

AN ORIGINAL MYSTERY TO SOLVE

THE EIDERWAKE FILES

The Star That Never Rose

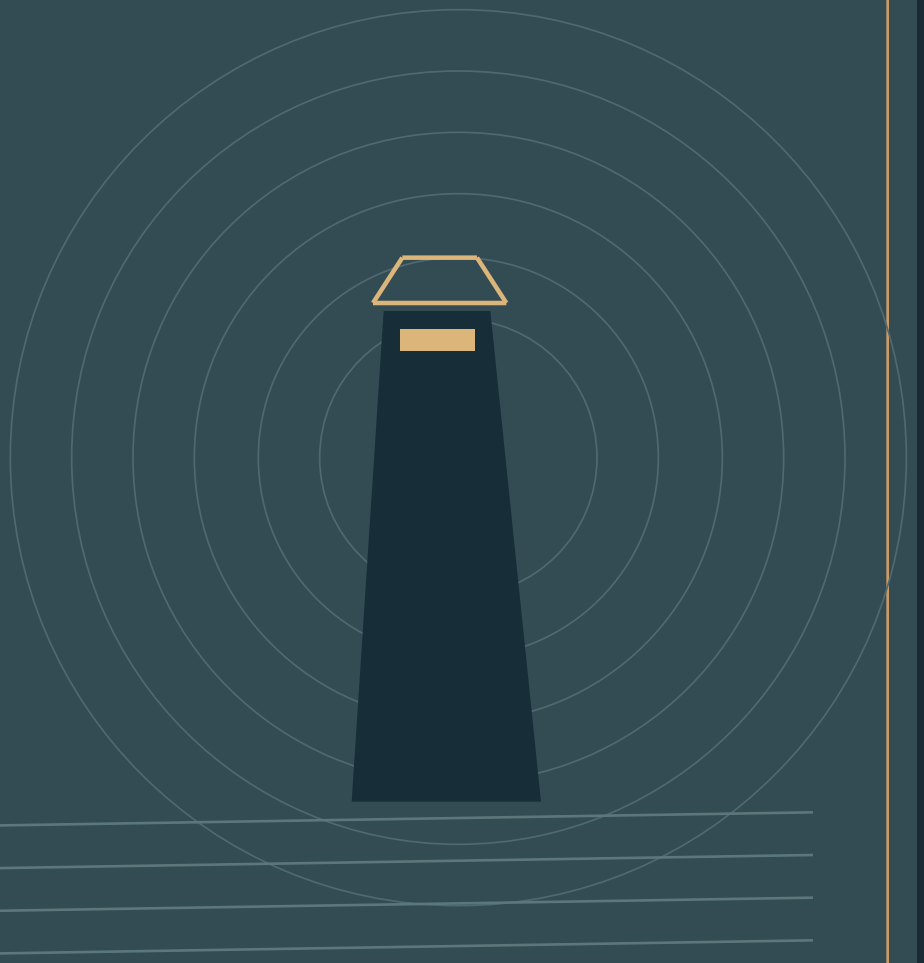
FIVE CLOCKS. ONE MISSING OBSERVER.

THE TIDE IS COMING IN.

12 EXHIBITS

9 DEDUCTIONS

1 TRUE SEQUENCE



INVESTIGATION BRIEF / BEGIN HERE

The missing observer

EIDERWAKE OBSERVATORY · OCTOBER 17, 1952

At 22:36, astronomer Dr. Ada Wren was reported missing from Eiderwake Observatory, a weather-beaten station on a tidal island. An irreplaceable photographic negative disappeared with her. The superintendent believes she escaped by boat. The harbor master says no vessel moved. A storm has put the lower station rooms at risk. Reconstruct the true sequence before the tide reaches them.

01 READ

Review Exhibits A through L. Every entry is a clue, but the clocks disagree. The harbor wireless time signal is the reference.

02 DEDUCE

Use the three worksheet pages to record nine conclusions. If you play digitally, check them in the online investigation room.

03 RESCUE

Decide where to search before the M-3 threshold floods at 23:11. The paper packet includes a sealed-answer section at the back.

04 REVEAL

Only after making your case, turn to page 19 for the spoiler warning and page 20 for the final findings. There is no scoring penalty for asking for a hint online.

PLAYTEST NOTE: This story has not yet been timed or independently tested. It is not being sold, and no registration or payment is required.

INVESTIGATOR TOOL / WORKING NOTES

Five clocks. One true time.

THE HARBOR WIRELESS SIGNAL IS THE REFERENCE

At 22:00 exactly, a harbor wireless chime reached Eiderwake. Record the displayed time from Exhibit B. Calculate whether each clock was fast or slow, and by how many minutes.

CLOCK	READING AT CHIME	OFFSET +/-
CONTROL / HARBOR	<div></div>	<div></div>
DOME	<div></div>	<div></div>
PLATE ROOM	<div></div>	<div></div>
EAST PASSAGE	<div></div>	<div></div>
PIER DESK	<div></div>	<div></div>

TRUE-TIME RULE: A fast clock makes an event appear later than it really happened. A slow clock makes it appear earlier.

Keep an event timeline

EVIDENCE EXHIBIT A / INCIDENT

ORIGINAL

The missing observer

STATION INCIDENT CIRCULAR / 22:36

At 22:36 on October 17, 1952, superintendent Hollis Trent telephoned the harbor watch to report Dr. Ada Wren missing. Her last assignment was to examine a photographic anomaly nicknamed the Second Star. Negative N-17 was also absent from its sleeve.

PERSONS

Ada Wren - astronomer. Esther Vale - observing apprentice. Hollis Trent - station superintendent. Gideon Moss - harbor master. Mara Pike - darkroom technician.

LAST SIGHTING

Esther Vale says she saw Ada carrying a field lantern toward the dome service hatch shortly after the photographic negative was checked out.

THE CLAIM

Trent believes Wren took the missing negative, crossed the east corridor, and left the island by the supply launch.

URGENCY

The lower meridian chambers stand close to sea level. Harbor tide table: water reaches the M-3 threshold at 23:11. The gate to the lower rooms must be searched first if anyone may be trapped.

Do not mistake a director's conclusion for a witnessed departure.

The wireless correction

HARBOR TIME SIGNAL / CLOCK COMPARISON

At exactly 22:00 true time, a harbor wireless chime sounded. Esther stood beside the control receiver and recorded the simultaneous displays on the station's four other clocks. The signal was received directly, without a relay delay.

TRUE TIME	Harbor wireless chime: 22:00. This is the common reference used throughout the investigation.
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DOME CLOCK	At the chime, the dome wall clock displayed 21:56.
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PLATE CLOCK	At the same chime, the photographic plate room clock displayed 22:06.
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PASSAGE CLOCK	At the same chime, the east service passage clock displayed 21:58.
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PIER CLOCK	At the same chime, the pier receiving desk clock displayed 22:03.
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A fast clock makes an event appear later than it was. A slow clock makes it appear earlier.

Photographic checkout

PLATE ROOM / EVENING REGISTER

The photographic plate room uses its own wall clock, not the harbor signal. Mara Pike recorded two items issued to Ada Wren before returning to the developing trays.

22:24	NEGATIVE N-17 / original glass photographic plate / signed out by A. Wren. Time copied from plate-room wall clock.
22:25	FIELD LANTERN / brass case, shutter and wick / signed out by A. Wren. Time copied from plate-room wall clock.
N-17	The negative shows a pale duplicate point of light next to a known star. In three exposures made with slightly different telescope aim, the extra point stays in exactly the same place on the camera glass.
M. PIKE	I saw Dr. Wren take the glass and lantern. She was worried but not frightened. She said, 'I need to find the source before I publish a mistake.'

Translate the plate-room times before comparing them to another room's log.

Dome service hatch

NORTHERN GALLERY / MECHANICAL REGISTER

The brass wheel on the east-facing service hatch leaves an impression on the paper tape whenever it opens or closes. The recorder was tied to the dome clock.

22:17 HATCH OPENED. Clock source: dome wall. Wheel turned from inside the upper observatory.

22:18 HATCH CLOSED. Clock source: dome wall. No forced entry.

E. VALE I saw a lantern cross the gallery. The person moved down toward the service hatch, not toward the central stairwell. I believed it was Dr. Wren.

STAFF NOTICE The east-facing hatch leads into a service passage which forks at the lower landing: north toward the pier desk, south toward the old meridian chambers.

An apparent time of 22:17 on the dome clock is not necessarily 22:17 in the harbor.

The east passage latch

EAST LANDING / KEYED CONTACT ROLL

The east landing is the only unobstructed connection from the dome hatch to the lower meridian chambers. A contact wheel recorded the gate's movement using the passage wall clock.

22:22	EAST GATE OPENED. Interior-side lever operated. Clock source: east passage wall.
22:25	EAST GATE LATCHED. Clock source: east passage wall.
HINGE	The outward gate cannot be opened from the pier walkway while the storm bar is seated. The storm bar was found undisturbed.
DIRECTION	An interior-side opening means the operator approached from the observatory, not from a boat moored outside.

Use the clock correction before placing this gate in the timeline.

EVIDENCE EXHIBIT F / PIER

PIER CLOCK

The blue-case sighting

PIER OFFICE / CARBON RECEIPT

A witness told Trent that a blue case appeared at the pier near the time Wren vanished. Trent cited this as evidence that she had boarded a vessel. The original receiving slip was later recovered.

22:30 SMALL BLUE CASE received at pier desk. Time entered from the pier wall clock.

FORM TYPE EQUIPMENT TRANSFER checked. PASSENGER DEPARTURE box left blank.

CONTENTS One EMPTY photographic plate sleeve. Sent from the observatory for repair.
Received by G. Moss.

DELIVERED BY H. Trent. The person carrying this case was the superintendent, not an identified passenger.

A case was transferred. The form does not say that a person boarded a boat.

The harbor master's book

BOAT SHED / ENGINE AND MOVEMENT LOG

Harbor master Gideon Moss maintained the launch engine and departure register. Both were timed against the harbor wireless signal, not the observatory's clocks.

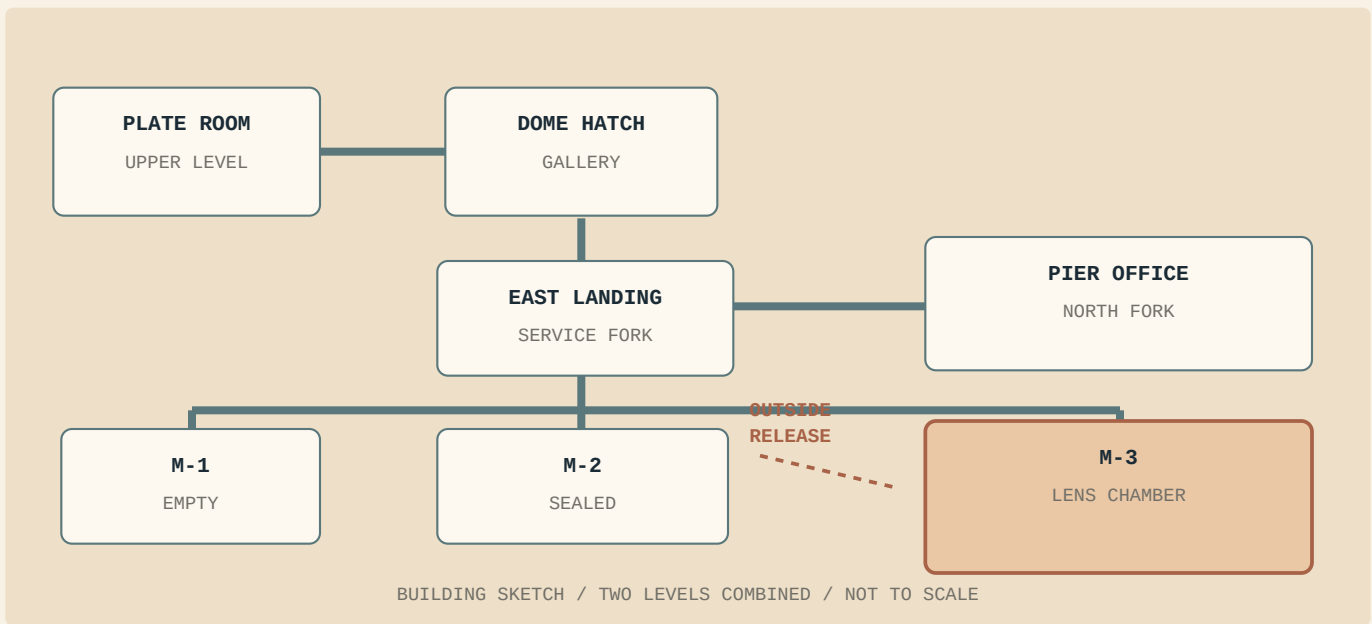
20:08	Engine output shaft seized during an inspection. Launch tied to inner berth. No repair parts available before morning.
21:00-23:00	Departures: NONE. Arrivals: NONE. The boat remained chained at the inner berth during the storm.
22:27	Received empty negative sleeve from superintendent Trent. This was a transfer of equipment, not a passenger.
G. MOSS	No one sailed from this pier tonight. Whoever told the superintendent otherwise mistook a parcel delivery for a departure.

There may be a missing person, but there is no recorded boat journey.

Under the observatory

FACILITIES / TWO-LEVEL SERVICE PLAN

The route from the plate room to the lower chambers passes through the dome gallery and the east service passage. At the landing, the path forks north toward the pier and south toward the meridian rooms.



M-1

Drained storage cell. Empty and open. A search at 22:35 found no person inside.

M-2

Concrete-sealed after a collapse in 1946. No usable door or passage.

M-3

Old lens and mirror test chamber. Still accessible through the south fork. Threshold floods at 23:11.

RESCUE

Exterior maintenance override for M-3 is in the superintendent's lower landing tool chest, beside the south fork.

Meridian-room key book

SUPERINTENDENT / SIGNED KEY ISSUES

The station's control-room clock was calibrated daily against the harbor signal. Its key-issue register is therefore already in true time.

21:46	M-3 BRASS KEY issued to Dr. Ada Wren. Purpose recorded: optical reflection test.
22:00	Control clock confirmed against the harbor wireless chime. No correction required.
22:40	M-3 key not returned. M-1 key still hanging on board. M-2 door is sealed.
H. TRENT	I thought she intended to check the old reflector during the weather switchover. We had argued about the need to test it in the storm.

The key answers where Ada could go, not whether she escaped afterward.

The nine-second light

ADA WREN / NOTEBOOK TRANSCRIPTION

Ada's observation notebook lay open on the main telescope table. The following entries concern the Second Star, the unexpected second point visible in the N-17 negative.

- | | |
|---------|---|
| OBS. 01 | The extra point repeats in intensity at an interval of approximately nine seconds. An ordinary star cannot turn itself on and off on our schedule. |
| OBS. 02 | When I aim the telescope at a different section of sky, the extra point stays fixed in the same place on the plate frame while the real stars shift position. |
| OBS. 03 | The coastal navigation beacon flashes once every nine seconds. Its timing has never varied during the present season. |
| OBS. 04 | There may be a reflected path up through the old meridian lens shaft. I must compare the alignment at M-3 before making a public claim. |

The strongest explanation matches both the timing and the optical route.

A mirror out of line

MERIDIAN SHAFT / MONTHLY INSPECTION

The old meridian apparatus had been repurposed as a lens-testing rig. It still connected the lower M-3 chamber to a narrow light shaft leading toward the upper dome.

SEPT 12

M-3 secondary mirror found two degrees out of alignment after storm vibration. Repair deferred until the following month.

OCT 17

A reflection from the harbor navigation beacon could enter the shaft at the present angle. Test recommended, but only during settled weather.

DOOR NOTE

M-3 storm latch may jam when salt water rises around the sill. The outside maintenance override can release it if someone is trapped inside.

RESCUE NOTE

Use the south fork from the east landing. The pier side has no entrance to M-3.

The observatory may have discovered a mirror problem, not another star.

A light in the shaft

CONTROL ROOM / EMERGENCY NOTE

After the missing-person report, apprentice Esther Vale returned to the observatory's upper lens shaft. The harbor receiver was still synchronized, so the observation was logged in true time.

22:39	A light flashed from below the M-3 shaft: three short flashes, then three long flashes, then three short flashes. The sequence repeated twice.
22:41	The light shifted as though someone were holding a field lantern. It did not follow the regular nine-second beat of the harbor beacon.
22:42	Superintendent Trent ordered a search of the outer pier. The south meridian rooms were not yet checked.
TIDE	M-3 threshold expected under water at 23:11. A delay may make the service door impossible to open from inside.

The signal is not astronomical. It is someone trying to communicate from below.

YOUR NOTES / DEDUCTIONS

Make your case. 01-03

WRITE YOUR ANSWERS BEFORE OPENING THE REPORT

Cross-reference the exhibits, name the evidence, and write your conclusion below. These are the same nine deductions used in the browser version.

DEDUCTION 01 / THE CLOCKS

Which station clock is six minutes ahead of true time?

EVIDENCE: _____

DEDUCTION 02 / FIRST MOVEMENT

At what true time did Ada sign out negative N-17?

EVIDENCE: _____

DEDUCTION 03 / THE HATCH

At what true time did the dome service hatch open?

EVIDENCE: _____

YOUR NOTES / DEDUCTIONS

Make your case. 04-06

WRITE YOUR ANSWERS BEFORE OPENING THE REPORT

Cross-reference the exhibits, name the evidence, and write your conclusion below. These are the same nine deductions used in the browser version.

DEDUCTION 04 / THE PASSAGE

At what true time did the east gate open from inside?

EVIDENCE: _____

DEDUCTION 05 / THE FALSE DEPARTURE

Does the blue-case receipt show that Ada left the island by boat?

EVIDENCE: _____

DEDUCTION 06 / THE LOCATION

Which lower meridian chamber is Ada most likely inside?

EVIDENCE: _____

YOUR NOTES / DEDUCTIONS

Make your case. 07-09

WRITE YOUR ANSWERS BEFORE OPENING THE REPORT

Cross-reference the exhibits, name the evidence, and write your conclusion below. These are the same nine deductions used in the browser version.

DEDUCTION 07 / THE MESSAGE

What do three short, three long, and three short flashes mean?

EVIDENCE: _____

DEDUCTION 08 / THE SECOND STAR

What best explains the repeated extra point on negative N-17?

EVIDENCE: _____

DEDUCTION 09 / THE DECISION

Which action has the strongest chance of reaching Ada before 23:11?

EVIDENCE: _____

DO NOT OPEN UNTIL YOU'RE READY.

The following pages reveal the solution, the rescue sequence, and the truth behind the Second Star.

FINAL REPORT / SOLUTION

The star that never rose.

NINE VERIFIED FINDINGS

Ada never took a boat. She checked out negative N-17 at 22:18 true time and a field lantern one minute later. At 22:21 she passed through the dome service hatch; at 22:24 she opened the east gate from the inside. Her M-3 key, the floor plan, and the reflected-light research all point to the lower meridian lens chamber. The blue case that reached the pier at 22:27 carried an empty sleeve, delivered by Trent. With the launch immobilized, it was never evidence of a departure.

In M-3, Ada confirmed the Second Star was coastal beacon light reflecting through a mirror left out of alignment. The storm swelled against the door and jammed the latch. She flashed SOS through the shaft at 22:39. The rescuers take the south fork, open the exterior maintenance release, and bring her up before the tide reaches the threshold. The new discovery is not a star; it is the explanation that keeps the observatory's data honest.

RECONSTRUCTED TIMELINE / HARBOR TRUE TIME

22:18	N-17 negative checked out
22:19	Field lantern checked out
22:21	Dome hatch opened
22:24	East gate opened from inside
22:27	Empty sleeve delivered to pier by Trent
22:39	SOS flashed from M-3
23:11	Projected flooding of M-3 threshold

ARCHIVE ADDENDUM / THE OBSERVER'S LETTER

A note from Ada Wren

FOUND IN THE OBSERVATORY LOGBOOK

To whoever reads the record—

I wanted to be right about the second star. For a week I believed the sky had given me something extraordinary. But the light kept the harbor beacon's rhythm, and no star should keep our schedule. The mirror was wrong, and so was I. I went below to prove it before making my claim. When the sea rose, I was forced to hope someone would read the evidence more carefully than I had.

— Dr. Ada Wren

THE END / CC-002 / CASE CLOSED