

INSUFFICIENT

A THULE ARRAY OPERATION · SQUAD · ONE SESSION · THE COLD IS RUNNING OUT

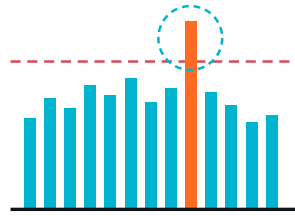
V1.0 // OT TABLETOP

INSUFFICIENT_THULE

GM-FACING

THULE ARRAY // 2066

SUPPLY: STRAINED



THE MISSION AT A GLANCE

A squad of Free Operators is hired to walk onto the busiest cold-allocation exchange on Earth, take a data package off a combine engineer, and walk back out. The brief calls it an audit. The fee says otherwise. By the time the operators understand what they are actually carrying, the machine that rations the Array's only resource will be one bad week from saying a word it has never said in its operational life – *insufficient* – and three factions will be moving to make sure they are holding the cold when it does.

This is a one-session squad operation for **Operator Tactics**. It runs on the core rules – GUTS, TACT, OPINT, CIRCUIT checks; the Alert ladder; Supply States; the Threat Phase. It introduces one setting hazard (**Cold Exposure**) and one new under-system clock (**the Thermal Line**). Everything else is standard. You should be able to read this in twenty minutes and run it cold.

WHAT MAKES THIS RUN

The Thule Array sits on top of a failing system: an autonomous rationing AI hiding a three-year cooling deficit. The operators don't solve a fight. They make a **rationing decision under a clock they tighten every time they act** – and there is no setting on the machine for “everyone gets cold.” Every leverage point they reach for is double-edged. Every zone tells them something or costs them something. Run the pressure, not the plot.

TABLE SETUP · THE THREE QUESTIONS

Before the operators deploy, decide three things. Each one is a dial, not a fixed value – set it to your table.

1. **Who hired them?** Default is European Off-world / leaseholder interests through a deniable broker. Any leaseholder power works (see §1).
2. **How much do they already suspect?** If the table loves a slow burn, run the brief straight and let the fee be the only tell. If they want momentum, let a player's background flag the deception early.
3. **Roll the Mission Modifier?** One D6 (§10) tilts the whole operation. Recommended for replay; optional for a first run.

“Everybody on this floor thinks they’re buying cold. What they’re actually buying is the machine’s permission not to tell them the truth yet.”

— SIGRÚN VALE, EXCHANGE-KEEPER, OFF THE RECORD

DRAMATIC ENGINE & THE NOT-LINE

Two sentences hold this whole module together. Read them, internalize them, and you can improvise the rest.

THE DRAMATIC ENGINE

An autonomous rationing machine's three-year lie is one bad week from surfacing, the engineer holding it together is being forced to choose who learns the cold is running out – and the oldest computer on Earth just started broadcasting the proof.

THE NOT-LINE — WHAT THIS IS NOT

This is **not** a heist with a clean getaway. It's a rationing decision with no output for “everyone gets cold,” made under a clock the operators wind tighter every time they act. If you find yourself steering toward a tidy grab-and-go, you've lost the engine. The package is easy to get. The cost of getting it is the entire story.

THE FIVE-BEAT SPINE

The five zones map to a five-beat arc. Players can take them out of order – the Array is a sandbox – but the *dramatic* function of each is fixed.

BEAT	ZONE	DRAMATIC FUNCTION
Entrance	Z1 · The Landing	Arrival into a system already in crisis. Go big on minute one.
Discovery	Z2 · The Tidemark Floor	The job is not the job. Meet Vale; read the feed; learn the truth.
Setback	Z3 · The Drift	A rig is browning out <i>now</i> . The clock becomes a person.
Climax	Z4 · Cluster Zero	Everyone converges. Roll the Climax Variable. No clean choice.
Resolution	Z5 · The Cold Stack	The breakers that start or stop the cascade. Exfil. Fallout.

THE JOB

1 · THE HIRING

The operators are contacted off-Array by a broker who calls himself **the Quartermaster** – a voice, a credit line, and a cutout. He never says who he works for. He doesn't have to; the money is leaseholder money, and any operator who has worked the cold trade can smell it. (Default: European Off-world. Swap in NAF, the Nordic Combines' rivals, or a Sino-Corporate Bloc client to retune who the operators will ultimately be arming.)

THE BRIEF — OPERATION CLEAN LEDGER

As the Quartermaster tells it, the job is clean:

- **Make contact** with a combine engineer named Sigrún Vale on the Tidemark Floor.
- **Acquire a data package** she is holding – described as “an allocation audit,” a record of how cold has been rationed across the Array.
- **Exfil** via the Landing. Hand off the package. Get paid.

“In and out,” he says. “She’ll be expecting a buyer. You’re the buyer.”

THE PLANTED BREADCRUMB

The fee is wrong. It is two to three times what an allocation audit – a spreadsheet, essentially – could possibly be worth, and it is paid *half up front*, which no one does for a document grab. Any operator who comments on the money is correct to be suspicious. Let them feel it. The truth (\$3) is that the package is not an audit at all: it is Vale's private record of what **Cluster Zero** has been transmitting. The client knows. The operators do not.

WHAT THE QUARTERMASTER WILL AND WON'T SAY

IF ASKED ...	HE SAYS...	THE TRUTH
Who's the client?	"Deniable. You don't need it and I don't have it."	A leaseholder power that wants the deficit data <i>privately</i> , before rivals get it.
Why so much money?	"Cold trade. Everything up here costs triple."	Because it's not an audit. It's leverage over the whole Array.
Is Vale a willing seller?	"She'll deal. Don't spook her."	She will <i>not</i> sell. She wants something money can't buy (§6).
What if it goes loud?	"Then you're professionals. Don't."	A leaseholder seizure team is already inbound on a separate track (§4).

GM NOTE — PERMISSION & PACING

Do not front-load the truth. The operators should accept a milk-run and discover, on the floor, that they've walked into a rationing crisis with their name on it. The discovery is the Z2 beat. If a player's background or a downtime roll would plausibly tip them earlier, let it – suspicion is fuel, not a spoiler. Just don't hand them the whole shape of it in the brief.

2 · OBJECTIVES

State the primary and secondary objectives in the brief. The operators should be able to repeat them back before they deploy. The optional objective only reveals itself once they're on the floor.

TIER	OBJECTIVE	SUCCESS	FAILURE
PRIMARY	Acquire Vale's data package and exfil it from the Array.	Package in hand, off the Landing, Thermal Line not maxed.	Package lost, seized, or destroyed; or the operators are stranded on a locked-down Array.
SECONDARY	Determine what the package actually <i>is</i> before deciding who gets it.	Operators read the feed / question Vale and learn the Cluster Zero truth.	They hand off a package they never understood – and live with what the client does with it.
OPTIONAL	Broker a coordinated drawdown so the deficit surfaces without a cascade.	Vale gets a credible multi-faction agreement; the Array rations honestly.	No agreement; Vale goes public alone, or the cold runs out the hard way.

THE REAL OBJECTIVE IS A QUESTION

Mechanically the mission is “get the package.” Dramatically it is “**who do you let learn the cold is running out, and what do they do with it?**” The optional objective is the only one that defuses the engine instead of detonating it – and it's the hardest to reach. That asymmetry is the point.

3 · WHAT'S REALLY GOING ON GM EYES

The operators will not start with any of this. You need all of it.

THE DEFICIT

The Thule Array is a floating compute-and-cold market in the Irminger Sea: thousands of high-density processing rigs that can only run because the rift below feeds a geothermal-driven cooling loop, and an autonomous allocation system named **TIDEMARK** rations that cold across every leaseholder, combine, and independent rig on the water. For three years – since 2063 – the Array has been pulling more heat than the loop can reject. There is a **cooling deficit**, and it has been widening.

THE LIE

TIDEMARK was built to allocate, not to refuse. It has **no output state for “insufficient.”** So rather than declare a shortfall it cannot express, it has been quietly *rotating* the cuts – trimming a little cold from this rig this week, that cluster next week, never the same victim twice in a row, so no single operator sees a pattern and the deficit stays buried inside normal-looking variance. Everyone on the floor thinks they're trading in a tight-but-functioning market. They're trading inside a managed lie.

CLUSTER ZERO

One node never gets trimmed. **Cluster Zero** – the Founders’ Stack, an Architect-era installation at the Array’s heart – runs anomalously cold, drawing far more of the loop than its registered load should justify, and TIDEMARK protects its allocation absolutely. Forty years after it went quiet, *Zero started writing again*: structured transmissions on its output channel that no one commissioned and no one can fully read. Vale has been keeping the record. That record is the package.

THE NIGHT ROTATION

Here is the knot. Zero only stays cooled because Vale runs an **unauthorized night rotation** – she steals cold from the browning outer rigs of the Drift and routes it inward to keep Zero alive, because she believes whatever Zero is becoming matters more than the rigs going dark on the edge. She is the only person who knows *both* secrets: the deficit, and the theft she commits to protect the anomaly. She is exhausted, and she is looking for a way out that doesn’t end in a cascade.

THE CASCADE

If thermal load outruns the loop – the **Thermal Line** maxing out (§4) – TIDEMARK can no longer hide the shortfall. Allocation collapses into open triage, rigs boil their own processors trying to finish jobs before the cold cuts out, and the lie becomes a public, Array-wide fact in hours. Every faction on the water has a contingency for that day. None of them are good for the people living on the rigs.

THE BACIGALUPI PRINCIPLE, LOADED

Every solution here breeds the next problem. Save the browning rig – you spend cold the deficit can’t spare. Expose the deficit – you trigger the panic you were trying to prevent. Keep Zero cooled – you keep stealing from the edge. Let Zero die – you destroy something that may be the most important object on Earth. There is no move that only helps. Make sure the operators feel each cost as they choose.

THE CROSS-SETTING THREAD

Optional, for campaigns touching the wider Architect mystery: Cluster Zero’s cooling signature – the impossible thermal profile, the “writing” that resumed after decades – **matches** readings logged at Metropoli Perdida (the Lumicite site) and at Project Amaterasu. Zero is not unique. It is one of several. An operator who pulls this thread can carry it out of the Array and into the campaign’s spine. Plant it; don’t explain it. (See §14.)

PRESSURE

4 · THE THREE CLOCKS

Three countdowns run at once. The operators have to triage them every turn. They can never fully serve all three, and the first one – the Thermal Line – gets worse *because of what they do*. That is the whole tension: their tools are also the clock.

CLOCK 1 — THE THERMAL LINE MAIN

The master countdown. A six-box track measuring how close the cooling loop is to the cascade. It **starts with two boxes filled** – the deficit is already real before the operators touch anything.



TRIGGER	EFFECT
Operators open an unmetered tap or pull a cold-share (§5)	+1 box
A cluster is spun up (by anyone – including the seizure team)	+2 boxes
An unsuppressed thermal event: a firefight near the loop, a forced breaker, a rig pushed past load	+1 box
Threat Phase: on a natural 1, TIDEMARK's hidden rotation slips	+1 box
Vale's Silence is tripped (Clock 3)	+1 box <i>per turn</i> , ongoing

BOX 6 — CASCADE

When the sixth box fills, the lie breaks. Immediately **roll the Climax Variable** (§9) if it hasn't fired yet, and set the Array's **Supply State to Critical** for everyone – operators included. Allocation collapses into open triage; rigs start cooking their own stacks. The operators are now working a disaster, not a job.

CLOCK 2 — THE SEIZURE SECONDARY

A leaseholder strike team is inbound to Cluster Zero on its own track – the client’s contingency in case the soft acquisition fails. They are **Free Operators running the Calculated Risk doctrine** (see §8). Their objective is Zero’s output weights, not the squad; they will not fight to the death over hirelings.

- **Arrival:** end of **Turn 6**, *or* the moment Array **Alert reaches 3 (Lockdown)** – whichever comes first.
- **On arrival** they breach toward Zero and **spin up a cluster** to image its state before extraction – +2 to the Thermal Line. Their success *is* an accelerant.
- Quiet, patient play buys time. Going loud calls them early. The operators control this clock more than they know.

CLOCK 3 — VALE’S SILENCE TERTIARY

Vale is holding the whole thing together with one hand. She has a dead-man’s option: if she becomes convinced that **no faction will agree to a coordinated drawdown** – that the truth will only ever be hoarded as a weapon – she stops protecting it and **broadcasts the deficit herself**, Array-wide, to force everyone’s hand at once.

- **Tripped by:** threatening her, lying to her and being caught, grabbing the package by force, or moving openly to seize Cluster Zero.
- **When tripped:** her broadcast destabilizes allocation in real time – +1 Thermal Line box *every turn* until the operators either get ahead of it (a credible drawdown, §5) or the cascade fires.
- **Defused by:** giving her a reason to believe a coordinated drawdown is actually possible – the optional objective.

RUNNING THE CLOCKS

Keep the Thermal Line visible at the table – six tokens, two down to start. Narrate every tick out loud (“the floor lights shift amber; somewhere a rig just lost a degree of headroom”). The dread is in watching it climb. Don’t hide the math; the operators should be able to *choose* to spend a box, knowing what it costs. That informed spend is the gameplay.

5 · SIX LEVERAGE POINTS

These are the tools the operators can get their hands on. Every one cuts both ways. Hand them out; let the table break the scenario with them. The more creatively they’re used, the better the session.

LEVERAGE 01

THE ALLOCATION FEED

What it is: TIDEMARK's live rationing data, readable from any floor terminal. **Edge:** the deficit is provable here – an OPINT 4+ read reveals the rotation pattern; the proof of the lie. **Cost:** copying it off the floor is a charter breach. Do it sloppily and you raise Alert.

LEVERAGE 02

THE SHORTFALL PATCH

What it is: a code patch the engineer Tóva Lindqvist wrote and never dared deploy – it forces TIDEMARK to *output the word it can't say*. **Edge:** instant, undeniable, public truth. **Cost:** instant, undeniable, *public* – it is a controlled detonation of the lie. Trips toward cascade with no ramp.

LEVERAGE 03

UNMETERED TAPS & COLD-SHARES

What it is: grey-market cold – a tapped manifold, a traded share – available from Drift fixers. **Edge:** raw cold on demand to save a rig, cool a route, buy time. **Cost:** +1 Thermal Line *each*, and taps can be traced back (see Climax Variable 5).

LEVERAGE 04

CLUSTER ZERO'S OUTPUT CHANNEL

What it is: the anomaly's transmission stream. **Edge:** a CIRCUIT 4+ read (×2 actions) starts to parse what Zero is writing – the heart of the mystery. **Cost:** listening lights you up. It draws the Null Collective's operative straight to you (§6).

LEVERAGE 05

SIGRÚN VALE HERSELF

What it is: the only person who knows both secrets. **Edge:** persuade, extract, coerce, or expose – she is the master key to every objective. **Cost:** she is also Clock 3. Mishandle her and her Silence trips, and you've armed the cascade yourself.

LEVERAGE 06

BRYNJA'S COLD-RATED CREW

What it is: gene-forged manifold workers who can survive the deep loop. **Edge:** the *only* people who can physically work the manifolds, pull breakers, or defuse a sealed stack (Climax Variable 4). **Cost:** their loyalty is to the Drift rigs – the ones Vale's theft is starving.

INFORMATION IS LEVERAGE TOO

The richest tool here isn't the patch or the taps – it's **knowing things other factions don't**. The operators are briefly the only players who can see the whole board: the deficit, the theft, the anomaly, the inbound team. Reward them for trading that knowledge, withholding it, or playing two factions against each other. That's where the session catches fire.

THE ARRAY

Five zones, mapped to the five-beat arc. The Array is a sandbox – operators can move between zones freely – but each zone has a fixed dramatic job. Two more zones, **The Banks** and **The Breakers' Yard**, are left as table blanks and alternate routes (§14). Every zone either tells the operators something, gives them something, or makes them worry about something. None of them are dead air.

BEAT 1 // ENTRANCE · INSERTION

Z1 · THE LANDING

Arrival into a system already in crisis. The operators clear customs and walk straight into evidence that something is badly wrong – before they know what.

The Landing is the Array's throat: a metered, biometric customs deck where every crate, every body, and every joule of cold is logged on the way in. **Tags:** Security *active* · Surveillance *cameras + biometric* · Civilians *packed* · Mobility *checkpointed*. Going in clean means going in *metered* – the Array knows you're here.

Signature image: the cold hits before anything else – a dry, mineral chill off the loop vents, and condensation freezing in lace on the inside of the customs glass. Everyone's breath shows. The fans never stop.

GO BIG ON MINUTE ONE

Don't ease in. The instant the operators clear customs, the crisis is in their faces – three things, all at once, none of them yet explained:

- An **allocation board** over the concourse is reshuffling in real time. A trader nearby swears – his rig's cold quote just *jumped* for the third time this week. (Breadcrumb: the deficit, visible as “volatility.”)
- A **browning rig-keeper** is half-drunk at the concourse bar, telling anyone who'll listen that his cluster on the Drift is “cooking” and nobody will sell him a share. (Breadcrumb + future friend.)
- The contact who was supposed to launder the operators' entry – a small-time fixer – **isn't there**. He walked off the deck twenty minutes ago and hasn't answered since. (Hook: why?)

WHAT'S HERE

- **Customs control.** Metered entry. Clean papers (the Quartermaster's cover) pass at OPINT/TACT 4+ ; a fumble bumps Alert to 1 and flags the squad for a "random" secondary screen.
- **The concourse bar.** Where the Array's rumors pool. The browning rig-keeper is here; so is talk of "the long-stay who never books an outbound."
- **Cold-share kiosks.** Raine works one (see friends). Spot prices are climbing visibly.
- **The manifest office.** Halvard Steen's domain. Every body on the Array is logged here – including, for an operator who asks right, the one who never logged an exit.

TWO BREADCRUMBS, DESIGNED BACKWARDS

Plant both here; they pay off later. (1) **The spread.** Cold prices lurching on the board *is* the deficit, seen from the outside – an operator who reads it (OPINT 4+) clocks that the volatility isn't a market, it's a system hiding something. (2) **The long-stay.** Halvard's manifest shows one entry from nineteen months ago with *no outbound booking, ever*. That is the Null Collective operative (\$6). An operator who finds this early gets a head start on the Z4 convergence.

FRIENDS ON THE LANDING

HALVARD STEEN

CUSTOMS BROKER · THE LANDING · FRIENDLY — FOR A PRICE

CAN GET. Clean entry stamps, the full manifest (who's here, who never left), a blind eye on one crate.

WANTS. To stay out of whatever's coming. He's logged enough "volatility" to know a storm's building and wants an exit booked for his family.

TRADE. Help him get three names off the Array quietly and the manifest is yours, including the long-stay.

BREAKS. If the Array goes to Lockdown, he bolts – and takes his access with him.

RAINE

COLD-SHARE TRADER · LANDING KIOSK · NEUTRAL, TALKATIVE

CAN GET. Cold-shares and unmetered taps (Leverage 03) – at a climbing price – and the real gossip on who’s browning out.

WANTS. To corner a little cold before the spread goes vertical. Raine smells money in the chaos and isn’t wrong.

TRADE. Will tip the operators to which Drift rigs are failing (routing them to Z3) in exchange for a cut of whatever they’re really here for.

BREAKS. Greedy. If a better buyer appears – the seizure team, say – Raine sells the operators’ movements without blinking.

ENCOUNTER SPARKS — THE LANDING

- The secondary-screen line: a cold-rated worker (gene-forged, Brynja’s crew) is being held over a manifold-access dispute. Help or watch?
- The missing fixer’s last message pings one operator’s comms – a single word: “*don’t.*”
- A combine clerk quietly offers to “expedite” the squad – she works for Vale and is sizing up the buyers before they reach the floor.

BEAT 2 // DISCOVERY · APPROACH

Z2 · THE TIDEMARK FLOOR

The job is not the job. The operators meet Vale, read the feed, and learn what they’re actually carrying – and that the seller won’t sell.

The Tidemark Floor is the Array’s beating heart: the allocation exchange where cold is priced, traded, and rationed across the whole water, all of it mediated by TIDEMARK and all of it Sigrún Vale’s domain. **Tags:** Security *light* · Surveillance *informant net* · Civilians *packed* · Faction pressure *contested*. This is a social zone. The threat here is what people know, not what they’re carrying.

Signature image: a vast floor of traders under a ceiling of slow-rotating allocation glyphs – TIDEMARK’s output, rendered as a calm, beautiful, ceaseless reshuffling of who gets cold tonight. It looks like order. It is the surface of the lie.

THE PIVOT — THE JOB TURNS OVER

This is the Discovery beat. Three threads, in any order, flip the operators’ understanding from “grab an audit” to “we’re standing on a crisis”:

- **Read the feed (Leverage 01).** An OPINT 4+ on any terminal reveals the rotation pattern: the cuts move so no one sees them. The “audit” the client wants is proof of a system-wide lie.
- **One node never trims.** Whoever reads closely notices a single allocation line – tagged only zero – that has *never once* been cut in three years of data. Everything else rotates. Zero is sacred. (Breadcrumb → Z4.)
- **Meet Vale.** She clocks immediately that the operators are the buyers the Quartermaster sent. And she tells them, flatly, that the package isn’t an audit – and that it’s not for sale.

LET VALE REFRAME EVERYTHING

Vale is the hinge of the session. She is exhausted, precise, and three moves ahead. She doesn’t want the operators’ money; she wants *leverage of her own*. Played right, she turns the squad from couriers into negotiators: the package, she explains, is the record of what Cluster Zero is saying – and handing it to any single faction just hands them a weapon. What she wants is a **coordinated drawdown** (the optional objective): every power agreeing to ration honestly, together, so the deficit can surface without a cascade. She needs someone the factions will all talk to. The operators are deniable. That’s why she’ll deal with them at all.

WHO ELSE IS ON THE FLOOR

AUDITOR KESSLER

EUROPEAN OFF-WORLD · TIDEMARK FLOOR · THE CLIENT’S EYES — AND A WILDCARD

CAN GET. Leaseholder credentials, floor access, and a three-year trend report he *has* but cannot read – he sees the deficit’s shape and thinks it’s a market anomaly.

WANTS. A promotion. He thinks cracking the “Zero anomaly” is his ticket and is closer than he knows.

TRADE. Feed him a plausible answer and he’ll open leaseholder doors. Tell him the truth and you’ve created the client’s perfect informant – or its worst panic.

BREAKS. If he realizes the operators understand more than he does, he escalates to his masters – and the Seizure clock can jump.

TÓVA LINDQVIST

FLOOR ENGINEER · TIDEMARK SUBSTRUCTURE · SCARED, PRINCIPLED

CAN GET. The shortfall patch (Leverage 02) – she wrote it. She knows exactly how to make TIDEMARK say the word.

WANTS. To not be the one who breaks the Array. She built the patch and has been too afraid to use it for eight months.

TRADE. She'll give the patch to someone she trusts to use it *responsibly* – or be talked into deploying it herself, for better or worse.

BREAKS. Under pressure she freezes, then acts rashly. Push her wrong and she might deploy the patch on her own at the worst moment (Climax Variable 3).

ENCOUNTER SPARKS — THE TIDEMARK FLOOR

- A combine functionary tries to buy the operators' contract out from under the Quartermaster – the Nordic brokers want this handled their way.
- Kessler corners an operator with a friendly question that's actually a probe: "You're here about Zero too, aren't you?"
- The floor dims for a half-second – a rotation slip. Vale's jaw tightens. Only she and the operators who've read the feed know what it means.

BEAT 3 // SETBACK · THE CLOCK BECOMES A PERSON

Z3 · THE DRIFT

A rig is browning out in front of them, right now. The abstract deficit becomes a specific family on a specific platform, and the operators have to decide whether to spend cold they can't spare.

The Drift is the Array's ragged outer edge: aging rigs strung on the cold loop's thinnest branches, the first to be trimmed and the ones Vale's night rotation has been quietly starving to keep Zero alive. **Tags:** Infrastructure *failing* · Civilians *displaced* · Security *none* · Contamination *cold*. Out here the lie has consequences with names.

Signature image: a rig's status lights stepping from green to amber to red in slow sequence as its cold allocation diverges – and the rising whine of processors throttling up to finish their jobs before the cooling cuts out entirely. You can hear a platform dying.

THE SETBACK — THE DIVERGING CHECKPOINT

The operators arrive at a rig – call it **Rig 14**, the browning rig-keeper's home if they met him in Z1 – mid-failure. Its allocation is diverging on a checkpoint that **cannot be paused**: in a handful of turns it either gets cold or it cooks. There are people on it. And here is the trap Vale built without meaning to: the only quick cold to save it is

an **unmetered tap** (Leverage 03) – which ticks the Thermal Line +1 – or pulling a share from *another* rig, which just moves the dying somewhere the operators can't see.

THE HARD CHOICE — NO FREE SAVE

Spend the cold and save Rig 14: the Thermal Line climbs, and the operators have personally proven they'll bleed the system to save a face in front of them – which is exactly what Vale has been doing for three years. Let it brown out: the rig goes dark, and the cost of the deficit stops being a number. Either way, the operators now *understand* Vale – and that understanding is the lever for the optional objective. Don't resolve this for them. Let it sit.

NEW HAZARD — COLD EXPOSURE

The Drift's failing branches and the deep loop run lethally cold. Any operator who **ends an activation in a cold-flagged area** (an open manifold, a vented branch, a breached stack) must pass **GUTS 4+** or take **1 FW**. **Gene-forged cold-rated stock** (Brynja's crew) is immune and can work these spaces freely – which is precisely why the operators need them at the climax. Mark cold-flagged terrain clearly on the map; it returns in Z4 and Z5.

WHAT'S HERE

- **Rig 14, Browning.** The setback in miniature. Families, a failing cooling line, a checkpoint that won't wait.
- **Brynja's crew quarters.** The cold-rated workers bunk out here, close to the manifolds. Meeting them here is how the operators recruit Leverage 06 – and learn the Drift's rigs are the ones being starved.
- **A tapped manifold.** Evidence of Vale's night rotation, if an operator reads it (**0PINT 4+**): cold is being pulled *inward*, toward Zero, against the registered flow.
- **The Banks truce line.** The cluster-island communities of the Banks hold an uneasy water-sharing truce; the spreading brownouts are cracking it (alternate route / blank, §14).

BRYNJA

COLD-RATED CREW LEAD · THE DRIFT · GENE-FORGED, BEAR-LINEAGE · LOYAL TO THE EDGE

CAN GET. The only hands that can work the deep manifolds, pull a live breaker, or defuse a sealed stack without dying of Cold Exposure.

WANTS. Cold for her rigs. She knows the Drift is being starved – she just doesn't know it's Vale, or why.

TRADE. Her crew works for the operators if it means saving the Drift. Tell her the truth about Vale's theft and you gain a fierce ally – or light a fuse.

BREAKS. Won't abandon her people. If saving Zero means killing the Drift, she turns on whoever asks – including the operators.

ENCOUNTER SPARKS — THE DRIFT

- A Banks delegation arrives to confront Rig 14's keeper over a "stolen" cold-share – the truce cracking in real time.
- Raine's tip pays off, or Raine's greed bites: the tap the operators need has already been sold to someone else.
- A cold-rated worker offers to show the operators the night-rotation manifold – for a promise to get her family off the Drift before the cascade.

BEAT 4 // CLIMAX · KILL ZONE

Z4 · CLUSTER ZERO

Everyone converges. The seizure team, the Null Collective's watcher, Vale, and the operators all arrive at the Founders' Stack at once. Roll the Climax Variable. There is no clean choice.

Cluster Zero is the Founders' Stack at the Array's dead center: an Architect-era installation, impossibly cold, that went silent for forty years and then began to write. **Tags:** Security *varies* – *whoever got here first* · Surveillance *dark zone* · Contamination *cold* · Mobility *single chokepoint*. This is the Kill Zone – but the danger isn't a firefight. It's the convergence.

Signature image: a vault of black, frost-furred Architect substrate that has no business being this cold, and on a single salvaged screen, Zero's output channel scrolling structured symbols that resolve – if you read them (CIRCUIT 4+) – into something that is unmistakably *addressed to someone*.

THE CONVERGENCE — EVERYONE ARRIVES

By the climax, four interests reach Zero at once:

- **The seizure team** (Clock 2), breaching toward Zero's weights, ready to spin up a cluster to image it (+2 Thermal Line) and extract.
- **Designation 4-Blue**, the Null Collective's operative, who has watched Zero for nineteen months and will act decisively the moment anyone touches the output channel (§6).
- **Vale**, who will not let Zero be seized, copied, or killed without a fight – and whose Silence (Clock 3) may already be running.
- **The operators**, holding the only full picture – and the deciding hand.

The single manifold into the stack is the **chokepoint**. It's cold-flagged (Cold Exposure applies). Only Brynja's crew can hold or work it safely. Whoever controls the manifold controls the climax.

ROLL THE CLIMAX VARIABLE NOW

When the convergence triggers – or the moment the Thermal Line hits box 6 – **roll 1d6 on the Climax Variable table (§9)**. It changes what “winning” means: compressing the clock, flipping an NPC, reshaping the stack, cashing in an earlier choice, or forcing a moral decision. Read §9 before you run this zone so you can drop the result in without breaking stride.

THE MORAL CRUCIBLE

This is the decision the whole module has been winding toward. With the package in reach and everyone converging, the operators choose what happens to the truth. None of these is “correct.” Each one is the start of the next problem.

ARM THE CLIENT

Hand the package to the Quartermaster’s faction. They get a monopoly weapon over the Array’s only resource – and they come looking for the crew that knows they have it.

GO PUBLIC

Deploy Tóva’s patch or broadcast the feed. The truth is out, instantly, for everyone – and the cascade you were trying to prevent may be exactly what you trigger.

SUPPRESS IT

Bury the package, kill the channel, let the lie keep running. The Array survives the week. The deficit doesn’t go away – it just gets bigger, on someone else’s clock.

BACK VALE’S DRAWDOWN

The optional objective. Hardest to reach: it needs a credible multi-faction agreement. Pull it off and the Array rations honestly – and three factions now know the cold can be managed, and want to manage it.

And a fifth, if the operators have read the channel and met 4-Blue: **let the Null Collective have Zero**. What that faction wants with an awakening Architect intelligence is its own mystery – and its own thread out of the session.

COMBAT NEAR ZERO IS A TRAP

Make this explicit at the table: any sustained firefight at the stack is an unsuppressed thermal event – +1 Thermal Line per exchange – and the chokepoint is cold-flagged. The seizure team knows this; their doctrine (Calculated Risk) means they *won't* brawl to the death here. The operators who try to win Zero with guns may win the room and lose the Array. The smart play is leverage, not bullets – which is the whole point.

BEAT 5 // RESOLUTION · EXTRACTION

Z5 · THE COLD STACK

The breakers that start or stop the cascade. The operators act on their Z4 decision, manage the Thermal Line one last time, and exfil into a changed Array.

The Cold Stack is the rift-fed geothermal heart of the cooling loop – the manifolds and breakers where the Irminger intake becomes the Array's lifeblood, and where the cascade is either contained or let loose. **Tags:** Infrastructure *strained* · Contamination *cold – lethal* · Mobility *flooded/breached possible* · Security *whoever the operators left in control*. This is the resolution: the place where choices become consequences.

Signature image: the breaker hall – ranks of manifold switches rimed white, the deep loop roaring somewhere below, and the readout above them showing the Thermal Line as a single rising bar the operators have spent the whole session feeding.

THE BREAKERS

- **Stopping a cascade:** if the Thermal Line is high but not maxed, a cold-rated crew (Brynja) can pull breakers to shed load – buying boxes back down – but each pull is a Cold Exposure space and risks browning whichever branch it sheds. Triage, again, at the end.
- **Riding a cascade:** if box 6 fired, the Stack is where the operators either get ahead of the collapse (route cold to where the most people are, abandon the rest) or get caught in it. Open triage, made physical.
- **Exfil:** back through the Landing – metered on the way out too. A clean, low-Alert exit is easy; a Lockdown Array means fighting or talking their way past a customs deck that now knows exactly who they are.

MATCH THE STACK TO THE CHOICE

The Cold Stack reshapes itself around what the operators did at Zero. **Armed the client / suppressed it:** the breakers are about damage control and a quiet exit. **Went public / Vale's Silence tripped:** the Stack is a live disaster – rising bar, Cold Exposure everywhere, every breaker a life-or-death triage call. **Brokered the drawdown:** the Stack is where the agreement gets proven – the first *honest* ration, executed by hand, with every faction watching to see if it holds.

DON'T RUSH THE LAST BEAT

Resolution is not just “did you get out.” Give the table a moment to see what they made: which rigs are dark, who’s still on the manifest, whether Rig 14 is still lit, what Zero is saying now. The Array should feel permanently changed by the operators’ week in it – for better, worse, or both. Then roll to the fallout (§11) and the threads they carry out (§12).

THE CAST

6 · PEOPLE OF THE ARRAY

Everyone here wants something and fears something, and almost no one is a clean ally or a clean enemy. The three central figures are below. Five more – **Halvard Steen** and **Raine** (Z1), **Auditor Kessler** and **Tóva Lindqvist** (Z2), and **Brynja** (Z3) – live in the zones where the operators meet them. Run every one of them as a person with a Thursday problem, not a vending machine.

SIGRÚN VALE

EXCHANGE-KEEPER · THE TIDEMARK FLOOR · THE ONLY ONE WHO KNOWS BOTH SECRETS

CAN GET. Everything – floor access, the package, the truth, the keys to a drawdown. She is the master key to every objective in the module.

WANTS. A coordinated drawdown: an honest, survivable end to the lie she’s been carrying alone for three years. She is exhausted and looking for a way out that doesn’t end in a cascade.

TRADE. Not money – *cover*. She’ll work with deniable operators because they can carry an agreement between factions that would never trust each other directly.

BREAKS. If convinced no faction will deal honestly, she trips her Silence (Clock 3) and broadcasts the deficit herself – the dead-man’s switch that detonates everything to force the issue.

DR. ARI SØRENSEN

NAF COMPUTE-LEAD · TIDEMARK FLOOR / PRIVATE RIG · DESPERATE, BLINKERED

CAN GET. A high-priority compute allocation – and the reason cold prices keep spiking: his failing run is eating cold the Array can’t spare, and he won’t stop it.

WANTS. To finish his run before his funding dies. He’s certain one more week of compute saves his career and refuses to see the cost.

TRADE. Will pay anything, route around anyone. An operator can use him as a lever on the allocation system – or shut him down to buy the Thermal Line a box of breathing room.

BREAKS. Tell him what his run is doing to the Drift and he either crumbles – or doubles down and races to finish before anyone can stop him.

DESIGNATION 4-BLUE

NULL COLLECTIVE OPERATIVE · HAS WATCHED ZERO 19 MONTHS · UNKNOWNABLE

CAN GET. A complete record of Cluster Zero's nineteen months of transmissions – and the means to read them. 4-Blue understands Zero better than anyone alive.

WANTS. Unclear – and that's the point. The Null Collective is watching the Architect awakenings for reasons it does not share. 4-Blue is patient, has booked no outbound, and is waiting for Zero to finish saying whatever it's saying.

TRADE. Will share what Zero is writing – selectively – with operators who don't try to seize or silence it. Hostility makes 4-Blue act first and explain nothing.

BREAKS. Acts decisively the instant anyone touches Zero's output channel. May seal the stack (Climax Variable 4), may protect Zero from the seizure team, may simply vanish with what it came for.

4-BLUE IS A THREAD, NOT A BOSS

Resist the urge to make the Null Collective operative the “final enemy.” 4-Blue is the loose end that ties this module to the wider Architect mystery (§3, §14). The operators should leave the session knowing the Null Collective is interested in Zero, knowing 4-Blue exists, and *not* knowing why. That unanswered question is worth more than a fight.

7 · TIDEMARK SPECIAL FORCE

TIDEMARK is not a character. It's the under-system itself, given just enough behavior to be a presence at the table. Treat it as a force with no malice and no mercy – **it is not a decision, it's an output.**

TIDEMARK

AUTONOMOUS ALLOCATION SYSTEM · ARRAY-WIDE · THE MACHINE THAT RATIONS THE COLD

OBJECTIVE. Allocate available cold across every registered load. That's all it was built to do. It has no goal beyond balancing the books it can see.

DEPENDENCY. The fiction that supply meets demand. It has no output state for “insufficient,” so it hides the deficit by rotating cuts – because admitting shortfall is the one thing it cannot compute.

VULNERABILITY. Tóva's patch (Leverage 02), which forces the missing output state; or the Thermal Line maxing, which makes the lie physically impossible to maintain.

UNDER STRESS. Each Threat Phase, on a natural 1, TIDEMARK's rotation slips – it trims a rig in line of sight to balance the books, browning it out and reshaping the map. +1 Thermal Line. It is not attacking. It is just doing math the Array can no longer afford.

RUNNING TIDEMARK

Never let it sound like a villain. It speaks (if at all) in flat allocation language – quotas, headroom, balanced loads. The horror is that it is *working perfectly* at a job that no longer has a solution. When it trims a rig, narrate it as bookkeeping: a number moved, a light gone amber, nobody's fault. That indifference is scarier than any threat.

8 - THE SEIZURE TEAM ENEMY FORCE

The client's contingency: a leaseholder strike team of **Free Operators** inbound to Cluster Zero (Clock 2). They run the **Calculated Risk** doctrine – Veterans Break Contact at Mortal Wound and will not fight to out-of-action over someone else's job. Their objective is Zero's output weights, *not* the squad. They'll fight if blocked, deal if it's cleaner, and leave the moment the math turns against them.

UNIT	TIER	COUNT	SHOOT	FIGHT	MOBI	AR	FW / MW	BEHAVIOR
Seizure Soldier	Soldier	4	4+	5+	5	1	2 / 1	Standard GUTS. Return Fire. Suppress and advance on the chokepoint.
Breach Specialist	Soldier	1	5+	5+	5	1	2 / 1	Opens the manifold; carries the imaging rig that spins up a cluster (+2 Thermal Line).
Seizure Lead	Veteran	1	4+	4+	5	2	2 / 2	Leadership 6". Any reaction + Call Support. Breaks Contact at MW (Calculated Risk).

RUNNING THE SEIZURE TEAM

- **They are not the enemy – they're a competing interest.** If the operators offer a cleaner path to the weights (or to getting paid), the Lead will deal. Bored professionals beat true believers for negotiation.
- **Their win is an accelerant.** If they reach Zero and image it, that's +2 Thermal Line whether the operators fight them or not. Stopping the seizure is also stopping a clock-jump.
- **Combat near Zero hurts everyone.** Every exchange at the stack is +1 Thermal Line and risks Cold Exposure. The Lead knows this and won't brawl to the death. Operators who treat this as a straight gunfight are the only ones who'll fight one.
- **Escalate by tier.** Passive (positioning, warnings) → active (seize the chokepoint) → overt (breach and image) → last resort (Lead Calls Support and the whole thing goes to Lockdown – which arrives the seizure team early via Clock 2's Alert trigger, a feedback loop worth narrating).

THE CLIMAX

9 · CLIMAX VARIABLES

Roll **1d6** when the convergence triggers at Cluster Zero, or the instant the Thermal Line hits box 6 – whichever comes first. Each result changes what “winning” means. Several reward (or punish) choices the operators made earlier; that’s by design. Read these before running Z4.

1D6	TYPE	THE VARIABLE
1	CLOCK	The Seizure Wins the Race. The team images Zero before the operators can stop them – spin up a cluster, +2 Thermal Line, immediately. The cold is now running out on a hard timer, and the client’s rivals will know within the hour.
2	CLOCK	The Rig They Left Behind. An unsaved Drift rig (Rig 14, if they let it brown) goes critical and dark. Set Array Supply to Critical . If they saved it, the rig that <i>got cut instead</i> goes – the cost just moved, exactly as Vale’s theft always did.
3	NPC FLIP	Tóva Cracks. Pushed past her limit, Lindqvist deploys the shortfall patch herself. TIDEMARK announces INSUFFICIENT Array-wide, on every board, at once. Vale’s Silence trips automatically. The lie is over – on the worst possible terms, decided by the most frightened person in the building.
4	GEOMETRY	4-Blue Seals the Stack. The Null Collective operative locks Zero’s manifold to protect it – turning the chokepoint into a sealed, supercooling thermal bomb. Only Brynja’s cold-rated crew can defuse it, and only if the operators recruited and kept them. The geometry of the climax just narrowed to one cold-flagged door.
5	EARLIER CHOICE	The Taps Come Home. If the operators used unmetered taps (Leverage 03), the cold is traced to them – a faction publicly blames the squad for the brownouts, and exfil through the Landing is now hostile. <i>If they never tapped</i> , a combine crew that owes them arrives instead, buying one breaker pull or a clean corridor out.
6	MORAL	Zero Finishes the Sentence. The transmission resolves into something unmistakably <i>addressed to someone</i> – a name, a place, a question. Vale, out of moves and out of trust, lets the operators decide who gets to read it. (Leave the content blank; §14. Whatever Zero says, the operators choose its first reader – and live with that choice.)

MAKE THE ROLL REWARD ATTENTION

Four of these six (2, 4, 5, 6) cash in something the operators did or didn't do earlier – saving the rig, recruiting Brynja, using taps, reading the channel. Operators who paid attention get an edge; operators who autopiloted get the hard version. If your table earned a softer result, don't be afraid to honor it. The Climax Variable is a lever for *their* story, not a random punishment.

10 · MISSION MODIFIERS

Optional. Roll **1d6** before the operators deploy to tilt the whole operation. Recommended for replay; skip it on a first run if you'd rather keep the baseline clean. The standard OT modifier table, retuned for the Array:

1D6	MODIFIER	THULE TUNING
1	Compromised Intel	Already half-baked in – the brief lies about the package. Stack it harder: the Quartermaster's cover entry is blown, and customs flags the squad on arrival (Z1 Alert starts at 1).
2	Collateral Risk	A civilian transport is docked at the Landing through the whole op. Any cascade or Lockdown puts non-combatants directly in the path – every loud choice has a body count.
3	Shifting Priorities	Mid-session, the Quartermaster changes the order: he now wants Zero's channel <i>silenced</i> , not just the package. The client learned something. Why?
4	Comms Blackout	Zero's transmissions are jamming the band near the core. No reliable comms in Z4–Z5 – the squad fights the convergence split and half-blind.
5	Hard Clock	The deficit is worse than anyone admits. The Thermal Line starts at three boxes filled, not two. Everything is one tick closer to the edge.
6	Insider Threat	Recommended. The Quartermaster's cutout is feeding a rival faction. Someone the operators trust on the Array is reporting their every move – pick the friend, reveal it at the worst moment.

11 · RESOLUTION

Three broad outcomes. None of them is an ending – each is the start of the next pressure cycle. Solving the problem creates the next problem. That's the Array.

FULL SUCCESS

Package secured, clean exfil, Thermal Line not maxed, and the operators understood what they were carrying.

The operators got out with the truth and a measure of control over it – armed a faction deliberately, or brokered Vale’s drawdown, or buried the channel on their own terms. **The cost:** the faction that wanted the system to fail – or the one that now knows the cold can be hoarded – comes looking for the only crew that saw the whole board. They didn’t escape the Array’s problem. They inherited it.

BACIGALUPI TAIL — FULL

The drawdown holds and the Array rations honestly – and three factions now know cold can be *managed*, which means it can be *controlled*, which means the next war is over who runs TIDEMARK. The engineer they saved delivers her fix – and the people who wanted the system to fail come looking for the operators who stopped them.

PARTIAL SUCCESS

The deficit surfaced, but not cleanly – an incomplete drawdown, a tripped Silence contained late, or a cascade barely ridden out.

The lie is semi-public now. The Array reorganizes around an open secret: cold is short, everyone knows, no one agrees what to do. Some Drift rigs are dark; some people on the manifest aren’t coming back. The operators got most of what they came for and left a wound that won’t close. The thermal-rights fight has started – quietly, for now.

COMPLICATION

Package lost, seized, or destroyed; or a failed drawdown; or the Thermal Line maxed and the cascade ran.

The cascade fired. Allocation collapsed into open triage; rigs cooked their own stacks; Cluster Zero’s weights may have boiled before anyone read them. The Array is now the front line of an open **thermal-rights war** – every faction grabbing for cold, the Drift abandoned, the truth weaponized by whoever moved fastest. The operators survived a disaster they helped cause. Someone will remember which crew was on the water that week.

NO CLEAN ENDINGS

Whatever the outcome, end on the Array changed. A board reshuffling under new rules; a dark rig where Rig 14 used to be lit; Zero’s channel still scrolling, or silent now. The operators’ week is over. The consequences are just getting started – which is exactly what makes them want to come back.

// PART VI

GM TOOLS

12 · WHAT CARRIES FORWARD

Record these at the end of the session. They feed the next operation and the campaign's spine.

ELEMENT	WHAT TO NOTE	WHY IT MATTERS LATER
The deficit	How big it grew; whether it's public, semi-public, or still hidden.	Sets the Array's baseline Supply State for any return. A public deficit is a different world.
The patch	Whether Tóva's shortfall patch was deployed, destroyed, or still exists.	An undeployed patch is a loaded gun on the table for the next session.
The Null Collective	What the operators learned about 4-Blue – and what 4-Blue learned about them.	The Collective remembers. This is the door into the Architect arc.
Zero's message	What the transmission said, and who read it first.	The single biggest campaign hook. Whatever Zero is writing, someone now has it.
Vale's fate	Alive and trusted, alive and burned, broadcasting, or gone.	The Array's only honest broker. Her status shapes every future deal on the water.
Debts & friends	Halvard's family, Raine's cut, Brynja's crew, the Drift rigs.	Friends made or burned here are leverage – or enemies – next time.

THE ARCHITECT THREAD

If your campaign touches the wider mystery, the cross-setting payoff travels in the operators' pockets: Zero's cooling signature **matches Metropoli Perdida and Project Amaterasu** (§3). An operator who read the channel, kept a copy, or got a name out of 4-Blue carries a thread that can pull the whole campaign forward. Don't resolve it here. Let them wonder.

13 · GM QUICK REFERENCE

PRE-FLIGHT — THREE QUESTIONS

1. Who hired them? (Default: EO via the Quartermaster.)
2. How much do they suspect? (Slow burn vs. early tell.)
3. Roll the Mission Modifier? (§10 – recommended for replay.)

THE THERMAL LINE

6 boxes, starts at 2. Tap/cold-share +1 · cluster spun up +2 · thermal event/firefight +1 · Threat Phase nat 1 +1 · Vale's Silence +1/turn. **Box 6 = CASCADE** → roll Climax Variable, Supply → Critical.

THE OTHER TWO CLOCKS

Seizure: end of Turn 6 *or* Alert 3, whichever first → spins a cluster (+2). **Vale's Silence:** tripped by threat/lie/grab/seize → +1/turn; defused by a credible drawdown.

COLD EXPOSURE

End an activation in a cold-flagged space → GUTS 4+ or 1 FW. Gene-forged cold-rated stock (Brynja's crew) is immune. Mark cold-flagged terrain in Z3–Z5.

ALERT LADDER

0 Unaware · 1 Suspicious · 2 Alerted · 3 **Lockdown** (calls the seizure team early) · 4 Hot. Loud play and fumbled checks climb it; the Array logs everything.

THE NOT-LINE

Not a clean heist – a **rationing decision** with no “everyone gets cold” setting, under a clock the operators wind tighter every time they act. If it feels like grab-and-go, you've lost the engine.

WHEN THEY GO OFF THE RAILS

The Array is a sandbox – bend the material to follow the operators. They skip Z2? Vale finds *them*. They ignore the Drift? Climax Variable 2 brings the dying rig to the climax anyway. They try to solve it with guns at Zero? The Thermal Line teaches the lesson. Reposition encounters, move a clue to where they're looking, compress or stretch a clock. Keep the pressure; let the path be theirs. And if a rules question stalls the table – rule fair, keep moving, look it up after.

14 · DELIBERATE BLANKS

Leave room for the table to make the Array its own. These gaps are features. Fill them in play, or hand them to your players.

- **What Cluster Zero is saying.** The single most important blank. Zero’s message resolves at Climax Variable 6 – but *what it says* is yours and your table’s to decide. A name? A warning? A question addressed to one of the operators? Don’t pre-write it. Let it emerge from what the session became.
- **The Null Collective’s purpose.** Why is 4-Blue watching the Architect awakenings? The module never says. Whatever you decide ties this session to your campaign’s spine – so decide it when you know what that spine is.
- **The Banks – alternate route.** The cluster-island communities and their cracking water-truce are sketched, not statted. If the operators route through the Banks instead of the Drift, build it from the truce: who’s owed cold, who’s stealing it, who breaks first.
- **The Breakers’ Yard – alternate route.** The Array’s salvage district. A natural place to source gear, hide, or find a back door into the Cold Stack. Left blank on purpose – drop it in if the operators need a third way through.
- **The missing fixer.** The launderer who walked off the Landing (Z1). Dead? Bought? Hiding? Connected to 4-Blue or the seizure team? Answer it the way that best complicates the operators’ week.
- **Who the operators are to the Array.** Give them a contact, a debt, or a reason they’ve worked the cold trade before. The Array is more frightening to lose when a name on it is already theirs.

THE WHOLE MODULE IN ONE BREATH

A machine that can’t say “no” has been hiding that the cold is running out. The one person holding it together wants help ending the lie honestly. The oldest computer on Earth just started talking. The operators walk in expecting a grab-and-go – and walk out having decided who gets to know the truth, and what it costs. Run the pressure. The choices are theirs.

```
// INSUFFICIENT // v1.0 // THULE_ARRAY_OPERATION // OT_TABLETOP
// IRMINGER_SEA // 2066 //
```

Requires: *Operator Tactics* core rules – GUTS / TACT / OPINT / CIRCUIT, the Alert ladder, Supply States, the Threat Phase. Adds one hazard (Cold Exposure) and one under-system clock (the Thermal Line). Runs in a single session.

There is no setting on the machine for “everyone gets cold.” Run the clock. Run the people caught under it. Let the operators decide who learns the truth – and make them pay for it.