list):

- Zone list (configurable)
- Toggle: Dry / Wet
- Optional: pumped out checkbox + note

Sea strainers (configurable list):

- Cleaned today? yes/no
- In use? yes/no
- Days-since-cleaned counter (only increments when In Use = yes)

3) Outputs (what it creates/updates elsewhere)

A) PM Matrix scheduling (S05)

- New meter readings update PM scheduling.
- PM Instances due/due soon can update DOS counters.

B) DOS counters & notifications

Daily Log drives operational status badges such as:

- Overdue routine checklist (if not submitted by cutoff)
- System status flags (e.g., chiller off, bilge wet, strainer overdue)

C) Defects (S01)

- Quick defect capture creates defects instantly.
- Optional prompts: “Create defect?” when abnormal toggles/thresholds occur (post-MVP).

D) Reports & History (archive)

- Daily log submission stores a “Daily Snapshot” record.
- Routine checklist submissions store as locked records, export-ready later.

E) Analytics baseline

- Consumption deltas (tanks), run profiles (underway vs dock), and equipment running time support trend graphs.

4) Tabs / sections / subviews (layout)

A) Top-level tabs

- 1) **Daily Snapshot** (default)
- 2) **Routine Checklists**

3) Plant Readings

4) Bilges & Sea Strainers

5) Running Log (freeform timeline entries)

6) Oil Record Book (structured ORB entries)

(Vessel admins can enable/disable tabs and per-system modules.)

B) Daily Snapshot layout (engineer-first)

- Context card
- Official meters card
- Tanks/consumables card
- Utilities snapshot card
- Quick defect capture card
- Submit day button

5) Rules & behaviors (automations + triggers)

F) Sea Service gating (no free ride)

- Sea Service counters update **only** when:
 - 1) Daily Log is **Submitted** for the day, and
 - 2) Required minimum fields are present (MVP required set: operational status + official meters).
- Draft saves do not increment Sea Service.
- If a submission is corrected later, the Sea Service record for that date is recalculated and an audit entry is created.

A) Official meter source of truth (locked)

- PM scheduling and all hour-based logic reads from Daily Log meters.
- If another screen needs meter entry, it should link back to Daily Log.

B) Submission model

- **Save progress** (draft) vs **Submit day/period** (locks record).
- Late submission creates an overdue badge and notification.

C) Routine checklist escalation

- If checklist not submitted by cutoff:
 - Escalate daily (badge + notification)
 - Mute requires override password + reason (audit)
- Submissions are stored to Reports & History.

D) Sea strainer decay model (simple MVP)

- If In Use = yes and Cleaned today = no:
 - Days-since-cleaned increments daily
 - Escalation thresholds (configurable later): Day 2 yellow, Day 3+ red
- If In Use = no:
 - Counter pauses (no growth assumption)

E) Anti-clutter rule (modular)

- Do not display unused equipment/system panels.
- Configurable counts for engines/gens/chillers/boilers/etc.

6) Links to other screens (drill-down + create actions)

- **S05 PM Matrix** (due items, scheduling)
- **S01 Faults & Defects** (create/view defects)
- **S02 Tasks & Work Orders** (view PM instances and open work)
- **S04 Inventory** (optional quick link when recording consumables anomalies)
- **Reports & History** (view stored records)
- **DOS** (daily hub counters deep-link back to relevant tab)

MVP notes (scope control)

- Keep advanced readings optional; focus on reliable daily capture and routing.
- Add thresholds/auto-defect prompts after MVP once baseline data is stable.