



# TWENTY THOUSAND LEAGUES UNDER THE SEA

A Voyage Aboard the Nautilus

Player and Developer Manual · Version 1.0.0

Tronsoft Interactive Fiction Engine — TIFE Core 1.1.3

Adapted from the 1870 novel by Jules Verne (public domain)

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# 1. The Story

In November 1867 the frigate Abraham Lincoln sailed to destroy a sea monster that had been sinking shipping across two oceans. The monster was a submarine vessel of steel, and three men went into the water and came up inside her: Professor Pierre Aronnax of the Paris Museum, his servant Conseil, and the Canadian harpooner Ned Land.

You play Aronnax. Captain Nemo will not put you ashore, because you have seen the Nautilus and she does not exist. What he will do is show you everything: a library of twelve thousand volumes, a saloon whose steel shutters open on the living ocean, engines that take their power from the sea itself, forests on the floor of the Pacific, the pearl banks of Ceylon, a drowned city under the Atlantic and a treasure fleet sunk in 1702.

Ned Land wants to escape from the first hour. You are not sure you do. That tension is the story, and the ending asks you to settle it.

*"The sea does not belong to despots. On its surface they may still exercise their iniquitous claims, but at thirty feet below, their power ceases." — from the Captain's logbook*

## 2. Getting Started

Open the game from the Tronsoft Games Portal, or open `index.html` directly in a modern browser. No installation, server or network connection is required.

Press **GO ABOARD** on the cover screen. Narration and ocean ambience are opt-in; both can be changed at any time from the ACCESSIBILITY panel in the footer. Browsers only permit audio after a click, which is why the cover screen exists.

You begin locked in an iron cell. Everything needed to leave it is in the room with you.

## 3. Giving Commands

Type into the command bar and press ENTER, or play entirely with the buttons: choose an action such as SEARCH and the CONTEXT row fills with every valid target in reach. Nothing in the story requires typing.

| Purpose  | Commands                                                                    |
|----------|-----------------------------------------------------------------------------|
| Looking  | LOOK · EXAMINE <thing> (X) · READ <thing>                                   |
| Objects  | TAKE <thing> · DROP <thing> · OPEN <thing> · CLOSE <thing> · SEARCH <thing> |
| Acting   | USE <thing> · USE <thing> ON <thing> · WAIT (Z)                             |
| People   | TALK NEMO · TALK NED · TALK CONSEIL                                         |
| Movement | NORTH SOUTH EAST WEST UP DOWN IN OUT · N S E W U D · GO <direction>         |
| Records  | INVENTORY (I) · JOURNAL · QUESTS · ACHIEVEMENTS · STATS · SCORE             |

Actions that change the world cost a move: walking, taking, using, opening, searching, talking and waiting. Consulting your own records costs nothing.

## 4. The Screen

| Panel            | What it shows                                                                                                |
|------------------|--------------------------------------------------------------------------------------------------------------|
| EXITS            | Every way out of this room and what lies through it. Also repeated as buttons.                               |
| POSITION         | Room name, region of the voyage, and the full description.                                                   |
| THE VOYAGE       | Your seven chapters with progress bars.                                                                      |
| LOG              | Turns, objects taken, conversations, hints used, places seen.                                                |
| DISCOVERIES      | The twelve achievements, locked and unlocked.                                                                |
| SHIP & SEA FLOOR | A live chart. Your position is bracketed, unvisited rooms stay masked, and a line is drawn only where a pass |
| CARRIED          | Your inventory. Click any item to examine it.                                                                |
| MANUSCRIPT       | The journal Aronnax is writing as the voyage proceeds.                                                       |
| CONVERSATIONS    | Everything Nemo, Ned and Conseil have said to you.                                                           |

## 5. The Voyage

Seven chapters, in order. This section names the shape of each chapter without giving the solutions; the solutions are in the appendix.

| Chapter                 | What is being asked of you                                                                              |
|-------------------------|---------------------------------------------------------------------------------------------------------|
| Leave the Iron Cell     | The cell was built for a guest, not a prisoner. Guests can call for service.                            |
| Understand the Nautilus | Open the saloon's window on the deep, read the Captain's log, and learn what drives the ship. Three se  |
| Walk on the Sea Floor   | Nemo offers an excursion. You need his invitation, a diving dress, a lamp and a gun before the outer we |
| The Bank of Mannar      | The ship must sail east before the shelf opens. On the bank, a man is diving who has not seen what is b |
| The Drowned City        | The gulf below the pearl bank is a long walk and your air is measured in minutes. The engine room can   |
| The Poulps              | Something takes hold of the hull. The ship cannot dive while she is held, so someone has to go out on t |
| Escape the Maelstrom    | Ned Land told you where the boat is kept. Whether you take it is the last thing the story asks.         |

## 6. Scoring

The voyage is worth **140 points**: 90 for objects recovered and carried, and 50 for the five scenes where you act at the right moment. Score and moves are shown in the top bar; a full clearance takes roughly 65 moves once you know the way.

| Points | Source                                                                                                                     |
|--------|----------------------------------------------------------------------------------------------------------------------------|
| 5 each | Your manuscript, the chart of the eastern seas, the diving dress, the Ruhmkorff lamp, the air-gun, the steel dagger, the b |
| 10     | Nemo's logbook                                                                                                             |
| 10     | The gold ingot from Vigo Bay                                                                                               |
| 15     | The great pearl of Mannar                                                                                                  |
| 15     | The basalt tablet from Atlantis                                                                                            |
| 5      | Leaving the cell                                                                                                           |
| 5      | Your first walk on the sea floor                                                                                           |
| 10     | Clearing the western pass at Crespo                                                                                        |
| 10     | The shark at the pearl bank                                                                                                |
| 15     | The fight on the hull                                                                                                      |
| 5      | Taking the skiff                                                                                                           |

## 7. Hints, Saving and Accessibility

**Hints.** Press HINT for advice about whatever is blocking you now. Ask again for a stronger one: the first is a nudge, the second names the place or object, the third gives the exact command. Hints are counted in the LOG and cost nothing else.

**No losing.** There is no death and no unwinnable state. You cannot be killed, you cannot lock yourself out of a puzzle, and nothing you need can be destroyed. A refusal is a gate, not a failure.

**Saving.** SAVE MANAGER in the footer creates, restores and deletes named saves; SAVE and RESTORE do the same by typing. Saves are held in browser local storage on this device only and are never transmitted. TRANSCRIPT shows everything printed so far and downloads it as a text file.

**Accessibility.** Six presets — Standard, Low Vision, Blind / Screen Reader, Hard of Hearing, Motor Assistance, Cognitive Support — each adjustable afterwards: text size, high contrast, larger controls, reduced typing, simplified layout, reduced motion, captions for sound cues, visual sound indicators, screen-reader optimisation and text-to-speech narration. Settings persist on the device. Narration depends on the speech voices installed in your browser; TEST NARRATION reports what it finds.

## 8. Developer Notes

This package is also a worked example of authoring a story for TIFE Core.

### Package layout

```
index.html
manifest.json (Package Specification v1.4)
css/game.css
js/core/ (engine: event-bus, state-machine, rule, world, save, parser, core,
accessibility, audio)
js/game.js (interface adapter: panels, palette, dialogs)
js/map.js (chart renderer)
js/interface.js (story-layer engine refinements)
js/sound.js (sample playback with synthesis fallback)
games/nautilus/game.js (the whole story: rooms, items, npcs, quests, rules, hints)
sounds/ assets/ screenshots/ docs/ patches/
```

### Where the story lives

Everything narrative is data in `games/nautilus/game.js`. The engine core is untouched. A room carries a name, description, region, exits and map coordinates; an exit is either a room id or an object with `locked` and `lockedText`. Items carry aliases, portability, score, and optional `searchText`, `readText` and `openText`. Rules bind a trigger and a condition set to a list of effects.

| Trigger                                   | Fires when                                                  |
|-------------------------------------------|-------------------------------------------------------------|
| game.start                                | the story begins                                            |
| room.enter                                | the player arrives somewhere                                |
| inventory.changed                         | any item moves to or from the player                        |
| item.opened / item.searched / item.usethe | the matching verb succeeds                                  |
| npc.talked                                | a character is spoken to                                    |
| action.after                              | any command completes                                       |
| turn.completed                            | a world-changing move ends (used for multi-condition gates) |

A rule condition may test `room`, `action`, `target`, `hasItem`, `notHasItem`, `flag`, `notFlag` and `questComplete`. Only one of each key is allowed, so gates needing several items are chained through flags: taking the gun sets one flag, the lamp checks that flag and sets another, the dress checks that one and opens the outer well. Effects available are `message`, `setFlag`, `moveItem`, `revealItem`, `score`, `quest`, `journal`, `achievement`, `unlockExit` and `endGame`.

### Three additions made for this release

**js/map.js** — the reference chart renderer was fixed to a three-by-three grid. This one reads the map coordinates of whatever rooms exist, masks what has not been visited, brackets the current room and

draws a corridor only where an exit genuinely joins two neighbouring cells.

**js/interface.js** — TIFE Core runs rules inside use, open and search and prints the verb's own response afterwards, so consequences appeared before causes. These prototype overrides print what the player did first and then let the rules narrate, and add per-item open text. The engine core is not modified.

**js/sound.js** — prefers the WAV samples in sounds/ and falls back to the engine's synthesised tones whenever a sample is missing or blocked, which is what happens on file:// origins.

## Testing

The story data was validated headlessly under Node by loading the core services with a stub window and playing a scripted walkthrough: 140 of 140 points, all seven quests, all twelve discoveries, fifteen of fifteen rooms, every once-only rule fired, and the ending reached in 63 moves. A second pass checks every gate, refusal message, hint level and a save/restore round trip. Static checks verify that every exit, item location, quest id, achievement id and unlockExit target resolves, and that the declared maxScore equals the sum of item and rule points.

## Appendix: Full Walkthrough (spoilers)

Sixty-three moves to 140 of 140 points. Skip this page on a first voyage.

| Where              | Commands                                                                |
|--------------------|-------------------------------------------------------------------------|
| The cell           | SEARCH BUNK · USE CALL-PLATE · EAST                                     |
| The berths         | SOUTH · SEARCH DESK · TAKE MANUSCRIPT · TALK NED · TALK CONSEIL · NORTH |
| The saloon         | EAST · TALK NEMO · USE LEVER · SEARCH CASES                             |
| The library        | EAST · SEARCH SHELVES · TAKE LOGBOOK                                    |
| The pilot's cage   | EAST · SEARCH CHART TABLE · TAKE CHART                                  |
| The arms store     | SOUTH · TAKE AIR-GUN · TAKE DAGGER · TAKE AXE                           |
| The engine room    | WEST · SEARCH RACK · TAKE RESERVOIR                                     |
| The diving chamber | NORTH · WEST · SOUTH · OPEN LOCKER · TAKE SUIT · TAKE LAMP · USE SUIT   |
| Crespo             | DOWN · USE AIR-GUN · WEST (coral cemetery) · EAST · UP                  |
| Setting course     | NORTH · EAST · EAST · USE CHART                                         |
| The pearl bank     | WEST · WEST · SOUTH · DOWN · EAST · USE DAGGER · OPEN CLAM · TAKE PEARL |
| Atlantis           | DOWN · SEARCH RUINS · TAKE TABLET                                       |
| Vigo Bay           | WEST · SEARCH WRECK · TAKE INGOT                                        |
| The hull           | UP · NORTH · UP · USE AXE                                               |
| The end            | USE SKIFF                                                               |

Two notes. The diving chamber will not open the outer well until you carry the air-gun, the lamp and the dress together — the game says so plainly when you try. And the eastward shelf at Crespo stays shut until you have attended the burial in the coral cemetery and then laid off a course in the pilot's cage; the Nautilus has to sail before you can walk on Ceylon.

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