

THE LAST WARM PLACE

CHAPTER THREE

FORTY-THREE

JIM STALEY



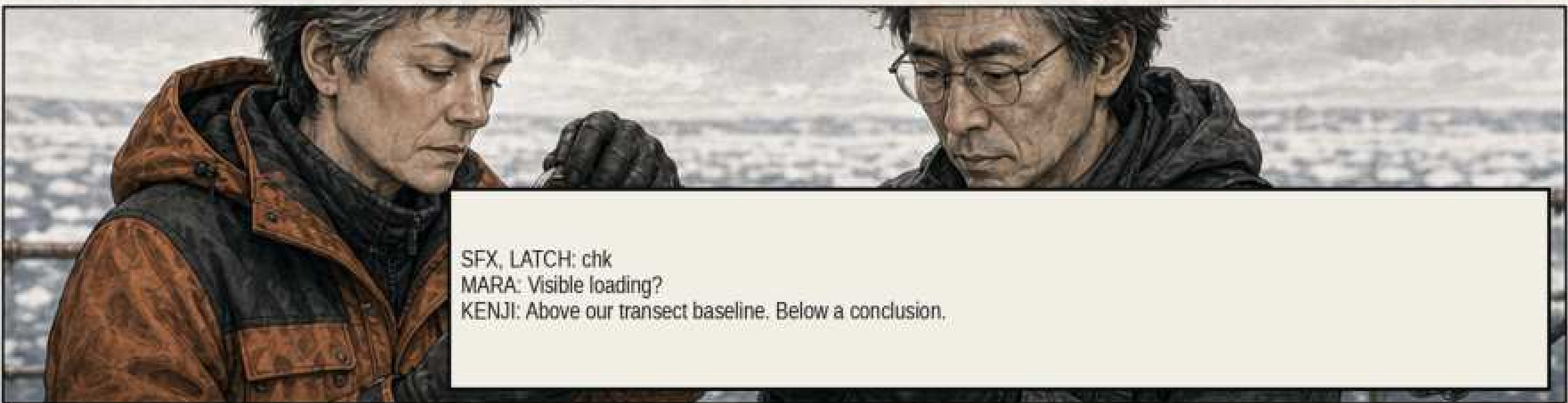


TOTAL ABOARD — 173
DURATION — 112.02 DAYS
PLANNING DATE — 5 JANUARY 2035

CAPTION: 18 September. Day Four.



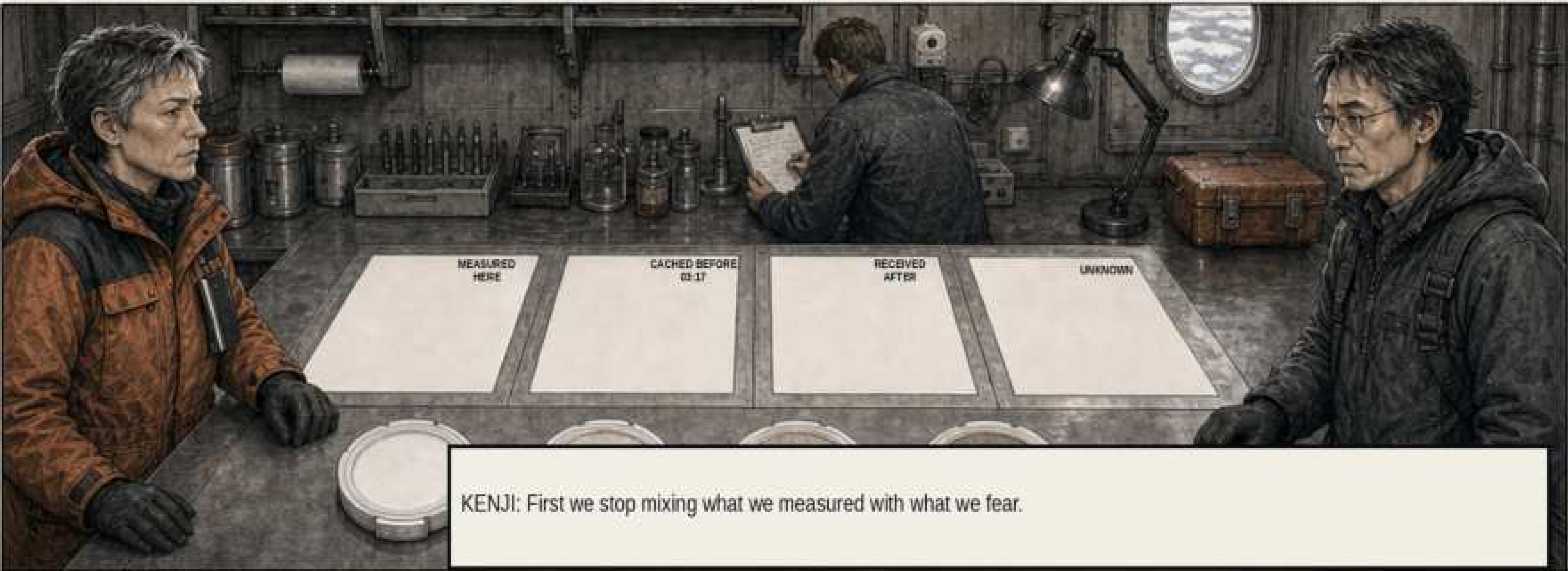
MARA: It looks cleaner than yesterday.
KENJI: That is why eyes are poor instruments.



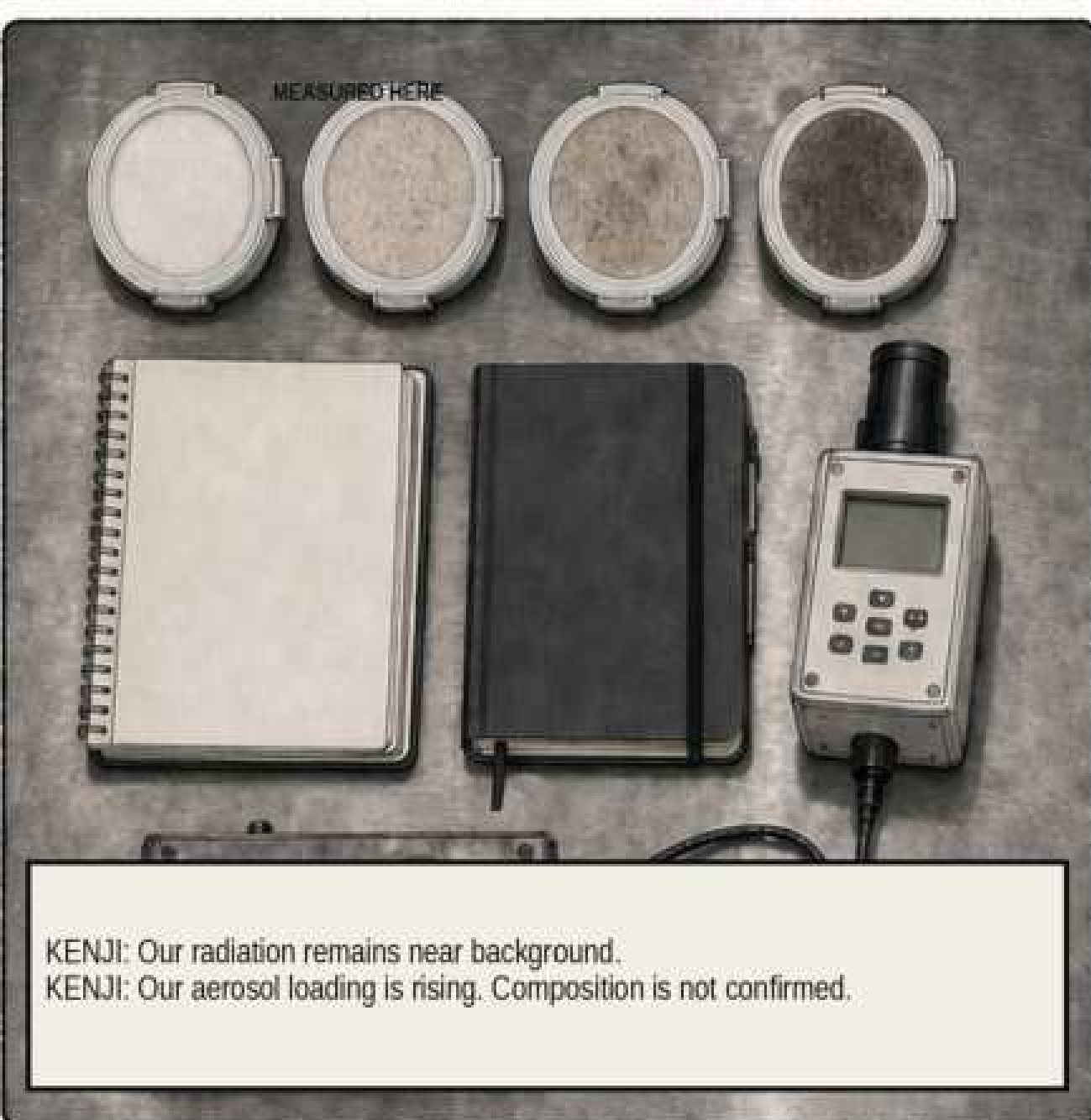
SFX, LATCH: chk
MARA: Visible loading?
KENJI: Above our transect baseline. Below a conclusion.



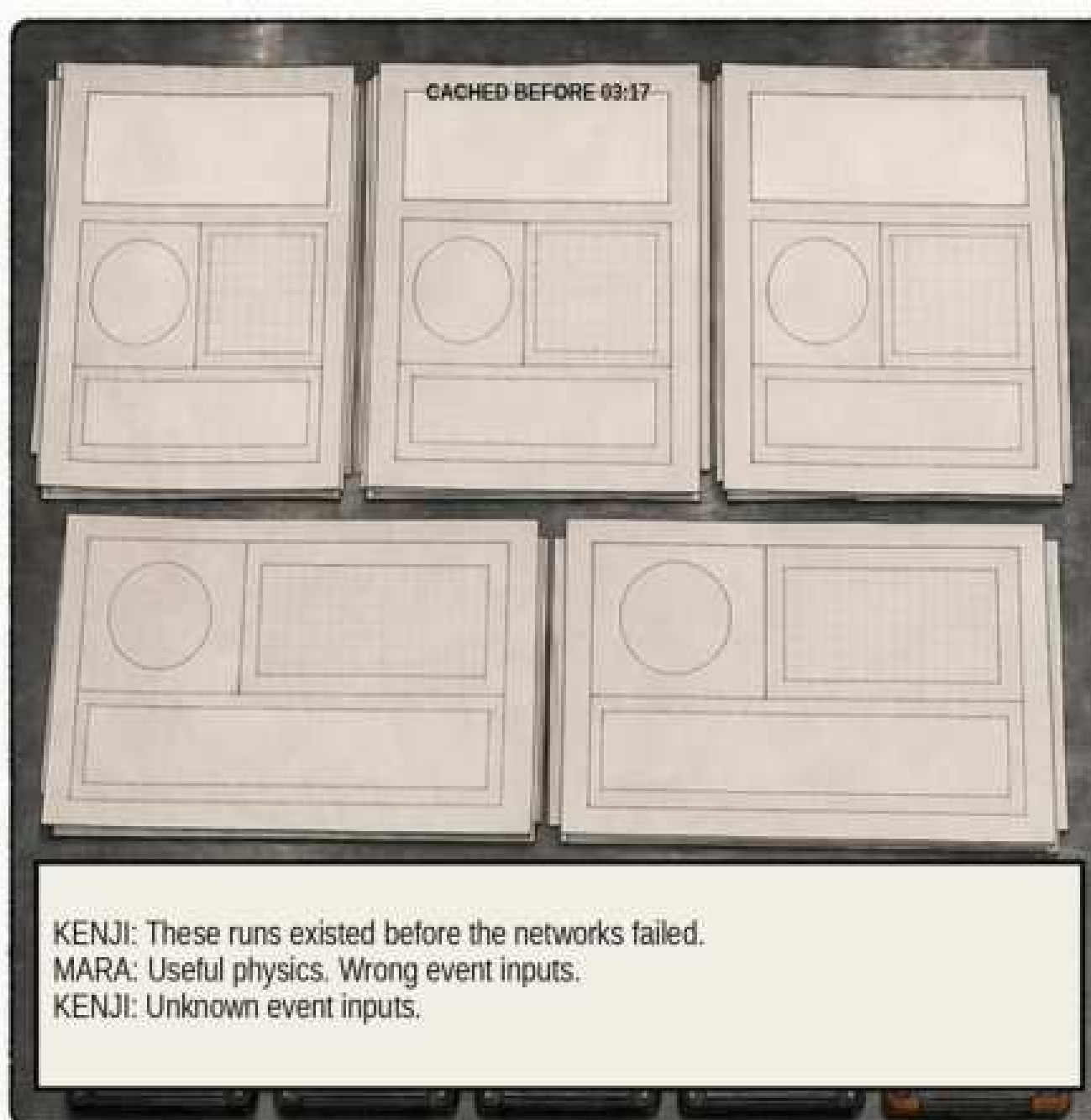
MARA: How long before the sky tells us?
KENJI: It may tell us after the harvests already know.



KENJI: First we stop mixing what we measured with what we fear.



KENJI: Our radiation remains near background.
KENJI: Our aerosol loading is rising. Composition is not confirmed.



KENJI: These runs existed before the networks failed.
MARA: Useful physics. Wrong event inputs.
KENJI: Unknown event inputs.



KENJI: Weather fields with holes. Two aerosol products with worse holes.
MARA: No authenticated source chain.
KENJI: No complete one.



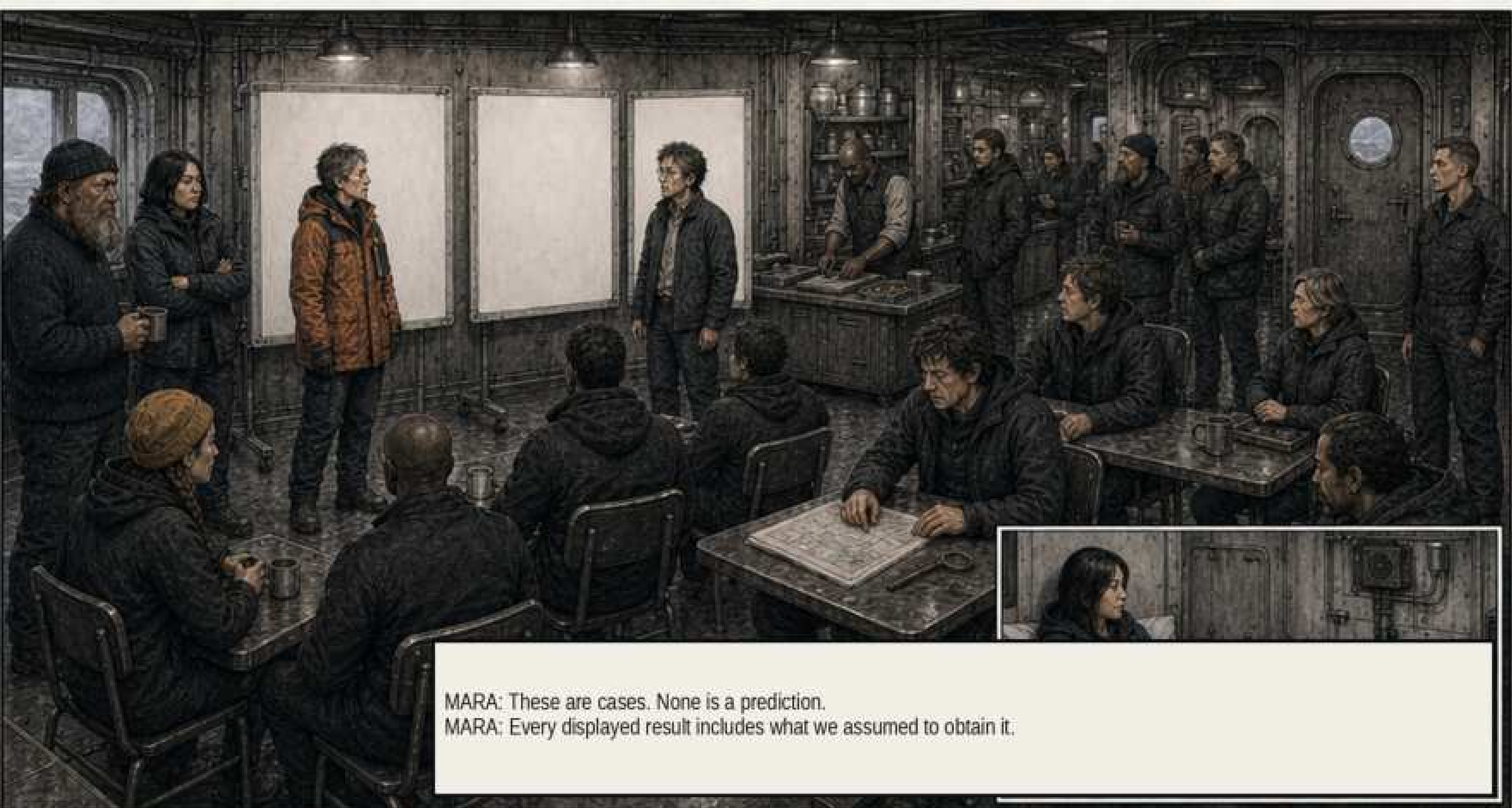
MARA: What can the overlap support?
KENJI: Cases. Not a forecast.



KENJI: Same atmosphere. Three soot burdens we cannot yet distinguish.



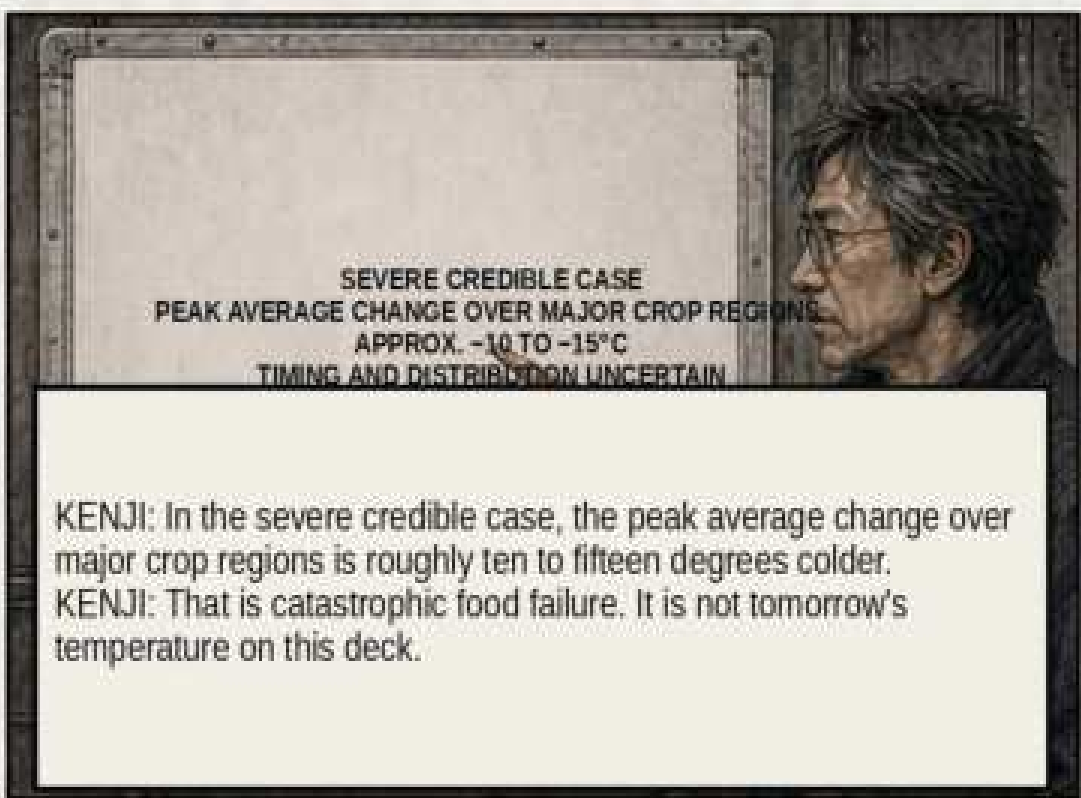
MARA: Then every number keeps its assumption attached.
KENJI: Especially the frightening ones.



MARA: These are cases. None is a prediction.
MARA: Every displayed result includes what we assumed to obtain it.



KENJI: The bounded case shortens growing seasons and breaks trade between regions that still harvest.
KENJI: The intermediate case produces multi-year agricultural failure across major producers.

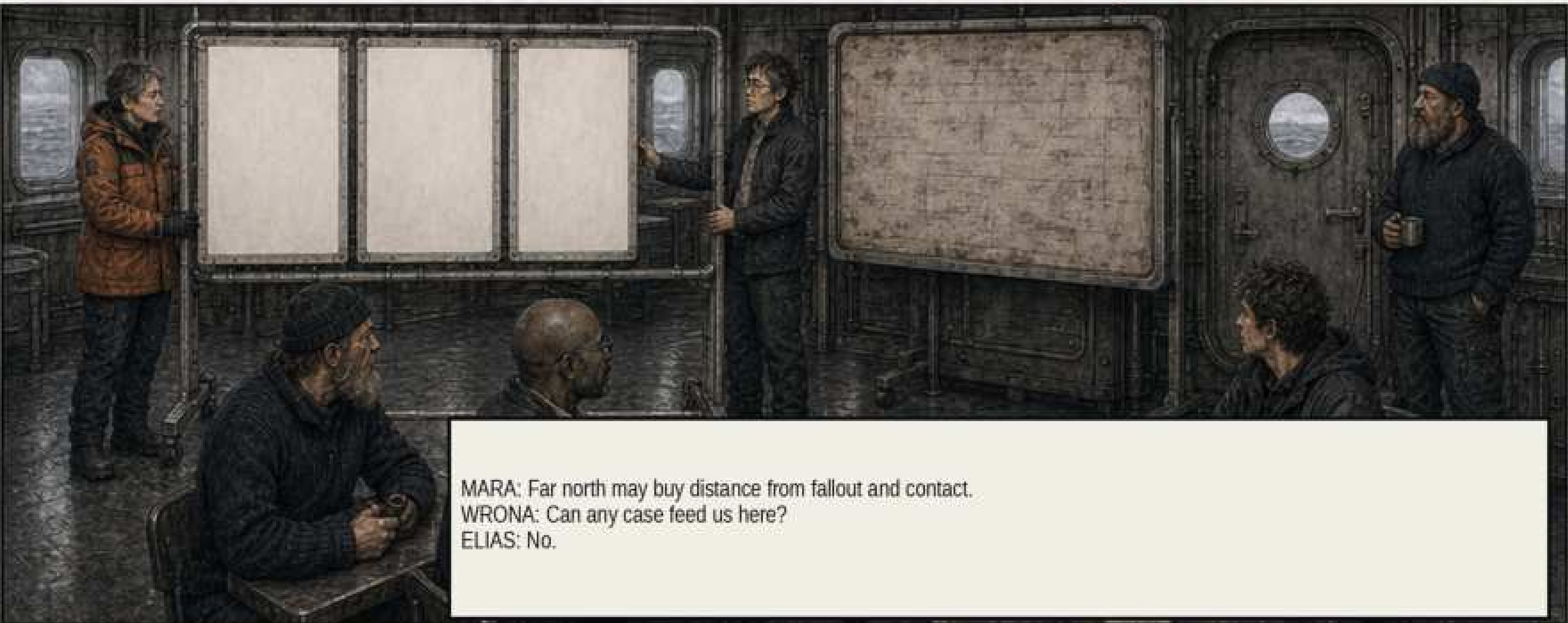


SEVERE CREDIBLE CASE
PEAK AVERAGE CHANGE OVER MAJOR CROP REGIONS
APPROX. -10 TO -15°C
TIMING AND DISTRIBUTION UNCERTAIN

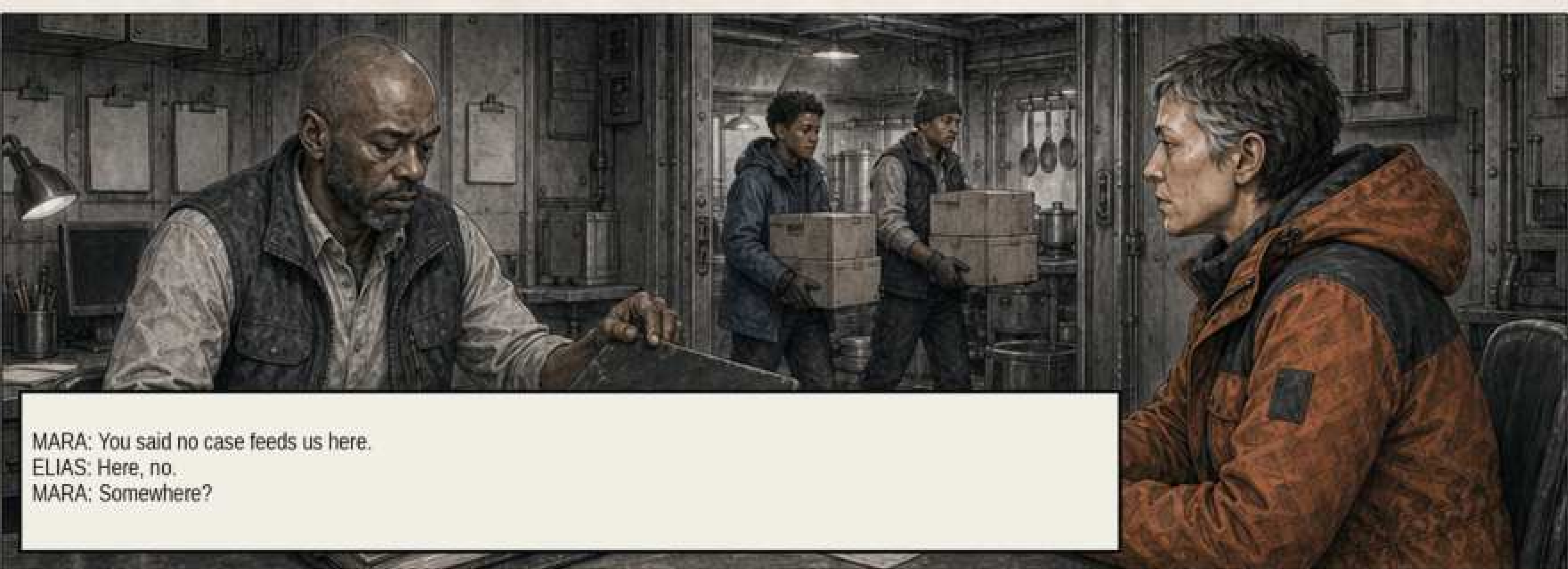
KENJI: In the severe credible case, the peak average change over major crop regions is roughly ten to fifteen degrees colder.
KENJI: That is catastrophic food failure. It is not tomorrow's temperature on this deck.



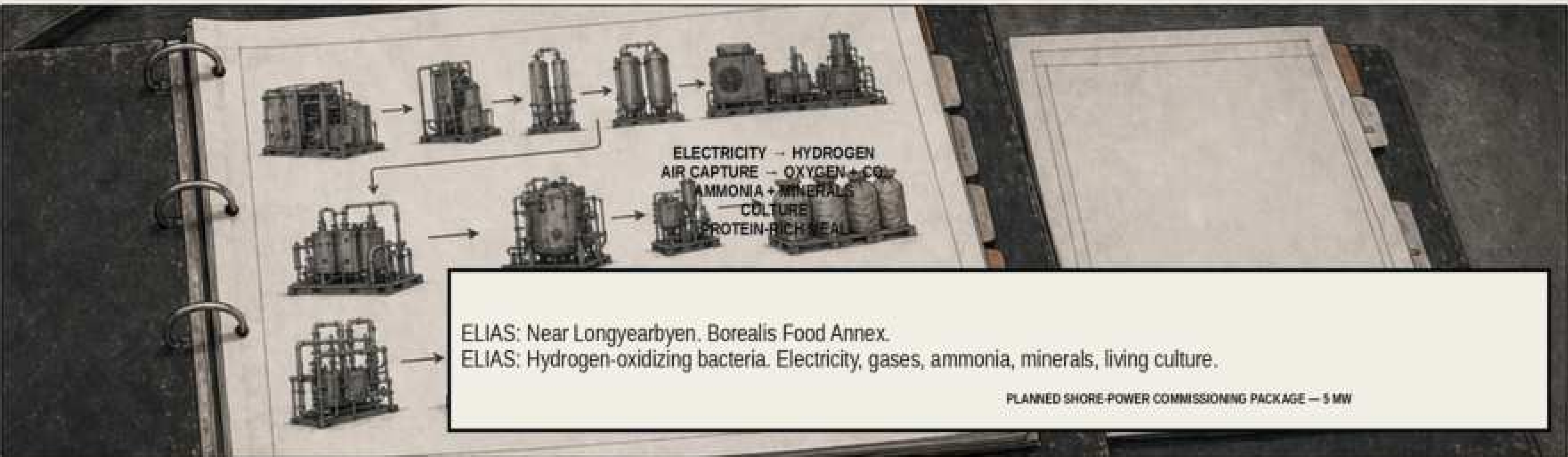
GRANT: Worst credible, or worst imaginable?
KENJI: Credible under inputs we cannot yet confirm.
GRANT: Then which conclusion survives all three?



MARA: Far north may buy distance from fallout and contact.
WRONA: Can any case feed us here?
ELIAS: No.

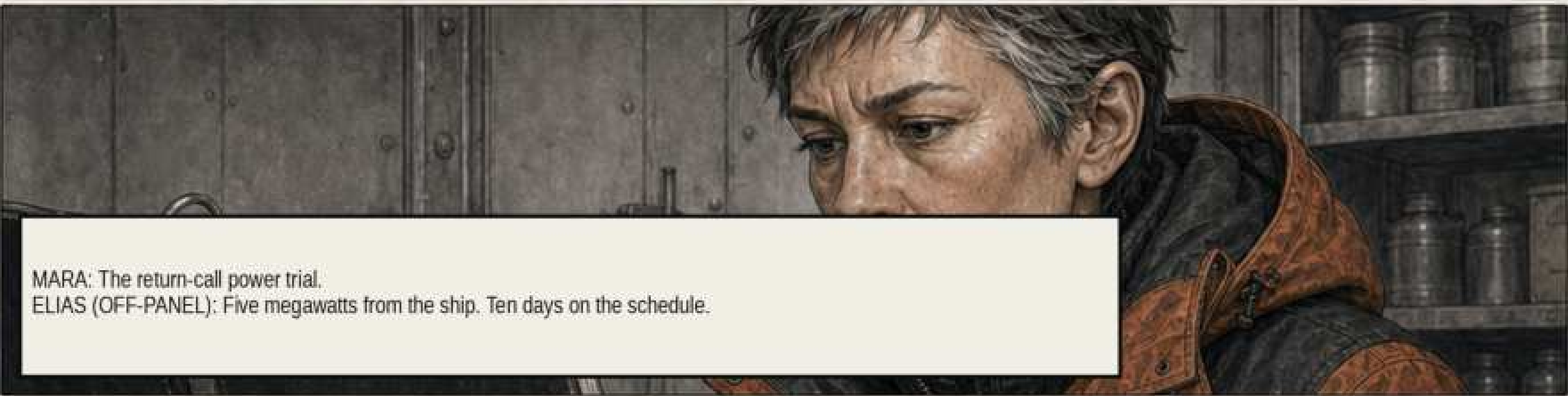


MARA: You said no case feeds us here.
ELIAS: Here, no.
MARA: Somewhere?

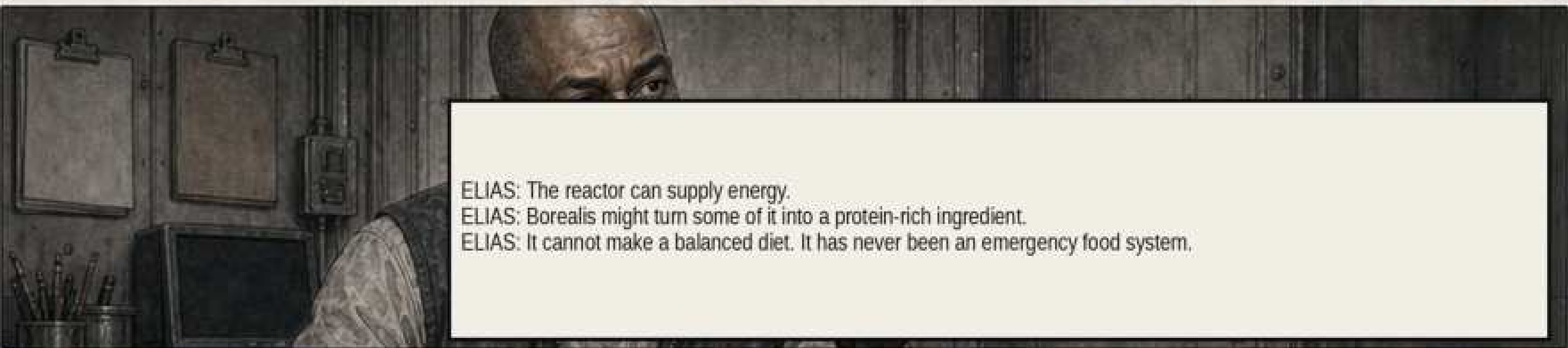


ELIAS: Near Longyearbyen. Borealis Food Annex.
ELIAS: Hydrogen-oxidizing bacteria. Electricity, gases, ammonia, minerals, living culture.

PLANNED SHORE-POWER COMMISSIONING PACKAGE - 5 MW



MARA: The return-call power trial.
ELIAS (OFF-PANEL): Five megawatts from the ship. Ten days on the schedule.



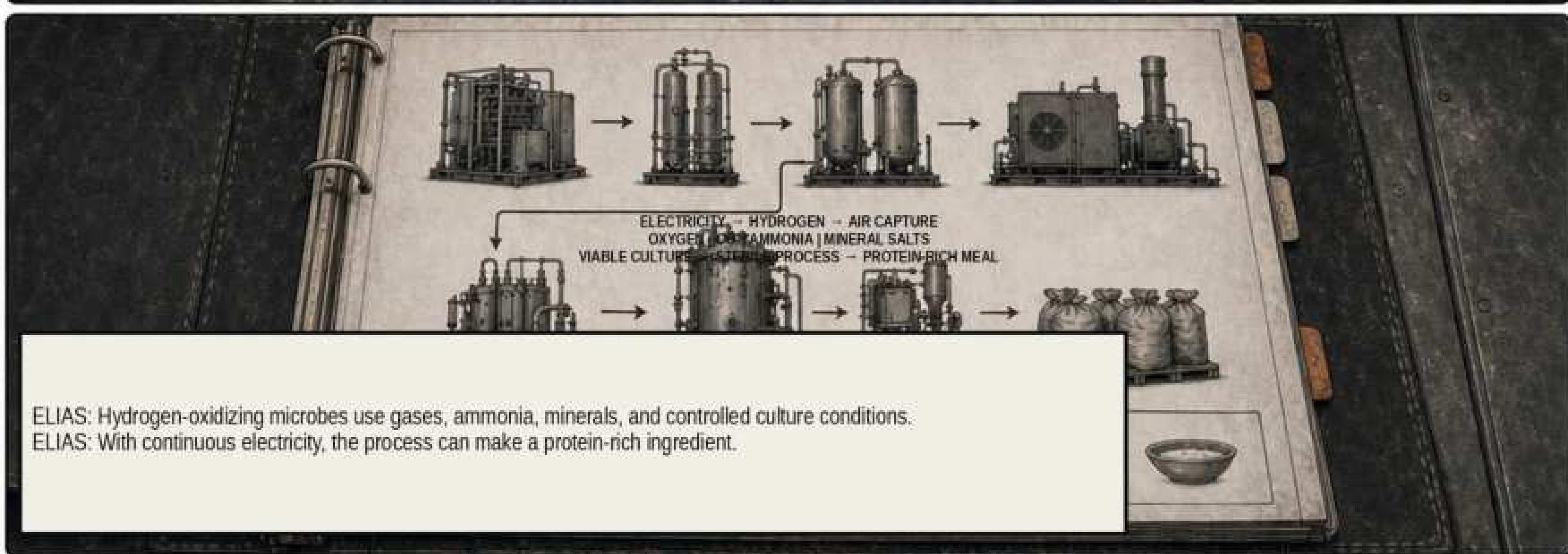
ELIAS: The reactor can supply energy.
ELIAS: Borealis might turn some of it into a protein-rich ingredient.
ELIAS: It cannot make a balanced diet. It has never been an emergency food system.



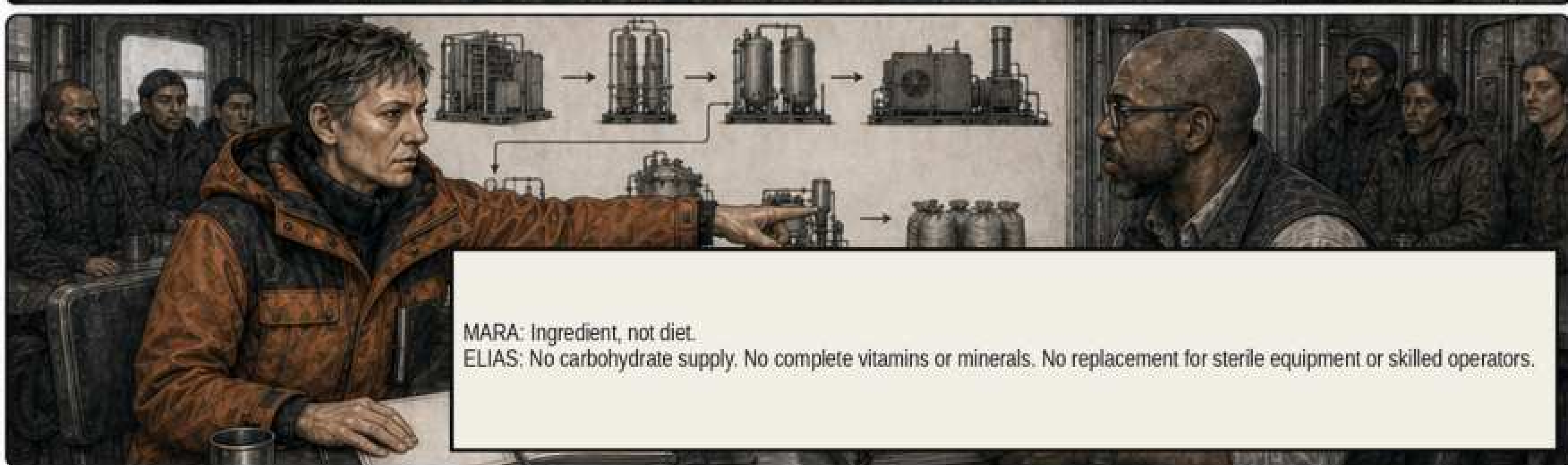
MARA: Why was this not on the board?
ELIAS: Because a remembered pilot plant is not a destination.
MARA: Not until it answers.



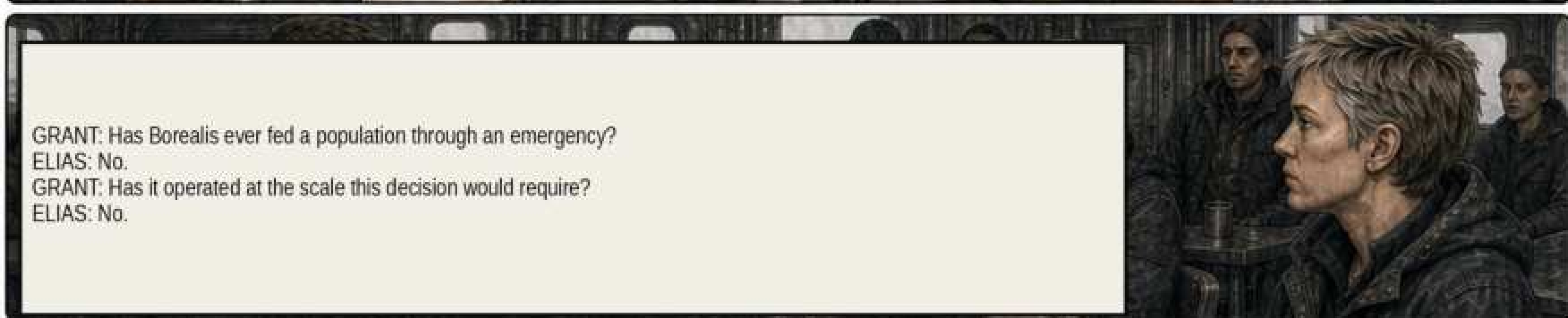
ELIAS: There is one machine in our former itinerary that changes the food question.
ELIAS: It does not answer it.



ELIAS: Hydrogen-oxidizing microbes use gases, ammonia, minerals, and controlled culture conditions.
ELIAS: With continuous electricity, the process can make a protein-rich ingredient.



MARA: Ingredient, not diet.
ELIAS: No carbohydrate supply. No complete vitamins or minerals. No replacement for sterile equipment or skilled operators.



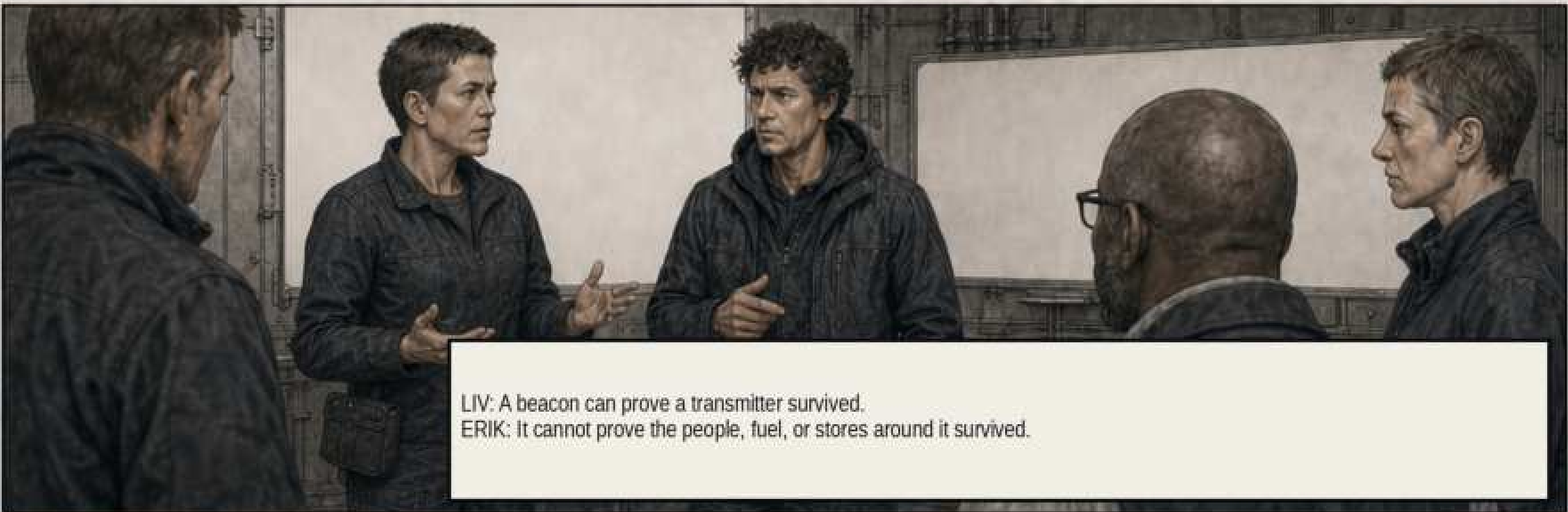
GRANT: Has Borealis ever fed a population through an emergency?
ELIAS: No.
GRANT: Has it operated at the scale this decision would require?
ELIAS: No.



WHAT BOREALIS CANNOT PROMISE
ELIAS: It was a pilot annex scheduled for a ten-day commissioning trial.
WRONA: Then it is machinery, not salvation.
MARA: And now the machinery is in the public ledger.



GRANT: Severnaya Zemlya has stations, caches, fisheries access.
ELIAS: It may have stores. We have no verified inventory, no living contact, and no harvest large enough to feed one hundred seventy-three through winter.



LIV: A beacon can prove a transmitter survived.
ERIK: It cannot prove the people, fuel, or stores around it survived.



OKSANA: We have heat, water, workshops, and years of nominal reactor fuel.
KENJI: None becomes calories because we remain distant from fallout.



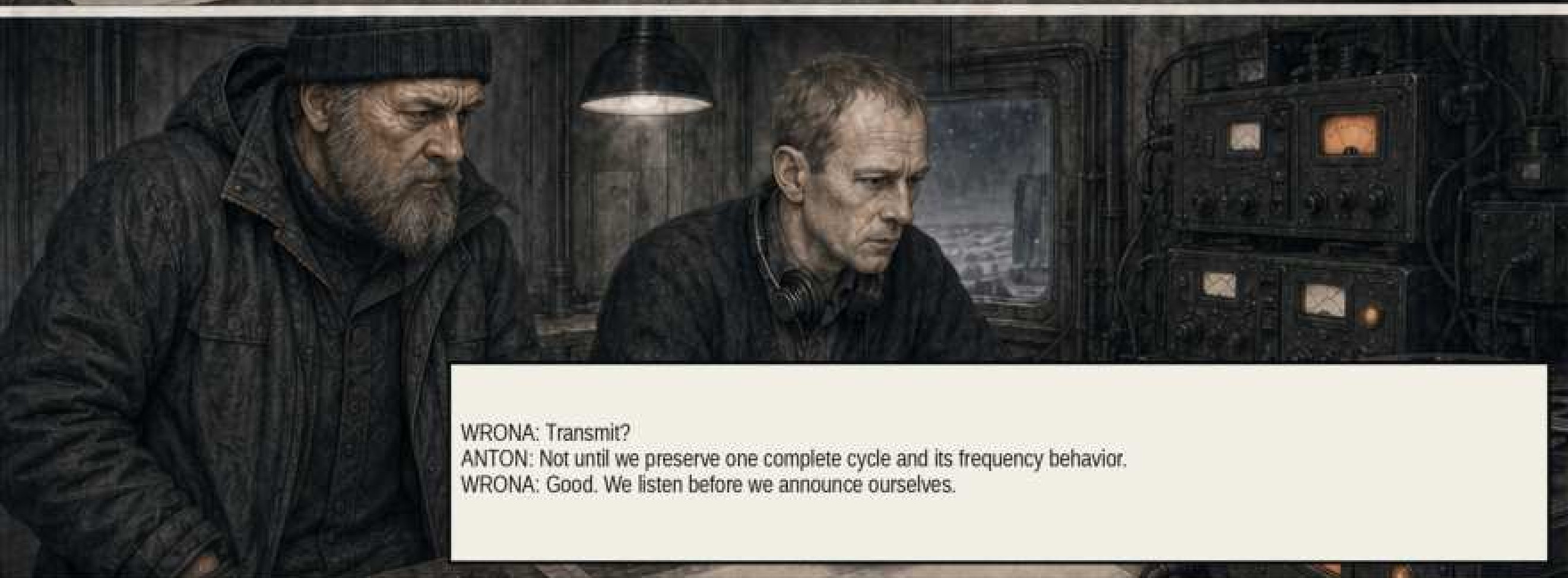
ANTON: Captain. Professor.
ANTON: The Svalbard band has found a clock.



ANTON: Four seconds of compressed energy at 20:10. Again at 02:10.
LIV: Same carrier shape?
ANTON: Within what the noise allows.



MARA: Scheduled, or repeating wreckage?
ANTON: The next arrival distinguishes them.



WRONA: Transmit?
ANTON: Not until we preserve one complete cycle and its frequency behavior.
WRONA: Good. We listen before we announce ourselves.



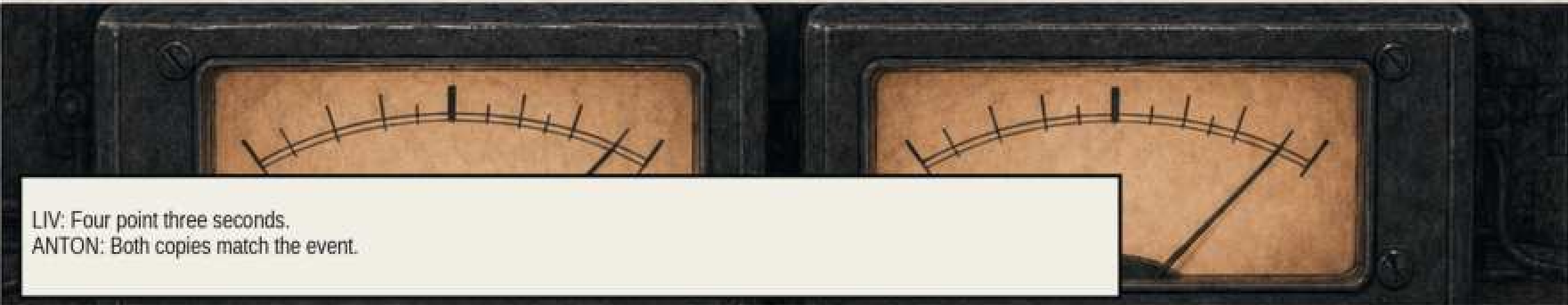
ANTON: 08:10 UTC. Eight seconds of listening may decide whether there is anyone to answer.



ANTON: Recorders live.
LIV: Independent track live.



SFX, SPEAKER: KRRR-TKTKTKTK—KSH



LIV: Four point three seconds.
ANTON: Both copies match the event.



MARA: Original preserved before processing.
ANTON: Original, independent copy, working copy.



WRONA: Nobody fills a hole because the sentence wants a word.
ANTON: We reconstruct what arrived.



LIV: The second repeat repairs eleven missing blocks.
ANTON: Not the failed checksum. Mark that boundary.



MARA: Content confidence?
ANTON: High for the repeated payload. Moderate for metadata. Low for origin authentication.

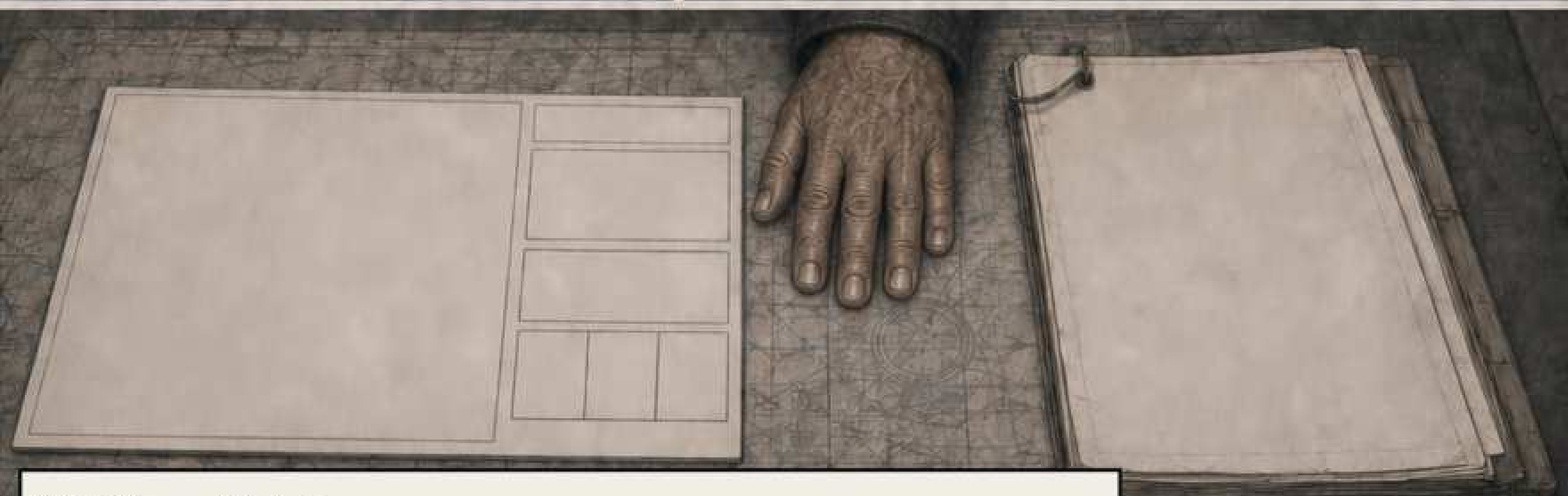
43 AT BOREALIS. GRID DOWN. CULTURES COLD. POWER 72 HOURS. CAN FEED IF RESTARTED.	
	REPEATED COORDINATE — 78°13.2' N, 15°38.7' E CONTACT WINDOW — 06:00–06:08 UTC NEXT WINDOW — 20 SEPTEMBER



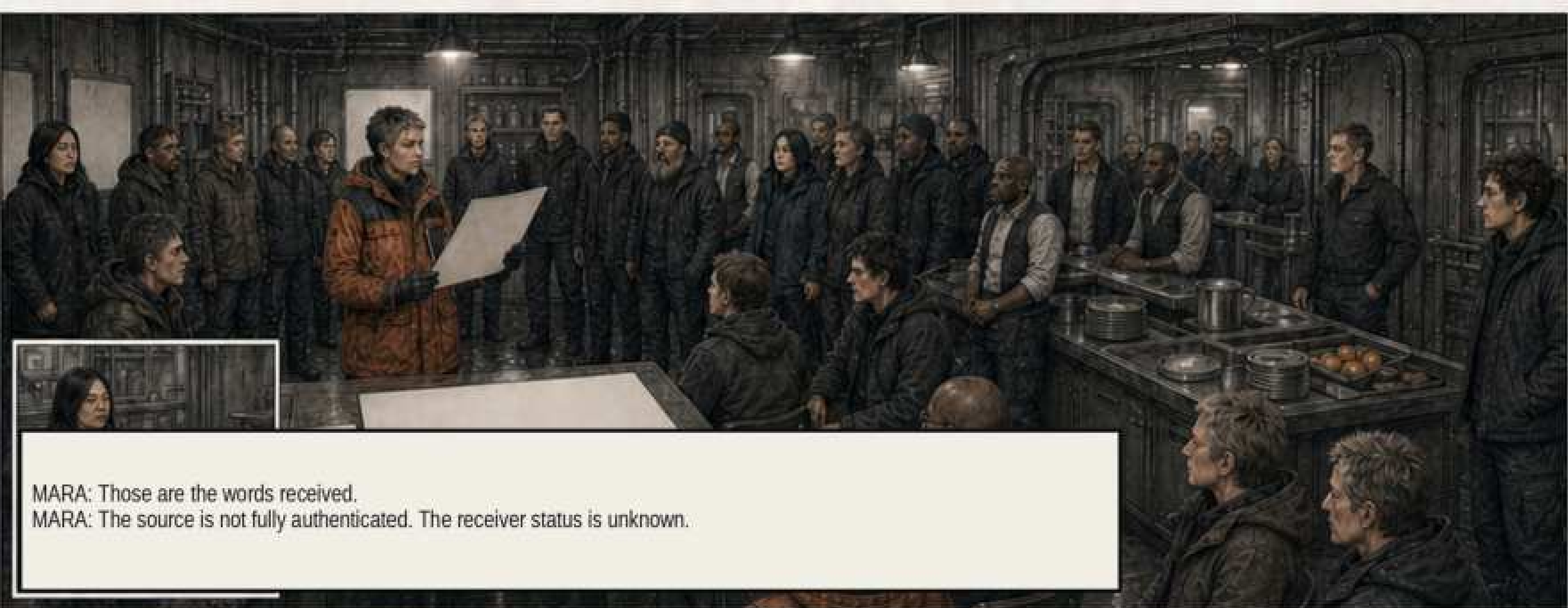
ELIAS: That coordinate is the annex corridor.



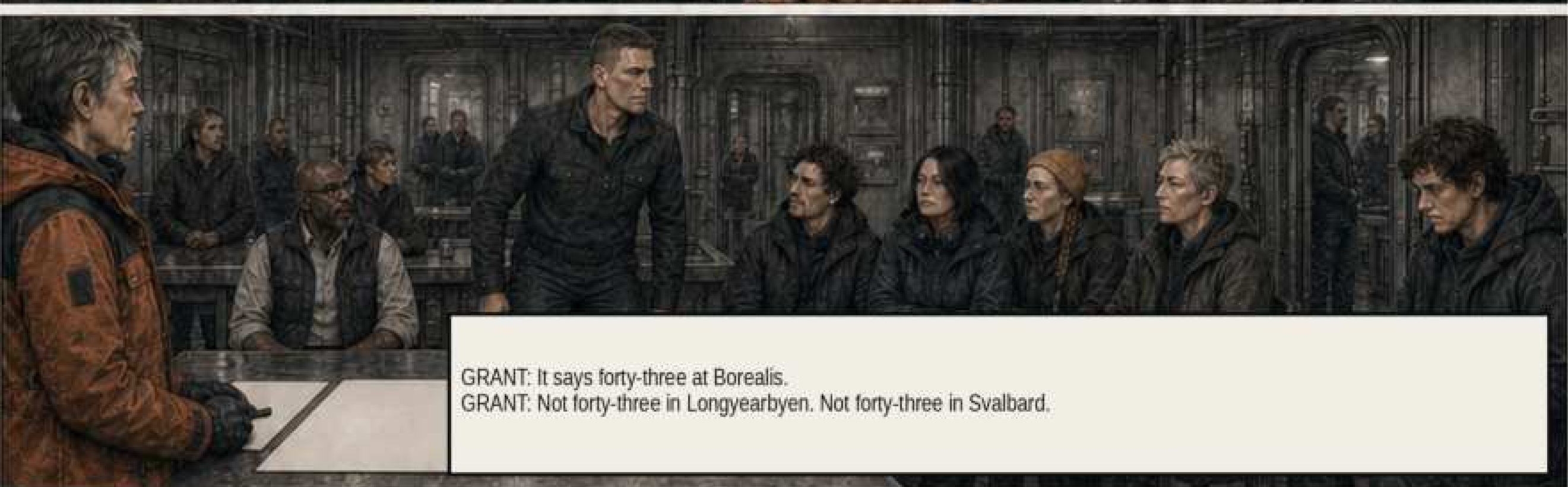
WRONA: Can the sender hear us?
ANTON: The packet asks for a window. It does not prove a working receiver.
MARA: Or who controls it.



WRONA: Then we publish what it says.
WRONA: And what it does not.



MARA: Those are the words received.
MARA: The source is not fully authenticated. The receiver status is unknown.



GRANT: It says forty-three at Borealis.
GRANT: Not forty-three in Longyearbyen. Not forty-three in Svalbard.



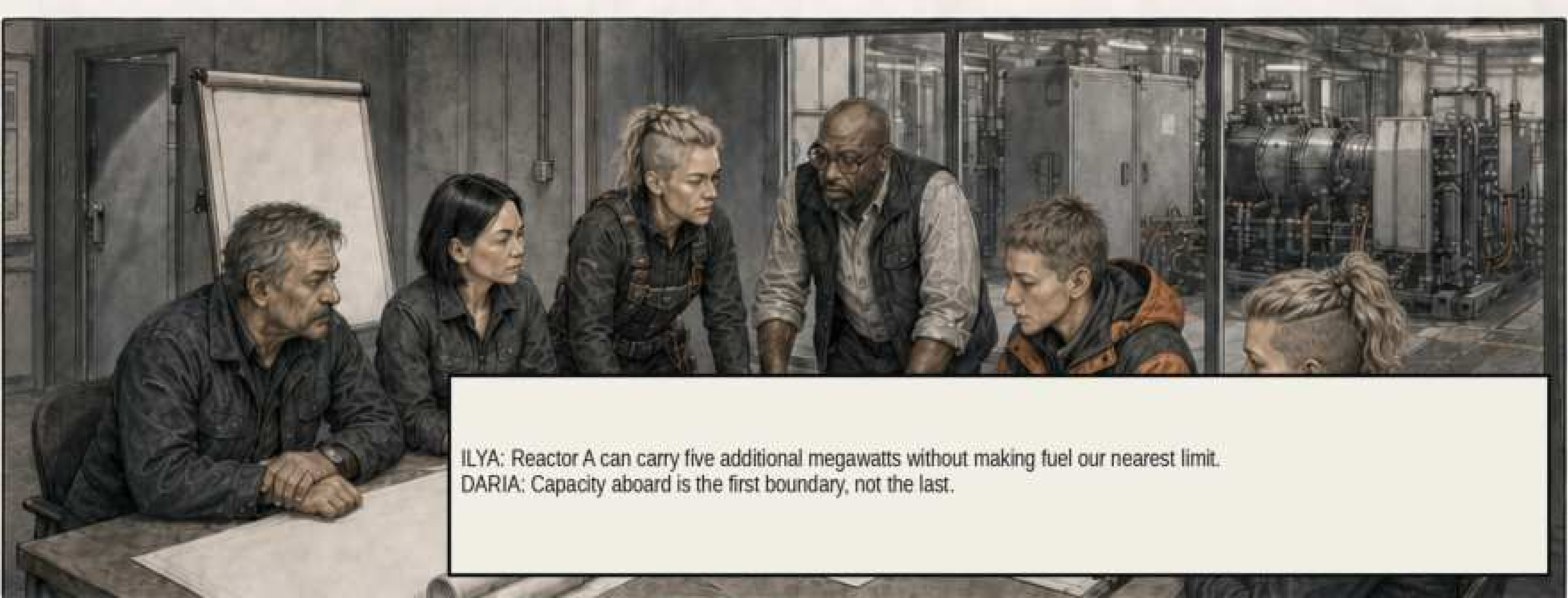
MARA: Correct.
MARA: We know a sender claims forty-three at one facility.



ELIAS: The annex could shelter forty-three and still know nothing about the rest of the settlement.
ERIK: Or know and choose not to say.



WRONA: Forty-three is a count at a machine.
WRONA: It is not permission to invent the people beyond it.

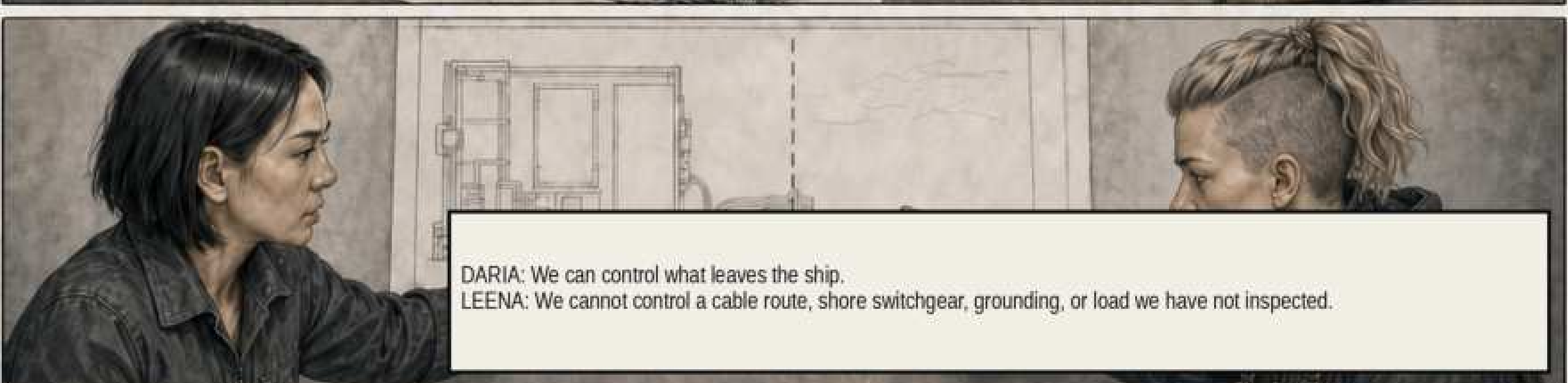


ILYA: Reactor A can carry five additional megawatts without making fuel our nearest limit.
DARIA: Capacity aboard is the first boundary, not the last.



MISSION TRANSFORMER CONVERTERS PROTECTION CABINET CABLE REELS

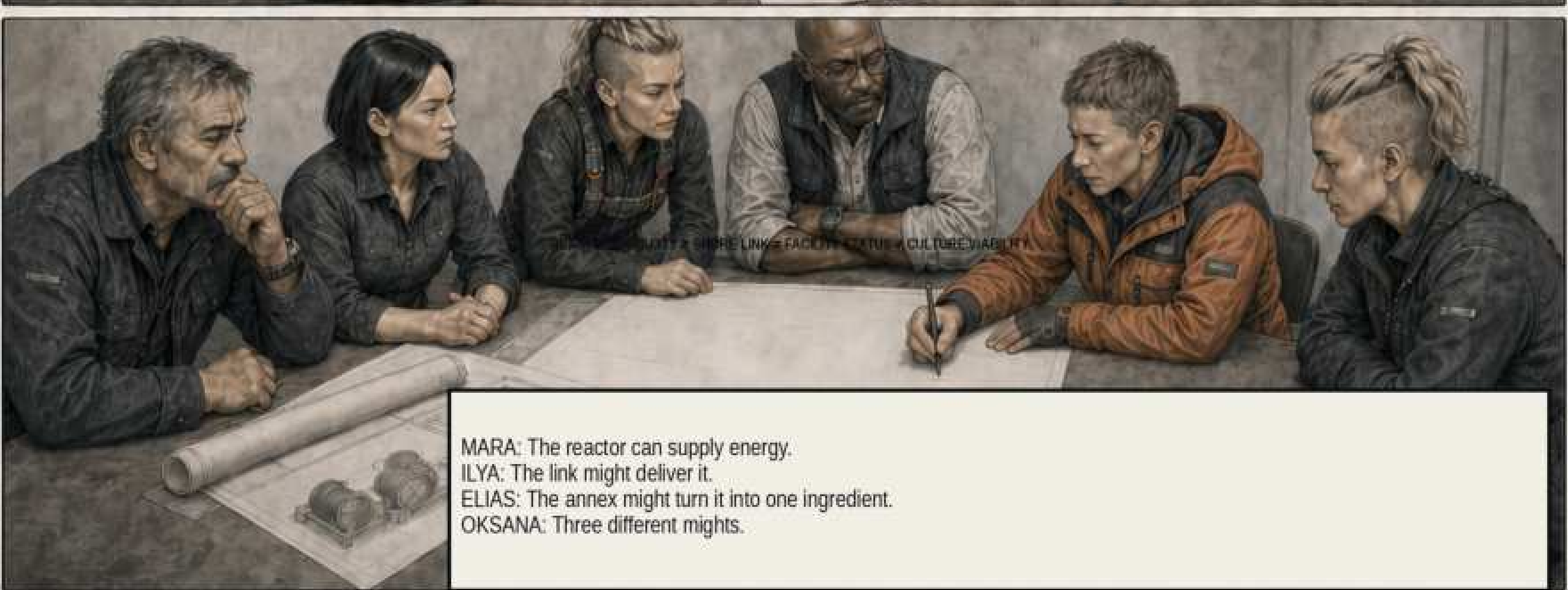
LEENA: This package was built for a ten-day supervised trial.
LEENA: It was never certified as a continuous emergency microgrid.



DARIA: We can control what leaves the ship.
LEENA: We cannot control a cable route, shore switchgear, grounding, or load we have not inspected.



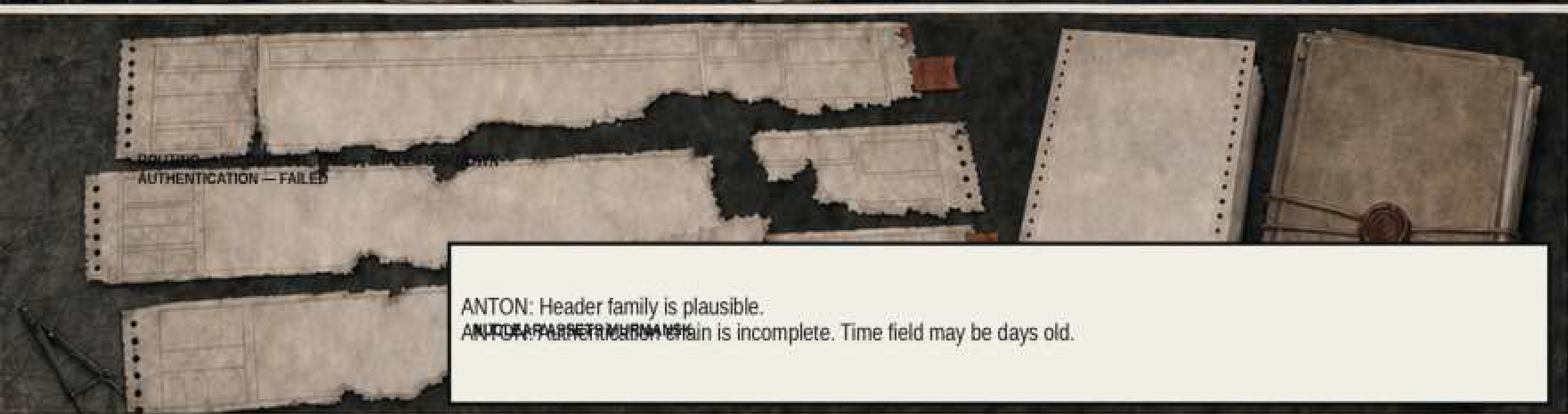
ELIAS: Power does not revive a dead culture.
ELIAS: A living culture still needs sterile vessels, gases, ammonia, minerals, controls, and drying.



MARA: The reactor can supply energy.
ILYA: The link might deliver it.
ELIAS: The annex might turn it into one ingredient.
OKSANA: Three different mights.



ANTON: [Russian] New carrier. Military framing.
SFX, RECEIVER: tk—KRR—tk-tk—



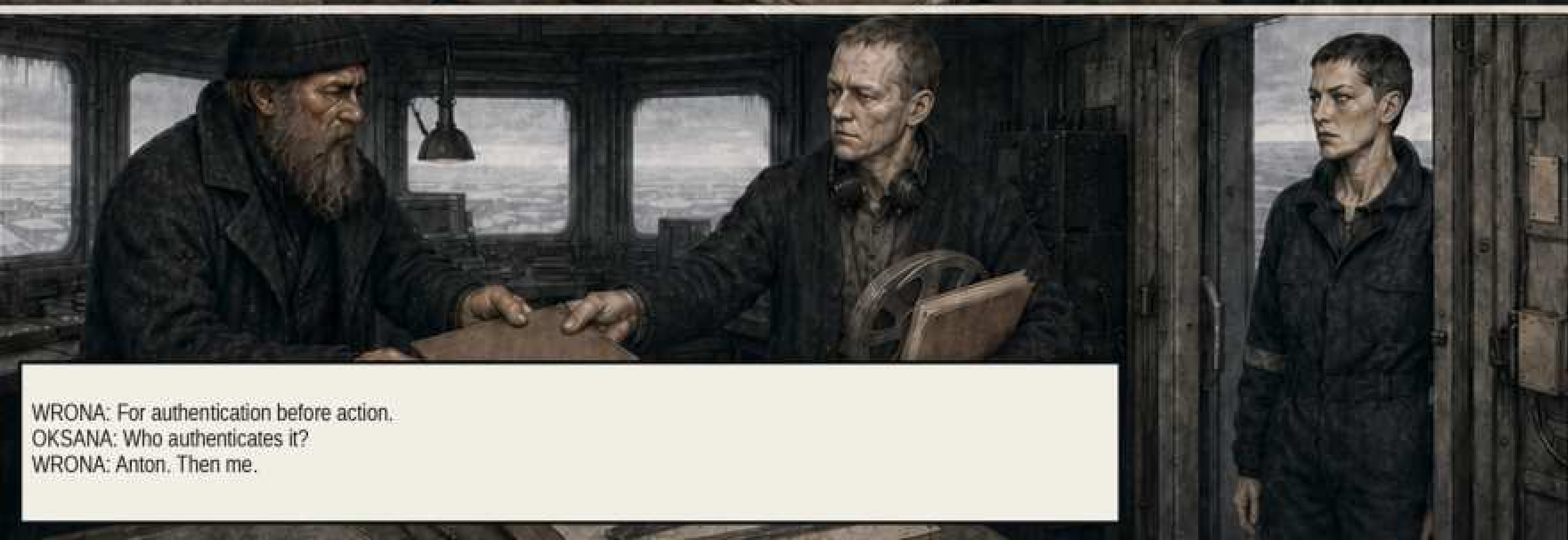
ANTON: Header family is plausible.
ANTON: Authentication chain is incomplete. Time field may be days old.



WRONA: [Russian] Direction?
ANTON: Nuclear assets. Murmansk survives in two repeated fragments.



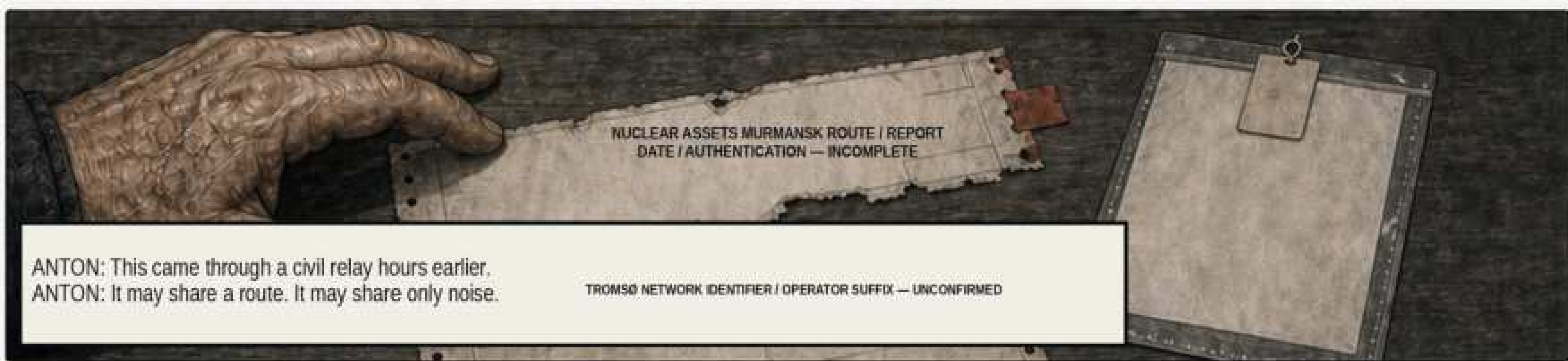
OKSANA: Command packet?
WRONA: Possible command traffic.
OKSANA: For us?



WRONA: For authentication before action.
OKSANA: Who authenticates it?
WRONA: Anton. Then me.



ANTON: The routing family existed before the silence.
ANTON: Nothing here proves this copy is current, complete, or addressed specifically to us.

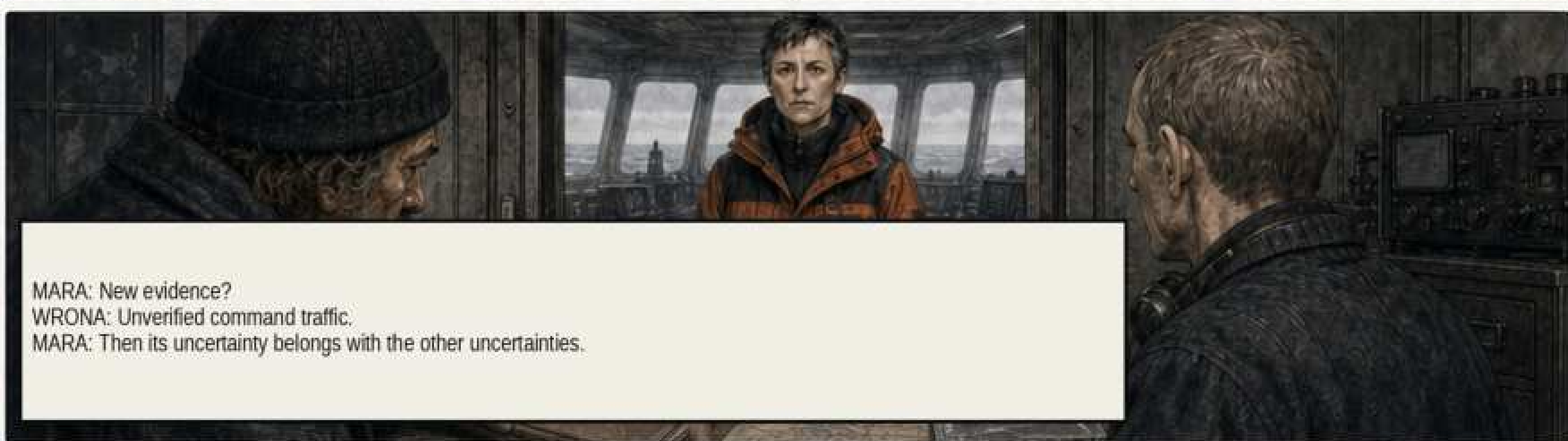


ANTON: This came through a civil relay hours earlier.
ANTON: It may share a route. It may share only noise.

TROMSØ NETWORK IDENTIFIER / OPERATOR SUFFIX — UNCONFIRMED



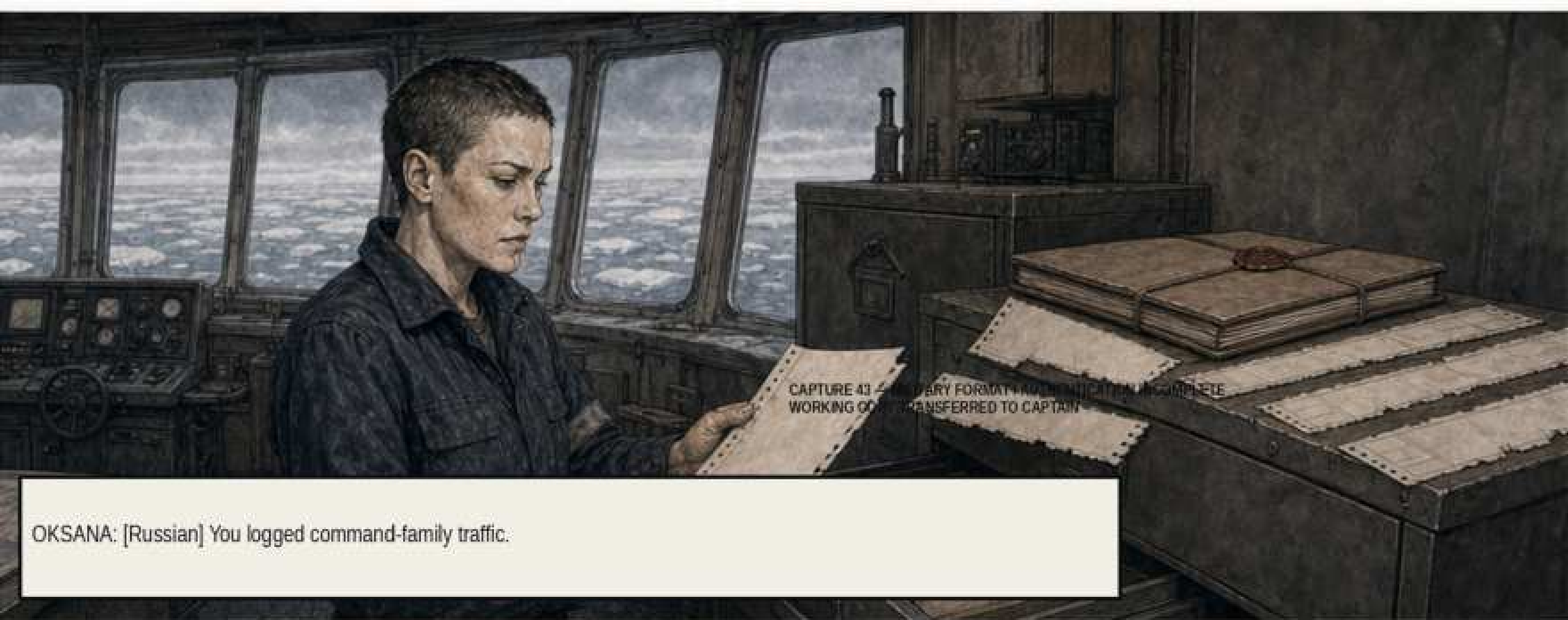
WRONA: No name goes into the log from half a call sign.
ANTON: Agreed.



MARA: New evidence?
WRONA: Unverified command traffic.
MARA: Then its uncertainty belongs with the other uncertainties.



WRONA: A broken order can move a ship before anyone proves it false.
MARA: A hidden order can move the captain before anyone knows it exists.



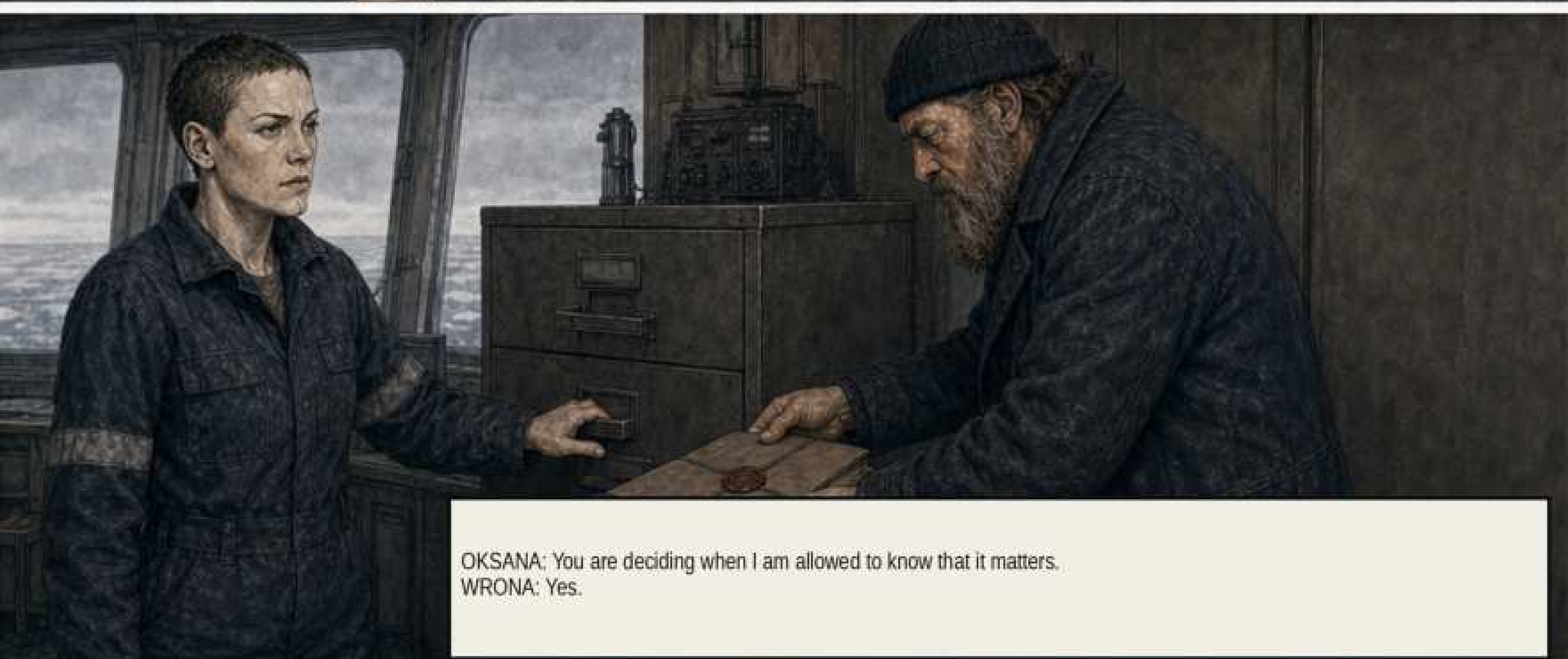
OKSANA: [Russian] You logged command-family traffic.



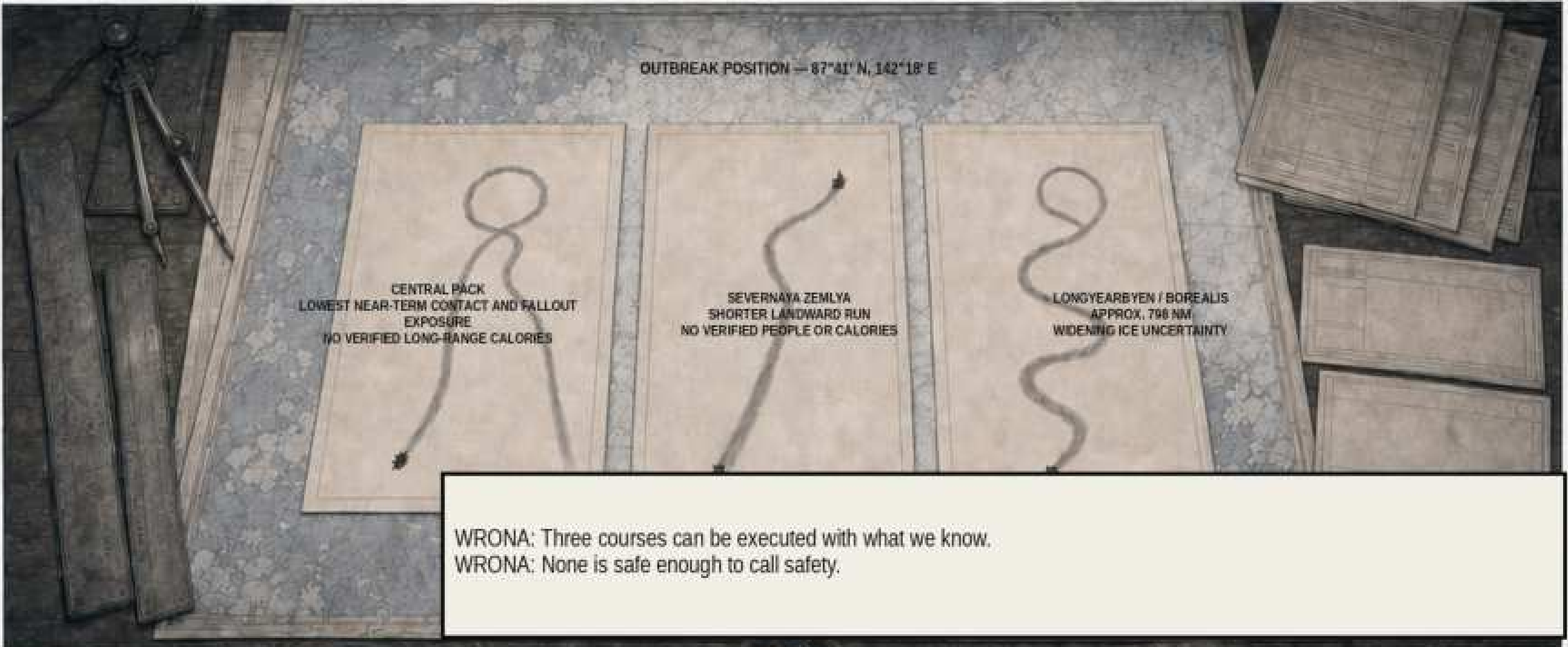
WRONA: Yes.
OKSANA: Direction affecting the ship?
WRONA: Possibly. Nothing executable yet.



OKSANA: I am chief officer. If command traffic changes our safe routes, I carry that risk on watch.
WRONA: When it becomes an order we can test, you will have it.



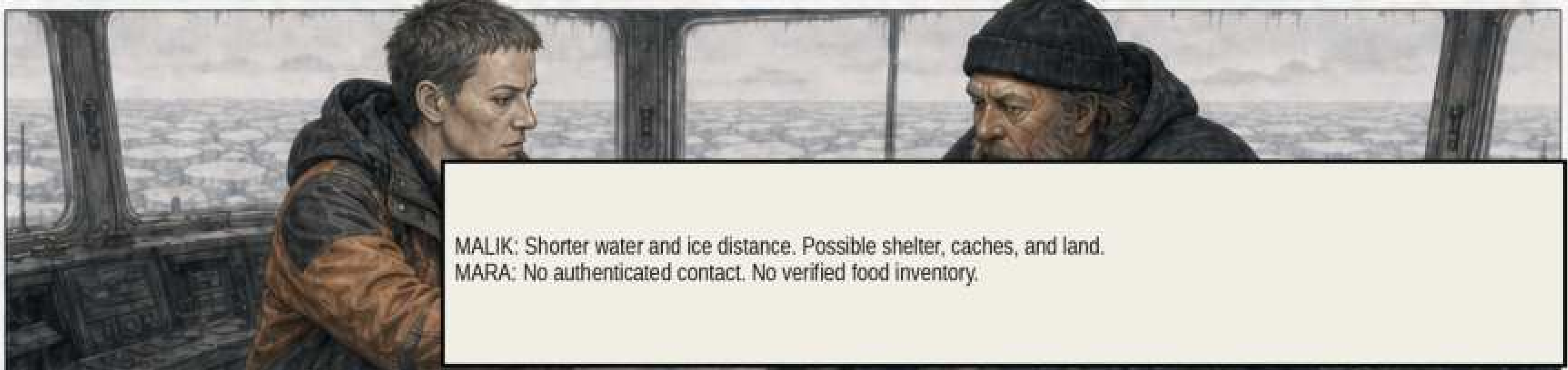
OKSANA: You are deciding when I am allowed to know that it matters.
WRONA: Yes.



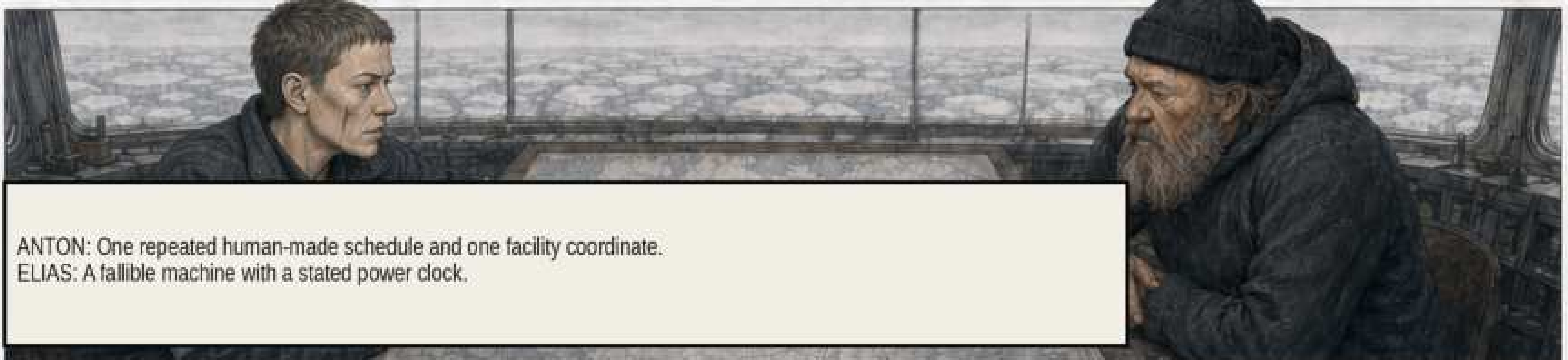
WRONA: Three courses can be executed with what we know.
WRONA: None is safe enough to call safety.



OKSANA: We keep distance, clean air as long as weather permits, and a ship we understand.
ELIAS: We also keep the same finite stores.



MALIK: Shorter water and ice distance. Possible shelter, caches, and land.
MARA: No authenticated contact. No verified food inventory.



ANTON: One repeated human-made schedule and one facility coordinate.
ELIAS: A fallible machine with a stated power clock.



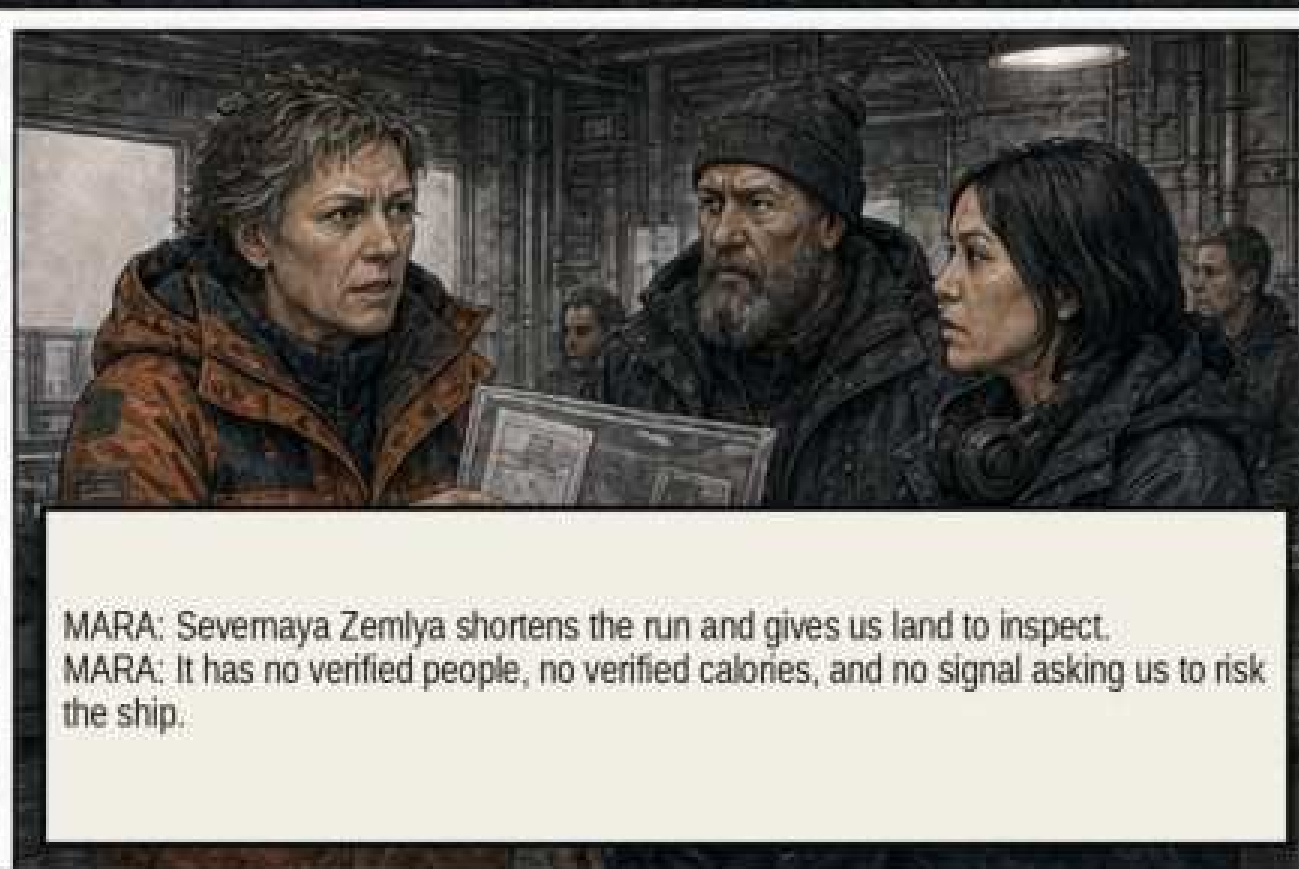
MALIK: Stay, land, or people.
MALIK: All three charge for being wrong.
WRONA: Then all three go before the ship.



WRONA: This is not a vote that makes the sea obey.
WRONA: It is the record I will answer to when I order a heading.



OKSANA: The central pack preserves the vessel, limits contact, and delays exposure.
OKSANA: Its failure is slow enough to look disciplined: stores fall, and no food arrives.



MARA: Severnaya Zemlya shortens the run and gives us land to inspect.
MARA: It has no verified people, no verified calories, and no signal asking us to risk the ship.



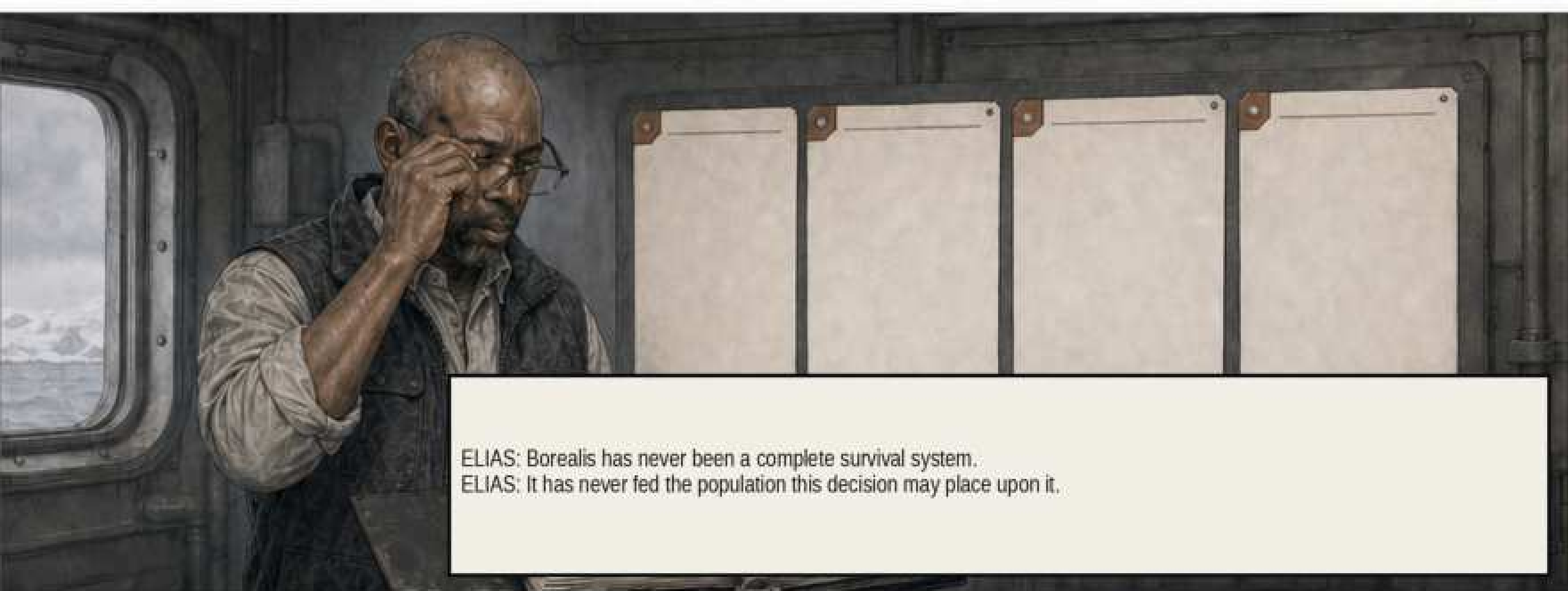
GRANT: Longyearbyen is the longest commitment to the least authenticated claim.
GRANT: The wording may be designed to move us.
CELIA: It may still be true enough that people die if it fails to move us.



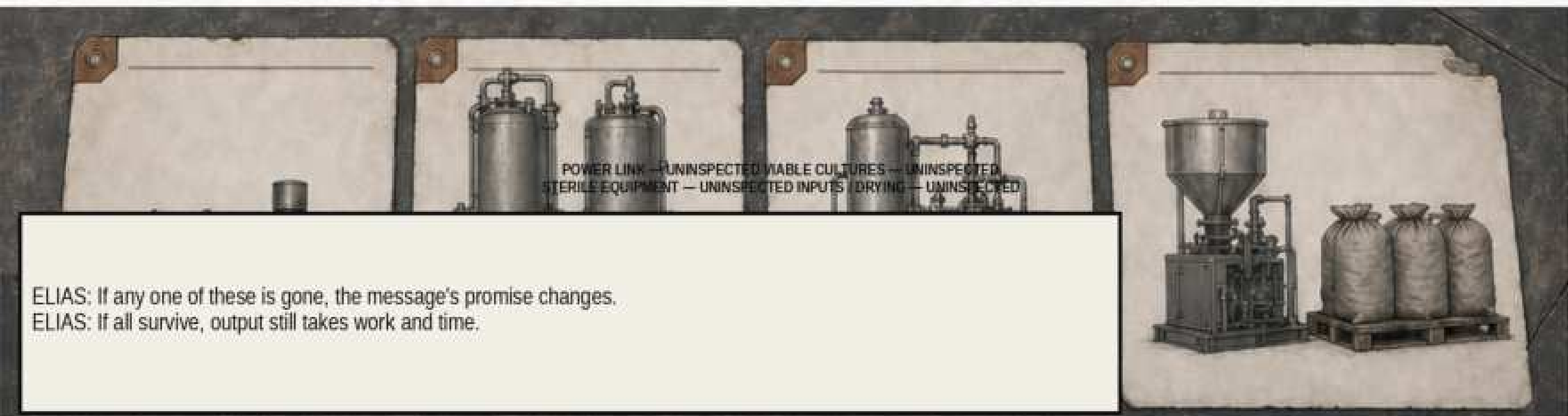
ERIK: Kestrel's signal did not prove our condition.
LIV: It gave you a place to look.
AINO (PA): Looking cost six days. Not looking would have cost nine people.



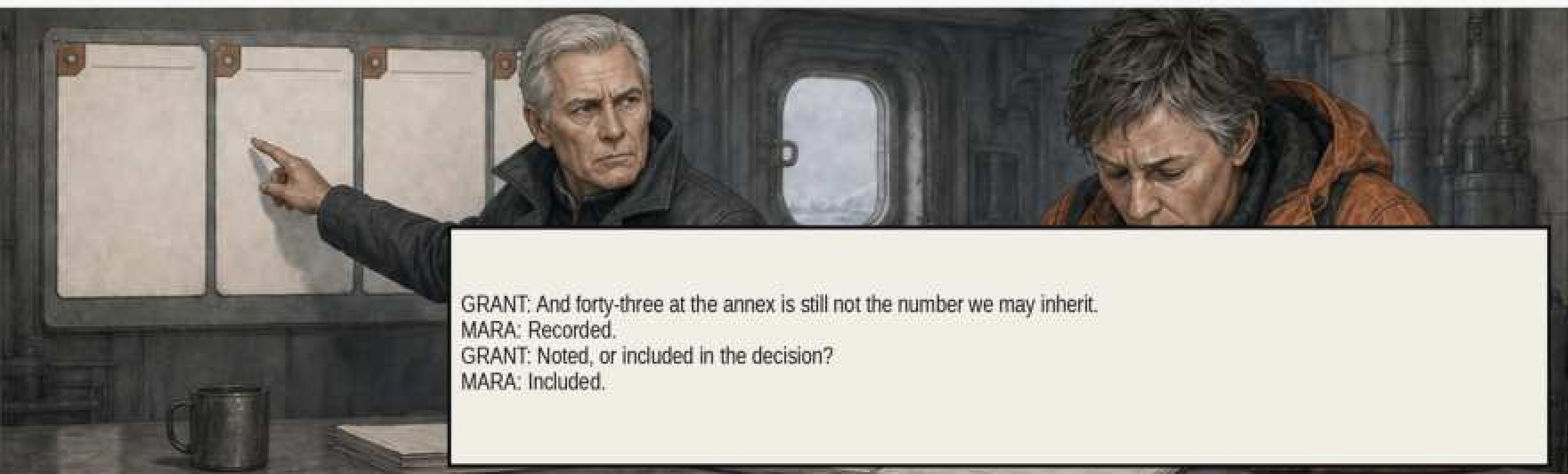
WRONA: Arguments entered.
WRONA: No one has transferred the consequence to a show of hands.



ELIAS: Borealis has never been a complete survival system.
ELIAS: It has never fed the population this decision may place upon it.



ELIAS: If any one of these is gone, the message's promise changes.
ELIAS: If all survive, output still takes work and time.

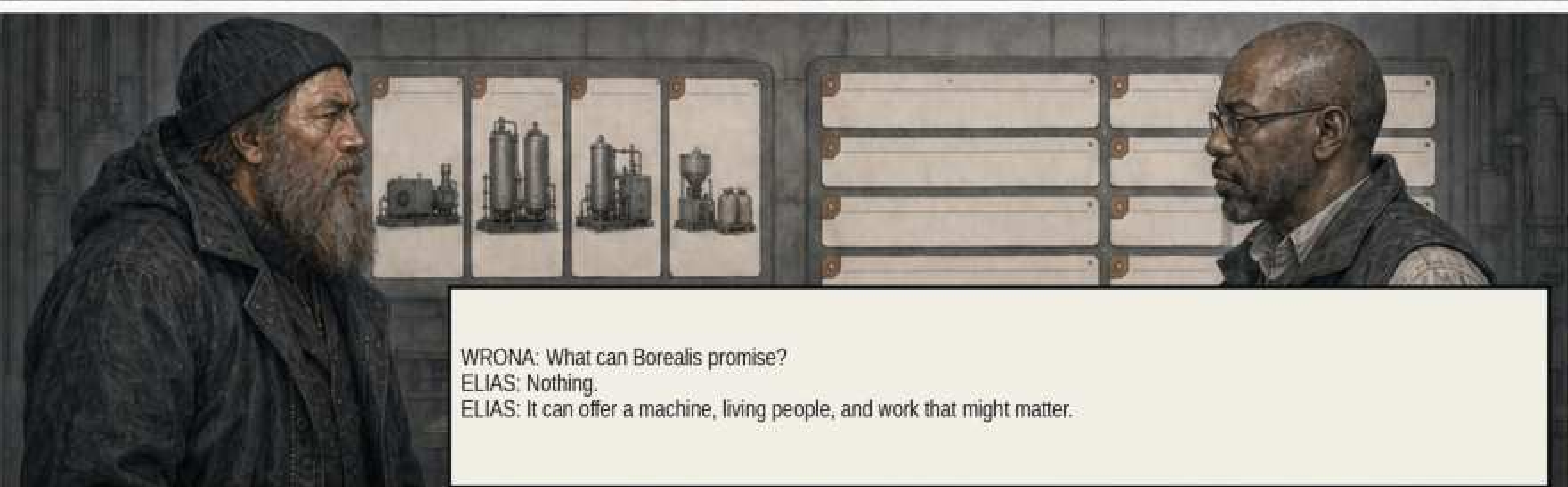


GRANT: And forty-three at the annex is still not the number we may inherit.
MARA: Recorded.
GRANT: Noted, or included in the decision?
MARA: Included.



MARA: Public facts do not make this safe.
MARA: They make the risk correctable and the cost visible.

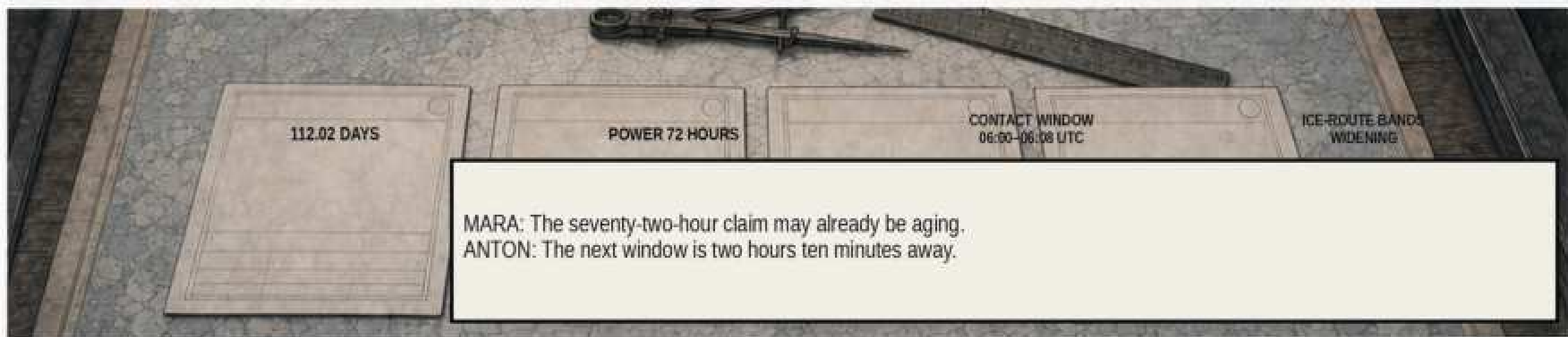
SOURCE NOT FULLY AUTHENTICATED
RECEIVER STATUS UNKNOWN
SETTLEMENT CENSUS UNKNOWN
CULTURE VIABILITY UNKNOWN
SHORE LINK UNINSPECTED
OUTPUT TIMING UNKNOWN
ROUTE ICE CHANGING



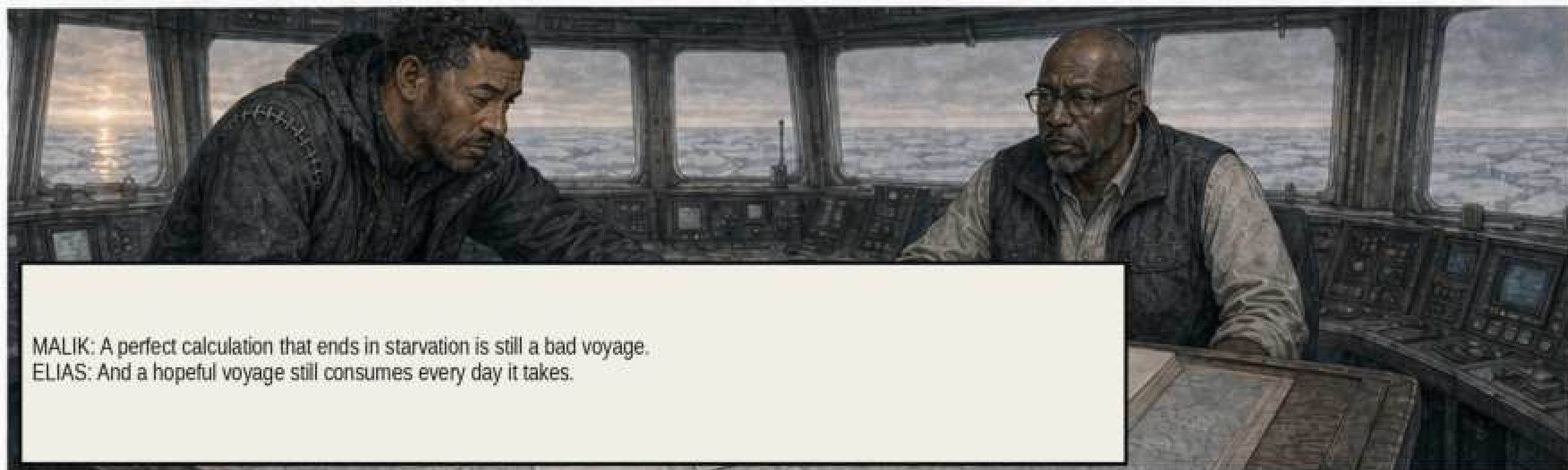
WRONA: What can Borealis promise?
ELIAS: Nothing.
ELIAS: It can offer a machine, living people, and work that might matter.



MALIK: The leads lost another third of their width overnight.
MALIK: Freeze-up is not waiting for our philosophy.



MARA: The seventy-two-hour claim may already be aging.
ANTON: The next window is two hours ten minutes away.

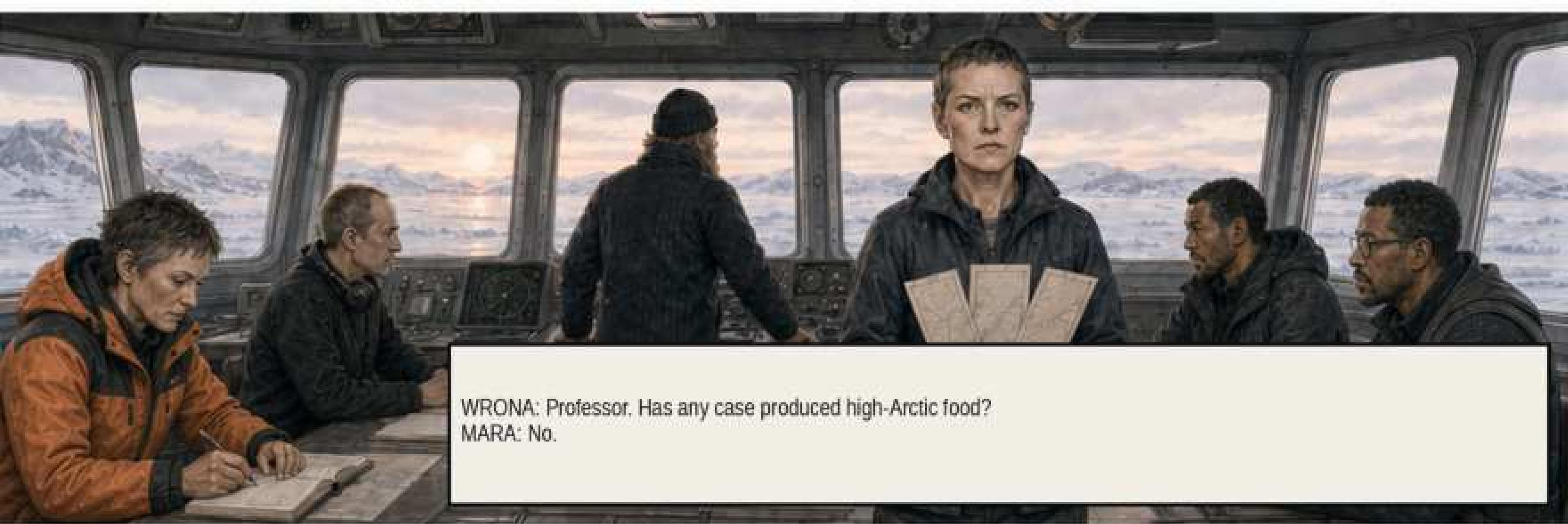


MALIK: A perfect calculation that ends in starvation is still a bad voyage.
ELIAS: And a hopeful voyage still consumes every day it takes.

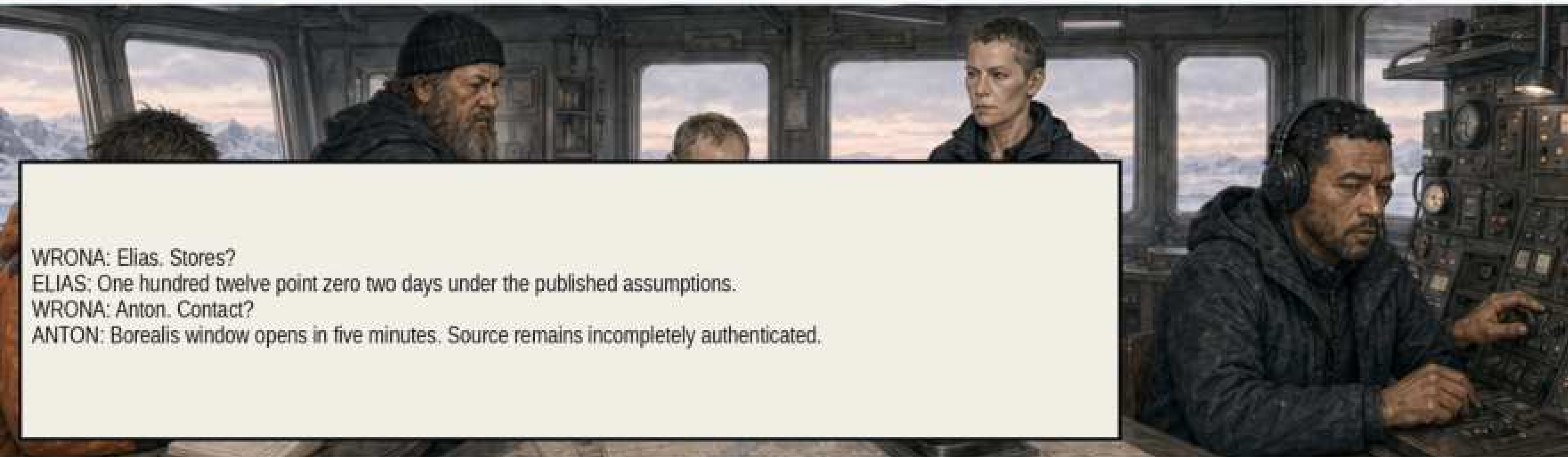


WRONA: One executable first heading for each course.
OKSANA: Prepared, with turn points and abort boundaries.
MARA: And the assumptions attached.

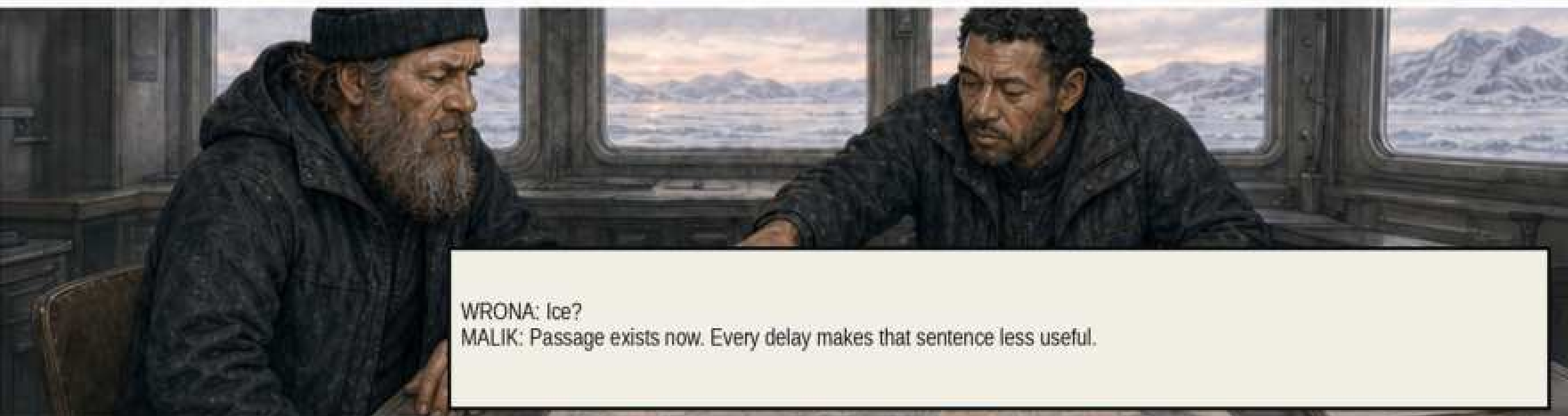




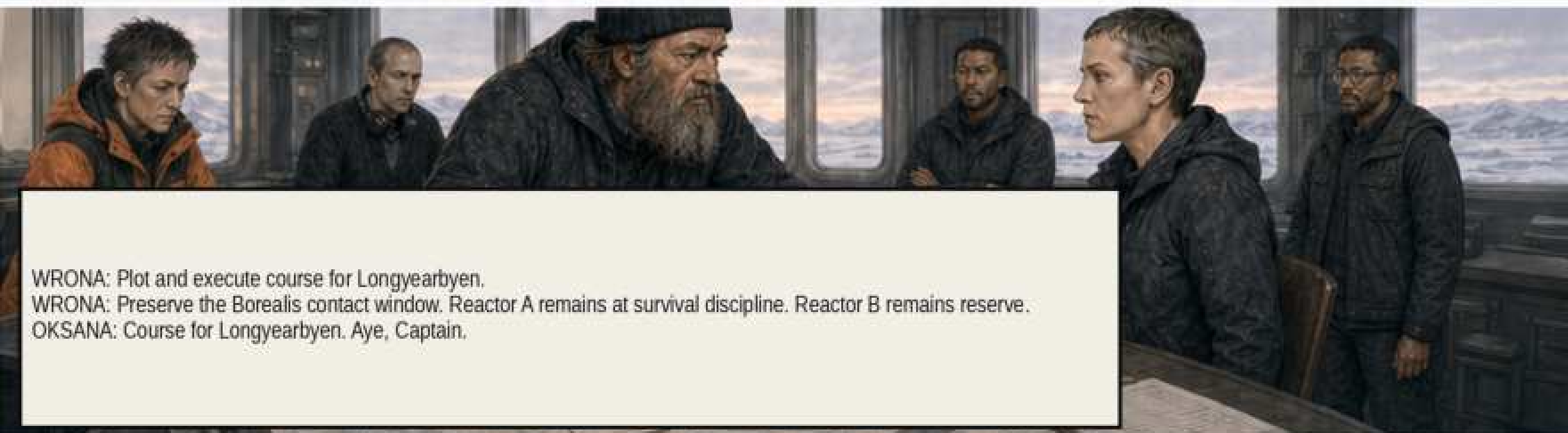
WRONA: Professor. Has any case produced high-Arctic food?
MARA: No.



WRONA: Elias. Stores?
ELIAS: One hundred twelve point zero two days under the published assumptions.
WRONA: Anton. Contact?
ANTON: Borealis window opens in five minutes. Source remains incompletely authenticated.



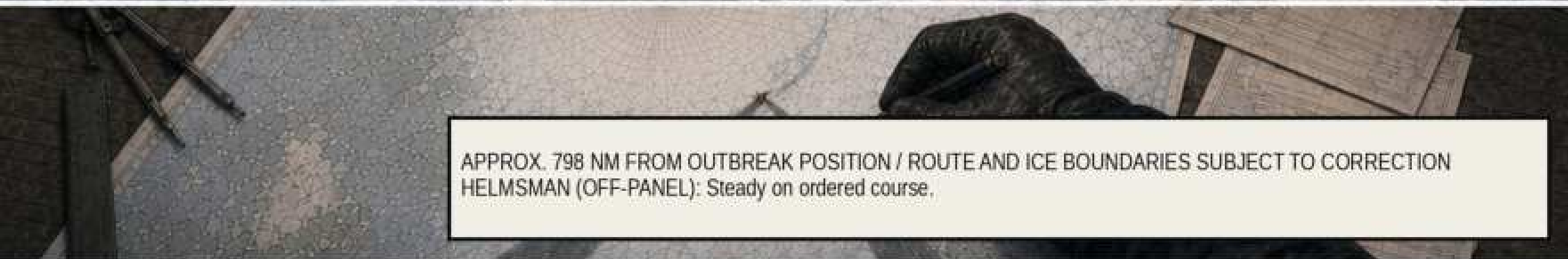
WRONA: Ice?
MALIK: Passage exists now. Every delay makes that sentence less useful.



WRONA: Plot and execute course for Longyearbyen.
WRONA: Preserve the Borealis contact window. Reactor A remains at survival discipline. Reactor B remains reserve.
OKSANA: Course for Longyearbyen. Aye, Captain.



HELMSMAN: Coming to ordered course.
ANTON: Borealis window open.
SFX, SHIP STRUCTURE: nnnng—KRRRRM



APPROX. 798 NM FROM OUTBREAK POSITION / ROUTE AND ICE BOUNDARIES SUBJECT TO CORRECTION
HELMSMAN (OFF-PANEL): Steady on ordered course.



OKSANA: [Russian] Did Moscow order the opposite?

