MAR DE ORO | 7202 POST SUNDERING ERA

# HOW AIRSHIPS WORK

*Lift, motion, and engineering in the Early Age of Flight*


JOHNNY CROWN ✦ MAR DE ORO

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*“Éterlumin makes flight possible. Discipline keeps it possible.”*

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# How Airships Work

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An airship is not a sea vessel with a miraculous engine fitted beneath it.

Every part of the vessel must be designed for flight. Its frame carries forces an ordinary hull never encounters. Its cargo must be balanced around a system that changes how weight passes through the ship. Its sails must move a mass that Éterlumin can lighten but cannot erase.

An airship is still made of timber, metal, canvas, rope, guns, stores, and people.

It still has momentum.

It still produces heat.

It still breaks.

Éterlumin changes one part of the problem. Discipline, calculation, and ordinary mechanics govern the rest.

> The drive can reduce weight. It cannot abolish mass.

That is the first rule taught to every airship engineer.

I FOUNDATIONS OF FLIGHT

# What This Chapter Represents

The learned world does not possess a complete theory of Éterlumin.

Engineers can measure its behaviour, reproduce its effects, and calculate safe operating limits. They disagree about what the substance ultimately is and where the forces produced by a working drive are carried.

This chapter presents the common engineering understanding of 7202 Post Sundering Era (7202 PSE).

Where the measurements are settled, it says so.

Where the theory remains disputed, it does not pretend otherwise.

# How to Use This Chapter

You do not need to master this entire chapter to use airships in play.

For the essentials, read Five Things Every Sailor Knows and In Plain Language. Those sections are enough to understand what an airship can do, why it is dangerous, and what a crew notices when something goes wrong.

Game Masters can then move directly to Shipboard Culture, Setting Up an Airship Map, and Modelling Airship Failure in Play.

The remaining engineering sections are reference material for readers who want the deeper explanation. They are not required study.

RULES CONTRACT

**SPECULATION**
Only Éterlumin and Fortera

**ENERGY**
Energy and momentum are conserved

**MASS**
Effective weight can change; inertial mass cannot

**THRUST**
No reactionless thrust; no free energy

# Five Things Every Sailor Knows

An airship crew does not need to agree on natural philosophy to remain alive.

Every trained sailor understands five practical truths.

## Éterlumin must be activated

Stored Éterlumin does not lift a ship. It must be transferred into prepared chambers and placed under controlled pressure, temperature, and pulse.

## The drive reduces downward load

A working drive makes the vessel easier to support, but does not remove its substance or inertia.

## Lift and propulsion are separate

Éterlumin holds the vessel aloft. Sails provide ordinary propulsion.

## Every force must go somewhere

Turns strain the frame. Guns produce recoil. Climbing produces heat. Collisions remain violent.

## Flight depends on balance

Pressure, temperature, cargo, altitude, weather, field conditions, and structural alignment must remain within tolerance.

The sky allows no argument with any of them.

## In Plain Language

> Éterlumin makes a ship easier to hold in the sky. It does not turn the ship into a feather. The vessel remains massive, difficult to stop, and dangerous in a collision. Sails move it forward. Separate lift banks keep it balanced. Hard manoeuvres create heat and strain. Most disasters begin when one part of that balance stops agreeing with the others.

# Éterlumin and Its States

Éterlumin is a luminous, Fortera-responsive medium extracted from sources beneath the earth and refined into grades suitable for transport, signalling, machinery, and flight.

Common people usually call it a gas.

Engineers often call it a medium.

Scholars use more elaborate language and disagree among themselves.

Éterlumin behaves like matter. It possesses measurable pressure, mass, temperature, and volume. It can be pumped, cooled, stored, contaminated, vented, and refined.

It also responds to things ordinary gases do not.

It answers pattern, calibrated pulse, resonance, disturbance, and nearby Fortera activity.

## The modern three-state classification

Assay offices and engineering schools recognise three practical states.

## Inert

Inert Éterlumin is dense, stable, and comparatively safe.

It is the form carried in storage tanks and transport cylinders. A sound vessel of properly refined inert Éterlumin should remain cold, quiet, and unresponsive.

Inert Éterlumin is not poisonous by nature.

It can still kill.

A substantial leak inside a closed compartment may displace breathable air. Flames may weaken or go out. People inside may become confused, lose consciousness, and suffocate without showing the signs associated with poison.

## Semi-state

The semi-state lies between inert storage and stable activation.

Éterlumin in this condition has begun to answer but has not settled into a controlled working response.

It may produce:

- irregular buoyancy
- unexpected pressure changes
- vibration or singing
- instrument drift
- unusual light
- heat or sudden cooling
- resonance with nearby machinery

The semi-state is necessary during controlled activation.

Outside controlled activation, it is a warning.

## Active

Active Éterlumin is luminous, light, volatile, and flammable.

Within a properly tuned drive, active Éterlumin contributes ordinary buoyancy, the same basic effect that allows a balloon to rise, because it is lighter than the surrounding air. It also produces the measured effect that reduces the downward load transmitted by the vessel.

That second effect makes the present airship fleets possible.

Lifting-gas buoyancy alone could not carry a timber warship, its artillery, stores, crew, rigging, armour, and machinery without a gas envelope far larger than the vessel itself.

Active Éterlumin provides both a light lifting medium and a response that allows the vessel to carry its weight differently.

## Why older manuals describe only two states

Older field memoranda often divide Éterlumin into two conditions:

- quiescent, or sunk breath
- quickened, or sky breath

Under that older classification, the semi-state was treated as an incomplete transition, a contaminated response, or a failure to quicken properly.

The older language remains common among sailors and experienced mechanics.

A veteran may speak of a chamber being quickened while a university engineer records the same process as movement through the semi-state into stable activation.

Both describe the same observed sequence.

# What the Drive Actually Changes

A vessel has both mass and weight.

They are related, but they are not the same thing.

Mass determines how strongly the ship resists changes in motion. It governs momentum, recoil, collision, and the effort required to turn, speed up, or stop.

Weight is the downward force produced by gravity.

A working Éterlumin drive reduces the downward load carried through the vessel. It does not remove the ship's mass.

A lightened frigate therefore remains capable of:

- tearing apart a dock during collision
- carrying momentum through a turn
- throwing unsecured cargo across a deck
- recoiling when its guns fire
- resisting attempts to accelerate or stop it
- crushing a smaller vessel on impact

A scale may show that an active chamber has become easier to support.

Push the same chamber sideways and its mass must still be accelerated.

This distinction is the foundation of airship engineering.

## The prevailing explanations

Most engineers agree that active Éterlumin, under a calibrated Fortera pulse, alters how the vessel's downward load is transmitted through the drive and hull.

They disagree about what this means.

One school claims that effective weight is reduced.

Another argues that the load is redirected through an unseen field.

A third uses the mathematical language of coupling between tuned matter and an underlying field. Its supporters call this the lattice model, though no instrument has directly observed the supposed lattice.

All three models can predict ordinary flight within useful tolerances.

None has yet explained every source, rupture, lunar variation, or contradictory response.

Captains care less about which school is correct than whether the gauges agree.

# The Éterlumin Drive

Sailors call the entire lift installation the Éterlumin drive.

The name can be misleading. The drive is not one engine. It is a connected system of chambers, pipes, rods, cooling apparatus, structural members, and controls.

A typical installation includes:

- inert storage tanks
- transfer pipes and pumps
- active chambers or lift-lungs
- pressure regulators
- cooling lines
- vents and emergency releases
- crystal resonators
- calibrated Fortera rods
- gauges and reference instruments
- isolation valves
- trim controls
- connections to the sky-keel

Éterlumin is not burned to create lift.

The active chambers contain no furnace producing upward thrust.

Activation is a controlled change of state maintained through pressure, temperature, and repeated pulse.

Pumps, cooling apparatus, and auxiliary mechanisms support the Éterlumin drive. They do not produce the Fortera response themselves.

# Lift Chambers and Lift-Lungs

Different builders arrange their active Éterlumin in different ways.

## Internal chambers

Smaller vessels and ships built around distributed support may use several rigid chambers inside the hull.

Each chamber serves a limited section of the vessel.

This permits damaged areas to be isolated, but the chambers consume space that a sea-going ship would use for cargo, stores, crew, or guns.

## Lift banks

Engineers group connected chambers, rods, regulators, and controls into lift banks.

A vessel may have forward, aft, port, and starboard banks. Larger ships divide these areas further.

The banks allow the engineering crew to adjust support across the vessel.

If the bow is too heavy, the forward banks can be increased or the aft banks reduced. If the vessel lists, the two sides can be brought back toward agreement.

A bank is not independent of the hull around it.

Every correction creates load elsewhere.

## Lift-lungs

A lift-lung is a larger active assembly containing one or more flexible inner bladders.

The bladder contains the active medium. An outer frame protects it, manages pressure, and carries the resulting forces into the ship.

Large warships may use paired or split lift-lungs. Separate sections provide greater capacity and some redundancy.

Their expansion and contraction can resemble breathing.

The resemblance is mechanical.
Sailors are free to disagree.

Figure 1 shows a representative lift chamber and test apparatus. Exact fittings vary by shipyard, vessel, and experimental purpose.

**FIGURE 1** Éterlumin lift chamber and test apparatus. Activation is a controlled change of state maintained through pressure, temperature, and calibrated pulse.

# The Sky-Keel

The sky-keel is the principal structural spine of an airship.

A sea-going keel resists bending along the length of the hull.

A sky-keel must also:

- carry forces from the active chambers
- keep the lift banks aligned
- resist twisting and roll
- distribute changing loads into the frames and ribs
- survive recoil
- tolerate heating and cooling
- remain continuous while the hull flexes

The entire ship is built around it.

A sky-keel cannot safely be bolted beneath an ordinary vessel. The forces must pass through the hull by prepared load paths.

An ordinary ship might be made to rise briefly under experimental activation.

Its frames would then begin carrying loads for which they were never designed.

The result would probably be distortion, splitting, or catastrophic torsion.

## Why continuity matters

Support must remain reasonably even along the vessel.

If the bow receives more support than the stern, the vessel pitches.

If the port side receives more than starboard, it rolls.

If the centre of support moves away from the centre of the ship's mass, the hull begins to twist between them.

Small differences can be corrected.

Large differences can tear the vessel apart.

# Preparing for Flight

A normal launch begins before the first chamber is activated.

## The vessel is weighed

The sailing master, quartermaster, and chief engineer calculate the current load.

They account for:

- crew and passengers
- guns and ammunition
- provisions and water
- cargo
- boats
- spare parts
- machinery stores and lubricants
- ballast
- stored Éterlumin
- temporary equipment

The position of each load matters.

A heavy gun or cargo crate placed in the wrong part of the ship may force one lift bank to work harder than the others.

## Cargo is secured

Reduced weight does not mean reduced inertia.

A loose cannon remains a cannon.

Once it begins moving, the drive does not make it easier to stop. Cargo, shot, tools, boats, and machinery must be restrained before activation.

## The drive is filled

Éterlumin is transferred from inert storage into the active chambers.

Pumps establish the required pressure. Cooling systems bring the medium toward its working range.

The engineering crew compares each chamber against reference instruments.

A singing cylinder, warm valve, drifting compass, or irregular gauge is cause to stop.

## Activation begins

A calibrated Fortera pulse is introduced.

The Éterlumin passes through the semi-state and begins to quicken.

The drive hum rises. Pressure changes. The storm-smell appears. Metal may feel cold near expanding lines, even while other parts of the installation begin to warm.

The hull sheds its burden in stages.

## Trim is tested

The engineers compare the response of every bank.

Ballast crews shift controlled weight where required. Depending on the vessel, this may include water, shot, stores, or other prepared ballast.

The placement of fixed tanks is included in the vessel's original trim calculations. Routine correction is made through movable ballast, secured cargo, and controlled changes between lift banks.

## The vessel is released

Mooring lines remain secured until the drive has reached stable flight trim.

The lines are then released in sequence.

The ship rises clear of its cradle, dock, or water.

Sails take over the task of forward movement.

# The Persistence of a Pulse

Older memoranda report that quickened Éterlumin can carry an imparted motion for five to eleven beats before the effect fades unless renewed.

The persistence varies with the charge, chamber, calibration, and kind of motion imparted.

Engineers therefore do not assume that cutting a pulse ends every response immediately. Residual motion or support may remain for several beats, but its duration and direction must be read from the instruments.

This gives a crew time to bridge a brief interruption.

It can also leave a damaged chamber carrying the final pattern it received.

A valve may be closed while the bank still carries load.

A severed command line may leave the chamber answering a command that nobody can now change.

The engineering crew must anticipate the fading response rather than assume every instruction takes effect at once.

II FLIGHT, MOTION, AND FAILURE

# Climbing

To climb, the crew reduces the vessel's effective downward load.

The lift banks are quickened in measured steps. Upward support exceeds the remaining downward force, and the ship begins to rise.

The engineers must then arrest the climb before the vessel passes its intended altitude.

A hard climb can:

- press the crew against the deck
- strain the sky-keel
- shift cargo
- change chamber pressure
- overheat tuned metal
- damage spars and rigging
- consume the reserve needed for correction

The ship remains massive throughout the manoeuvre.

A competent captain asks for the smallest change that will produce the required ascent.

# Descending

To descend, the engineering crew reduces drive support.

The vessel's effective weight increases and it begins to fall.

A controlled descent is a normal manoeuvre. The crew retains enough active reserve to slow the vessel before reaching the intended altitude.

# Diving

Warships can descend rapidly by reducing support in stages.

This converts altitude into speed.

The manoeuvre does not erase the energy of the fall. The vessel gains downward momentum and must later overcome or redirect it.

Recovery requires:

- functioning lift banks
- sufficient reserve
- cooling capacity
- an intact sky-keel
- room below the vessel
- control surfaces capable of answering
- a crew prepared for the returning load

When lift is increased again, every gun, frame, tank, and body tries to continue downward.

The drive changes the vessel's motion.

The structure must survive the correction.

This is the principle behind the heavy attack descent used by Wolfhound. Height becomes speed. Recovery remains an engineering act, not an exemption from gravity.

# Altitude and the Operating Ceiling

Every airship has a maximum useful altitude.

The exact height depends on load, weather, design, Éterlumin grade, cooling, and the condition of the drive.

Several limits tighten together.

## Ordinary buoyancy decreases

The active medium is lighter than the surrounding air and provides part of the vessel's support.

As the atmosphere becomes thinner, the ship displaces less mass of air. That ordinary buoyant contribution decreases.

The Fortera response must then carry a greater share of the vessel's load.

Eventually the drive reaches its safe operating limit.

## Sails weaken

Sails produce force by acting against air.

Thinner air provides less force for the same sail area and wind speed. Steering response becomes slower and manoeuvres require more room.

### Cooling becomes harder

Air carries heat away from the machinery.

Thinner air removes heat less effectively. A ship may possess enough lift capacity to climb higher but lack the cooling capacity to remain there.

### Chamber conditions change

Temperature and pressure change with altitude.

The engineering crew must continually adjust the drive as the surrounding conditions change.

Near the ceiling, the vessel has little remaining margin. A leak, sudden turn, overloaded bank, or change in weather may leave it unable to hold height.

Altitude is an advantage only while the ship can afford it.

## Propulsion

Lift holds an airship above the ground.

Propulsion moves it through the sky.

They are separate systems.

### Sails

Sails are the standard and most efficient means of sustained travel.

They require no powered plant, have few moving parts, and can move a large vessel for long periods.

An airship under sail still depends on the wind.

It may change altitude to seek a different current. It may tack or alter sail. It cannot treat weather as irrelevant.

A ship with working lift but destroyed sails may remain aloft while drifting.

RARE POWERED PROPELLERS

Most airships have none. Propellers are a closely guarded Albion innovation. Duchy engineers have fitted related systems to a few small vessels, but they remain auxiliary and exceptional rather than part of standard airship design.

Figure 2 shows a Heller prototype under sail. Its inset illustrates one exceptional arrangement for auxiliary machinery and shafting.

**FIGURE 2** Heller experimental sky-sloop under sail. Inset: internal mechanical plant and shafting driving Éterlumin pumps and, on some prototypes, external thrust units.

# Steering and Trim

An airship turns through the combined work of the helm, sailing crew, engineers, and ballast watch.

## Rudders and steering vanes

Rudders and vertical vanes control yaw, the vessel's turn to port or starboard.

They require airflow.

A nearly stationary vessel cannot turn sharply by rudder alone.

## Tailplanes and fins

Horizontal control surfaces help manage pitch.

Fins and angled strakes resist unwanted roll and help the hull settle into a stable path.

Structures useful in the air may make a vessel poor at sea. Aurora Ventus has a deep sky-keel and angled strakes that steady her aloft but drag and slap in water.

She can make sea when forced.

The sea is no longer her natural element.

## Differential lift

Engineers can change the support provided by individual lift banks.

A small increase at the bow assists a climb. A measured difference between port and starboard can help initiate or arrest a roll.

Differential lift assists the helm.

It does not replace steering.

Used too aggressively, it twists the hull.

## Ballast

Movable ballast helps align the centre of effective weight with the vessel's mass.

In an emergency, ballast may be dumped.

Once released, it is gone. The ship gains immediate lift margin but loses material that might be needed for a later correction.

# Why Airships Turn Slowly

Reduced effective weight does not remove momentum.

A heavy ship therefore requires time and distance to change direction.

The bow may begin turning while the vessel continues partly along its previous course. Sailors call this drift, slide, or simply bad handling, depending on who is blamed.

A turn made too sharply can cause:

- severe roll
- shifting cargo
- loose gun carriages
- field-centre drift
- overload in one lift bank
- mast or spar failure
- loss of speed
- structural torsion

From the ground, a skilled turn may appear effortless.

On deck, it is a controlled argument between wind, inertia, lift, timber, and iron.

# Recoil, Cargo, and Collision

The drive does not absorb cannon recoil.

When a cannon sends a projectile forward, the gun and vessel receive the opposing reaction.

A full broadside may produce roll, yaw, sideways movement, and strain around the gun deck.

Warships manage this by:

- bracing gun decks into the main frame
- firing in controlled sequences
- adjusting trim before action
- preserving lift reserve
- limiting fire from a damaged side
- placing heavy bow weapons along strong longitudinal structures

A vessel suffering uneven lift may still possess functioning guns.

Firing them may break what remains of the ship.

## Cargo

A heavy crate may contribute less effective weight once the drive is active.

Its inertia remains.

If it breaks loose during a turn or descent, it carries its full moving mass into whatever stops it.

## Collision

Airships do not strike one another like weightless objects.

Their momentum remains real.

A collision can:

- split frames
- break masts
- tear away rigging
- rupture lift-lungs
- damage steering linkages
- misalign the sky-keel
- shift the field centre
- kill crews through impact alone

Lightened does not mean harmless.

# Heat and Energy

The drive does not provide free energy.

Quickening Éterlumin, changing support, compressing and pumping the medium, moving ballast, operating cooling apparatus, and overcoming friction all require work.

Climbing stores energy in the vessel's height.

When the ship descends, that height becomes downward speed. The drive does not recover the energy as useful power. It is spent through air resistance, control work, vibration, structural strain, and heat.

## Why activation may first feel cold

Gas passing through a pressure change can cool nearby pipes and surfaces.

The beginning of activation may therefore produce cold metal, condensation, or frost around some parts of the apparatus.

This does not mean the complete system is cooling.

Most operational heat comes from compression, pumping, friction, and repeated Fortera activation. The pulses warm the containment, rods, frames, pumps, and surrounding structure.

Cooling machinery moves that heat elsewhere.

It does not destroy it.

## Thermal reserve

A drive may possess enough lift capacity to perform a manoeuvre but lack the cooling capacity to repeat it.

Engineers therefore distinguish between capacity and reserve.

Capacity is what the installation can produce.

Reserve is what remains after heat, degradation, and recent use are accounted for.

A captain who asks only whether the ship can climb has asked half the question.

# Crowded Fields and Interference

Fortera responds locally.

Within prudent use, the surrounding response recovers readily. If pressed too hard, it weakens for a time. Violent or contradictory use can create instability that affects nearby workings.

A single vessel operating normally seldom causes serious local depletion.

Several vessels pulsing hard in the same volume of air can interfere with one another.

Crews may observe:

- slower drive response
- drifting reference instruments
- greater heat for the same support
- delayed corrections
- irregular resonance
- false quiet followed by sudden pressure
- one vessel's adjustment appearing in another's gauges

Busy military harbours enforce spacing and activation schedules for this reason.

Fleet formations also leave room between active drives.

## Conflicting instructions

Two independent control patterns applied to the same chamber can form a standing node, a violent rim, or a false calm that hides rising pressure.

The rule taught in engineering schools is simple:

> One guidance in a chamber at a time.

When instructions conflict, the weaker pattern should be cut before the stronger one is corrected.

Adding more control to a confused chamber may deepen the contradiction.

# Degradation and Service Life

Éterlumin does not remain equally useful forever.

Repeated activation changes its response.

Pressure cycles, contamination, thermal stress, incompatible batches, and resonance damage reduce reliability.

A degraded charge may:

- require greater pressure
- answer more slowly
- produce more heat
- drift from its calibration
- respond unevenly
- enter the semi-state without command
- retain unwanted patterns after use

Good Éterlumin is predictable.

Bad Éterlumin may still produce a strong response.

That is what makes it dangerous.

## Grades

Operational grades are judged by:

- degradation rate
- remaining service life
- calibration quality
- stability under repeated activation
- compatibility with other batches

Brightness is not proof of quality.

A violent response may be a sign of instability rather than strength.

No sealed vessel remains true forever.

# How Airships Fail

Airships rarely fail in one clean instant.

They degrade through connected systems.

## Loss of propulsion

Sails, rigging, or steering are disabled.

The lift system remains functional.

The vessel may continue along its existing path or drift with the wind. It does not immediately fall.

## Vent failure

A damaged vent prevents heat or pressure from leaving a bank normally.

The affected section may answer slowly, overheat, or become unstable.

A broken vent can release active vapour.

It can also trap dangerous pressure inside the installation.

## Pressure leak

Éterlumin escapes from a chamber, pipe, seal, or bladder.

Lift falls in the affected section. The escaping medium may appear pale or luminous.

Ignition is possible when active Éterlumin meets flame or sufficient heat.

Fire is a risk.

It is not the automatic result of every leak.

## Lift-bank failure

One bank stops answering properly.

The vessel pitches, rolls, or begins descending unevenly.

Other banks may compensate, but compensation transfers additional strain into the remaining system.

## Field-centre drift

The drive begins supporting the vessel away from the point where the ship's mass is balanced.

The hull begins twisting because lift and mass are no longer aligned.

Small drift can be corrected.

Large drift can break rods, deform frames, and turn a controlled descent into a roll.

## Resonance instability

The active charge begins cycling between stronger and weaker responses.

The ship shudders or repeatedly becomes heavier and lighter.

Crew members may feel alternating pressure and lightness. Gauges move out of rhythm. The drive's note changes.

Even if average lift remains sufficient, repeated loading can damage the hull.

## Lift-lung rupture

An inner bladder or its supporting frame tears.

Gas escapes. The lung loses pressure. The ship tips toward the damaged side.

A second lung may slow the fall but must now carry a load it was not intended to bear alone.

The loss of one lung may produce a gradual descent.

The loss of several can become a fall.

## Sky-keel fracture

The principal structural and field path breaks.

Different parts of the vessel may retain different levels of support.

The bow may remain light while the stern becomes heavy. One side may continue answering while the other has lost continuity.

The resulting forces can tear the ship apart.

An uneven failure can be more destructive than a complete, uniform loss.

## Fire

Active Éterlumin is flammable.

Fire becomes most dangerous when it:

- damages containment
- ignites escaping active medium
- weakens the frame
- reaches lamp oil, combustible stores, or powder
- prevents the crew reaching the controls
- heats a nearby charge into instability

Éterlumin chambers are not themselves furnaces.

A falling airship does not automatically explode.

### Complete lift loss

If the drive loses effective support across the vessel, full weight returns.

The ship begins accelerating downward.

It does not vanish from the sky or strike the earth instantly. Air resistance increases with speed. Sails, vanes, and remaining control surfaces may alter the path. Partial lift may slow the fall.

From ordinary operating height, the crew may still have little time.

## Why Falling Airships Do Not Always Explode

A loss of lift and an explosion are separate events.

A vessel may:

- leak without ignition
- lose one bank and descend under control
- rupture a lung and roll
- fall intact
- break apart during descent
- ignite after structural failure
- strike the ground before its magazine explodes
- survive a forced landing

During the campaign as played at the table, an Albion frigate loses its lung supports and inner bladders, rolls, and falls. Its magazine cooks only after impact.

The loss of lift causes the fall.

The powder produces the later explosion.

One disaster can cause another.

They remain different mechanisms.

FAILURE AND SURVIVAL

# Emergency Procedure

The exact orders vary by navy, but the priorities are consistent.

### STABILISE AND ISOLATE

1. Secure guns, cargo, and exposed crew.
2. Identify the failing chamber, bank, or frame.
3. Isolate damaged pipes, tanks, rods, and bladders.
4. Cut contradictory or uncontrolled guidance.
5. Open the correct high vent where safe.

### RECOVER AND SURVIVE

6. Restore symmetry before demanding full lift.
7. Shift ballast only under engineering instruction.
8. Preserve enough reserve to arrest the descent.
9. Seek denser air and open ground or water.
10. Prepare for forced landing or abandonment.

The instinct to demand maximum lift immediately can kill the ship.

If one bank cannot answer, forcing the others to full activity may increase the imbalance, overheat the system, or break the sky-keel.

> First make the vessel answer evenly. Then ask it to rise.

III LIFE ABOARD

# Life Aboard

People aboard an airship do not become weightless.

Gravity continues to pull them toward the deck. Their weight passes through the vessel and becomes part of the load handled by the drive.

Changes in motion remain obvious.

A climb presses boots into the planks.

A descent brings lightness to the stomach.

A turn pulls bodies and loose objects sideways.

Experienced crew members learn to notice trouble before the instruments confirm it:

- a gauge moving out of rhythm
- a changed note through the deck
- a warming valve handle
- an unfamiliar vibration in a rod
- rigging taking load too early
- tools sliding toward a developing list
- the storm-smell near a sealed bank
- a cold metallic sensation against the teeth

Airship service turns wonder into routine.

It does not make the wonder safe.

# Shipboard Culture

An airship is not merely transport. It is a workplace, military post, technical institution, household, and isolated community held together above open air.

Every person aboard depends on people they may dislike, distrust, outrank, or barely understand.

A gunner depends on the engineer who keeps the vessel aloft. The engineer depends on the sailor who notices the weather turning. The officer depends on the rigger willing to climb into exposed canvas during a descent. The passenger depends on all of them.

This dependence shapes shipboard culture more strongly than written regulation.

Figure 3 illustrates the overlap between command, navigation, and engineering judgment during a developing failure.

FIGURE 3 Senior officers reading instruments and charts during a developing failure. Rank matters, but the ship's needs come first.

## The Ship Comes First

Aboard a functioning vessel, ordinary disagreements remain subordinate to the survival of the ship.

An insult may wait. A debt may wait. An arrest may wait.

A leaking pressure line does not.

Crew members are expected to answer danger before continuing a personal dispute. This does not make them harmonious. It gives them a shared order of urgency.

In play, enemies may work beside one another during an emergency, then return to their conflict once the deck is level.

A character who protects the vessel earns credibility that rank, money, and social position cannot easily purchase.

## Watches and Routine

Airship life is divided by watches. Sailors, engineers, lookouts, riggers, navigators, and damage-control parties rotate through work, rest, maintenance, and readiness.

The watch determines:

- who is awake when something first goes wrong
- which officer holds immediate authority
- which systems are being inspected
- who is exhausted
- who witnessed an event
- which friendships and rivalries have formed
- who believes another watch neglected its duties

A failure discovered at the beginning of a watch feels different from one discovered at its end.

Fresh crew may possess strength but lack knowledge of what happened before they arrived. An exhausted crew may understand the problem perfectly and still lack the hands to correct it.

## Two Authorities

Most airships possess two overlapping forms of authority.

The captain commands the vessel, its mission, and its crew.

The chief engineer controls what the vessel can physically survive.

A captain may order a climb. The chief engineer determines whether the drive can provide it. A captain may demand pursuit. The engineer may report that another burst will lock the aft bank or fracture a heated support.

Competent captains respect this distinction. Incompetent captains treat technical limits as hesitation or disobedience.

A responsible chief engineer may refuse an order that will certainly destroy the vessel. Whether the navy, company, or court later supports that refusal is a separate matter.

The captain may be correct about the mission. The engineer may be correct about the ship. The crew may still have to choose.

## Sailors and Engineers

Sailing crews and engineering crews often describe the same event in different language.

A sailor hears the vessel labouring. An engineer records delayed response in the forward bank. A topman feels the mast taking load too early. A regulator specialist observes support arriving three beats behind command.

Neither description is superior. One is learned through physical familiarity. The other is learned through instruments, calculation, and technical training.

The best vessels respect both.

The sailor knows what the ship usually feels like. The engineer knows what the change may mean.

## Ritual and Superstition

Airship crews possess rituals. Some are military, some occupational, and some inherited from seafaring. Many began as practical precautions whose original explanation has been forgotten.

A crew may:

- touch the sky-keel before first activation
- remain silent while chambers pass through the semi-state
- refuse to whistle near exposed pressure lines
- place a marked nail near a repaired frame
- name a vessel only after her first stable ascent
- leave one cup untouched after a fatal accident
- repeat an old response when the drive note changes
- avoid speaking of a safe landing before the mooring lines are secured

A custom need not possess supernatural power to matter. It may encode timing, attention, memory, or discipline.

A ritual that appears foolish may cause the crew to pause at exactly the moment an engineer needs quiet to hear a failing regulator.

Another may be nothing more than fear given form. The distinction is not always obvious.

## The Ship Remembers

Crews speak of vessels as though they possess temperament.

One ship climbs easily but answers slowly in a turn. Another carries damaged rigging without complaint but develops pressure drift in cold air. A third is considered unlucky because several unrelated deaths occurred aboard her.

These reputations influence behaviour. Crew members listen more closely where someone died. They trust repairs made by one engineer and distrust those made by another. They may blame a new officer for disturbing established habits.

The vessel does not need consciousness for its history to shape every person aboard.

In play, a ship's reputation can provide:

- warnings
- prejudices
- inherited procedures
- concealed defects
- rumours
- loyalties
- resentment toward replacement crew
- reluctance to abandon the vessel

A crew may remain aboard a doomed ship because it is their home, not because they misunderstand the danger.

## Rank, Skill, and Credibility

Formal rank matters aboard an airship. So does demonstrated competence.

A noble passenger may possess social authority ashore but little authority during a ruptured lift line. A junior mechanic who recognises the failure may become the most important person on deck.

Credibility is earned through conduct under pressure.

Characters may gain standing by:

- recognising danger
- protecting crew
- accepting an unpleasant duty
- remaining at a station
- admitting uncertainty
- obeying a necessary order
- refusing a destructive one
- returning for someone others had abandoned

They may lose it by:

- creating avoidable risk
- concealing damage
- abandoning a watch
- sacrificing crew without necessity
- claiming credit for another person's work
- treating technical labour as beneath notice
- panicking while others remain exposed

A trusted character receives warnings, access, cooperation, and honest answers.

An untrusted character receives regulation.

## Passengers and Outsiders

Passengers do not belong naturally to the ship's working order. They occupy space, consume stores, alter trim, and may not understand when they obstruct essential work.

A wealthy passenger may expect privacy in a compartment through which engineers need emergency access. A soldier may assume weapons take priority over ballast. A scholar may wish to observe a disturbance the crew intends to vent immediately.

Characters unfamiliar with airship life should be allowed to learn its rules through play.

The crew notices whether they listen.

## Death and Replacement

Airship crews work closely enough that an empty station remains visible.

A replacement inherits:

- someone else's tools
- unfinished work
- established relationships
- suspicion
- expectations
- blame for changed procedures
- a place where another person died

Crews may welcome replacements because they are needed. They may resent them for proving that the ship continues without the dead.

## What Shapes a Ship's Culture

Fleet doctrine and ship culture are related, but they are not the same thing.

Doctrine describes how a navy expects a vessel to fight, travel, hold formation, or accept risk. A Valdegracian order to remain at post belongs to fleet doctrine. It does not tell us whether the people aboard obey with pride, resentment, fear, habit, or confidence in their officers.

Ship culture grows from the history of one vessel and the people serving aboard her. To establish it, consider:

- how long the crew has served together, what they have survived, and which losses remain present
- the relationship between the captain, chief engineer, officers, specialists, and ordinary crew
- where the crew was recruited, which languages and customs share the decks, and how rank, pay, mess, and promotion work aboard
- whether the vessel is naval, commercial, experimental, captured, privately owned, newly commissioned, or held together by years of alteration

A national institution still shapes training, uniforms, watch terms, discipline, legal authority, and burial or dismissal procedures. Those are starting conditions, not a shared personality. Two ships under the same flag may possess completely different cultures.

## Shipboard Culture in Play

Before an extended voyage, establish:

- who is respected aboard
- which officer is distrusted
- what the crew believes about the vessel
- which station is undermanned
- what previous accident remains unspoken
- which custom outsiders find strange
- what the captain will risk for the mission
- what the chief engineer will refuse to risk
- who would be difficult to replace
- whether the crew sees the characters as passengers, officers, specialists, or one of their own

During play, allow reputation to change.

A character who helps save the vessel should not return to being socially irrelevant once the emergency ends. A character who abandons a station should not escape consequence merely because the ship survived.

The vessel carries memory through its crew. What happens aboard becomes part of its culture.

# The Airship Crew

The sailing crew and engineering crew operate different parts of one machine.

## Captain

Commands the vessel and decides what risk the mission justifies.

A captain who ignores engineering limits will eventually give an order the ship cannot survive.

### Sailing master

Manages navigation, wind, sails, course, and altitude planning.

### Pilot or helmsman

Controls the rudders, steering vanes, tailplanes, and immediate attitude of the vessel.

### Chief engineer

Holds technical authority over the drive, active chambers, pressure systems, cooling, and sky-keel.

A responsible chief engineer may refuse an order that would certainly destroy the vessel.

### Lift watch

Controls activation, pressure, vents, cooling, and individual lift banks.

### Ballast watch

Moves water, shot, stores, or prepared ballast to maintain alignment.

### Pump and machinery hands

Operate transfer pumps, cooling apparatus, ballast mechanisms, and other auxiliary machinery.

### Riggers and topmen

Work the sails, lines, masts, and fighting tops.

Their work is exposed and especially dangerous during rapid altitude changes.

### Gunners

Operate weapons whose recoil affects the entire vessel.

### Damage-control parties

Isolate leaks, shore frames, cut damaged rigging, fight fires, and prevent local failure from becoming total loss.

IV AIRSHIPS IN PLAY

# Using Airships in Play

Airship scenes work best when the vessel is treated as a place under pressure rather than as a single machine with a single condition.

A damaged airship rarely changes from functional to destroyed in one moment. Problems appear locally, spread through connected systems, and force the crew to choose what they are willing to sacrifice.

The purpose of an airship complication is not merely to remove capability.

It is to create decisions.

Figure 4 shows a worked example of these principles on a Heller experimental sky-sloop, including map anchors, failure nodes, and access routes.

SYSTEM-NEUTRAL PLAY GUIDANCE

# Quick Procedure

To run an airship failure with no preparation beyond a few notes, follow these steps.

1

## Name the problem

State what is going wrong in ordinary language.

*The aft bank cannot vent and is overheating.*

2

## Create an intervention clock

Name what the crew must accomplish.

*Restore Aft Venting.*

Use:

- 4 segments for one straightforward problem
- 6 segments for a serious emergency
- 8 segments for a failure involving several locations or systems

*When uncertain, use six.*

3

## Create a danger clock

Name the consequence that is approaching.

*Aft Bank Ruptures.*

Use the same number of segments as the intervention clock unless the crew has unusually little or unusually generous time.

4

## Decide when danger advances

Choose one clear interval.

During an immediate emergency, advance the danger clock after every round of character actions.

During a slower problem, advance it after every major action, manoeuvre, scene, or watch.

*Tell the players what the interval is.*

5

## Describe the warning

Give the players something they can hear, see, or feel.

*The pressure gauge is rising. The vent pipe is knocking. The valve housing is becoming too hot to touch.*

Mark the map anchors: the failing system, control point, access route, obstruction, and system or resource at risk. Any of these may contain a failure node.

6

## Ask what each character does

Do not begin by asking for a particular skill.

What do you do?

The character might inspect gauges, organise the crew, force an access door, cool the pipe, clear debris, change course, or hold a valve closed.

7

## Decide whether a test is needed

No test is required when the action is routine, safe, and certain to work.

Use the chosen game's normal resolution rules when:

- time is short
- the character is in danger
- the action could fail
- the method may worsen the situation
- the character is attempting something beyond normal procedure

8

## Apply the result

On a successful intervention, mark one segment on the intervention clock.

Mark two segments when the method is exceptionally effective, perfectly prepared, or accepts a serious cost.

On a failed intervention, apply a consequence. Usually this means:

- advancing the danger clock
- causing injury
- damaging equipment
- worsening access
- creating another problem
- succeeding at a cost

*Do not simply ask for the same test again.*

9

## Advance the danger

At the end of the chosen interval, mark one segment on the danger clock unless the crew has done something that specifically buys time.

10

## Continue until a clock fills

When the intervention clock fills, the crew controls the failure or reaches the clear final step needed to do so.

When the danger clock fills, the named consequence occurs.

That is the complete procedure.

## Begin with the Situation

Before an airship scene begins, establish five things.

### What is the vessel trying to do?

Climb above a storm, escape a pursuer, hold formation, cross a mountain range, descend into a concealed harbour, or survive long enough to fire.

### What is already under strain?

The drive may be hot, the ship overloaded, the rigging damaged, the crew exhausted, or the Éterlumin charge near the end of its useful service.

### What margin remains?

A vessel with lift reserve, cooling capacity, open airspace, and an experienced crew can recover from mistakes. A ship near its ceiling or operating inside a crowded field cannot.

### What can be lost?

Altitude, speed, weapons, cargo, secrecy, formation, structural integrity, or time.

### What happens if the crew does nothing?

A good danger continues to develop. The ship drifts toward cliffs. The damaged bank grows hotter. The enemy closes. The storm rises. Field interference deepens.

## Describe Warning Before Failure

Airship failures should usually announce themselves.

Characters may hear:

- the drive note slipping out of rhythm
- a repeated knock inside a pressure line
- rigging taking strain at the wrong moment
- a cooling pump beginning to chatter
- timbers creaking across the direction of the turn

They may see:

- frost spreading from a valve
- pale vapour collecting near the deckhead
- instruments disagreeing
- tools sliding toward a developing list
- one sail drawing while another hangs strangely slack
- light inside a chamber pulsing too slowly

They may feel:

- sudden heaviness in their legs
- a moment of lightness in the stomach
- vibration through the teeth
- heat behind a bulkhead
- a sideways pull that the visible turn does not explain

These signs give the crew time to investigate, argue, prepare, or take a risk.

Catastrophe without warning should be reserved for sabotage, concealed damage, violent enemy action, or danger the crew knowingly ignored.

## Stages of Failure

### Warning

Something has moved outside normal tolerance. The vessel remains controllable. The crew has time to investigate, prepare tools, clear compartments, or reduce strain.

The danger clock advances slowly or only when the warning is ignored.

### Strain

The ship must work harder to maintain its condition. Cooling falls behind, the helm becomes sluggish, a mast carries too much load, or crew members abandon other duties to respond.

The danger clock advances regularly. The crew can still solve the problem cleanly, but something else may be lost.

### Failure

The affected system no longer performs its normal function. The failure spreads fire, releases vapour, blocks access, throws people from their feet, damages connected systems, or forces the ship into unwanted movement.

Clean repair may no longer be possible. The crew must contain, bypass, isolate, or destroy something.

### Catastrophe

Several failures combine, or one critical failure is allowed to spread.

The sky-keel fractures. Multiple lift banks lose continuity. Fire reaches powder. The ship enters an unrecoverable dive.

The crew may no longer be saving the ship. They may be choosing where it falls, which section survives, what can be abandoned, and who escapes.

Even catastrophe should present a final question.

The choice should remain real.

## Modelling Airship Failure in Play

A major failure can be run as an encounter. The uncontrolled process changes the environment, consumes time and resources, threatens connected systems, and becomes more dangerous when left unanswered.

The vessel itself is not the enemy.

The failure is.

The crew does not overcome it through one successful test. They identify what is wrong, reach the affected system, contain the spread, restore balance, and decide what they are willing to sacrifice.

## Use Two Clocks

### The intervention clock

The intervention clock describes what the crew is trying to accomplish.

Examples include:

- Stabilise the Forward Bank
- Isolate the Ruptured Lift-Lung
- Restore Aft Venting
- Realign the Field Centre
- Arrest the Descent
- Cut Away the Burning Mast

The clock should describe the desired result rather than one required method.

Restore Aft Venting allows diagnosis, access, clearing debris, breaking an obstructing grille, forcing a valve, or creating another release route.

Repair the Vent Valve would make the encounter unnecessarily narrow.

### The danger clock

The danger clock describes what will happen if the failure continues.

Examples include:

- Bank Overheats
- Sky-Keel Separates
- Lift-Lung Ruptures
- Fire Reaches the Magazine
- Vessel Enters an Unrecoverable Dive
- Enemy Comes Alongside

It advances as time passes and may advance further when an intervention fails badly, the vessel performs a demanding manoeuvre, the crew ignores a warning, another system is pushed beyond tolerance, or a destructive solution creates a new problem.

When the clock fills, the named consequence occurs. It may end the encounter, advance the failure to a new stage, or begin another clock.

## The Pace of the Clock

The clock does not need to advance in combat rounds.

A ruptured line during battle may worsen from moment to moment. A cooling problem may develop across manoeuvres. Calibration drift may worsen over a watch. Degraded Éterlumin may create danger across a voyage.

Tell the players how quickly the danger advances.

## What Different Actions Accomplish

### Make progress

The action directly helps control the failure and marks the intervention clock.

### Buy time

The action prevents the danger clock from advancing once.

### Create access

The action allows someone to reach or affect the problem.

### Reduce danger

The action removes one harmful effect, protects the crew, or prevents additional escalation.

An action does not need to mark progress to matter.

Holding a buckling frame may buy time. Breaking a jammed door may create access. Moving ballast may reduce danger. Clearing the blocked vent makes progress.

## Resolving Interventions

Use the ordinary resolution rules of the chosen game whenever the result is uncertain.

The player describes what the character is doing. The Game Master determines which capability, skill, tool, resource, or form of action applies.

Possible interventions include:

- diagnosing the cause
- reading instruments
- identifying a safe sequence
- reaching an exposed control
- forcing a seized mechanism
- opening an access route
- moving ballast
- securing loose machinery
- shoring a damaged frame
- organising frightened crew
- finding denser air
- reducing sail or changing course
- cooling an overheating bank
- treating an injured specialist
- clearing a blocked pipe
- cutting away damaged structure
- destroying a component that can no longer be controlled

The same action should not solve every part of the emergency.

Diagnosing a blockage reveals where it is. It does not open the compartment, remove the debris, and vent the pressure.

Every successful intervention should change the situation.

## Progress

A successful intervention normally marks progress. Exceptional preparation, specialised equipment, a particularly effective method, or acceptance of a serious cost may produce greater progress.

Some actions instead prevent escalation, improve access, reduce risk, reveal the correct intervention, remove one harmful effect, or allow the crew to contribute.

Progress should follow the fiction. Once a door has been opened, opening it again provides no further progress. Once the cause has been identified, repeating the diagnosis does not help.

## Failure and Consequences

A failed intervention should usually change the situation.

Possible consequences include:

- advancing the danger clock
- injuring the character
- damaging equipment
- worsening the obstruction
- closing an access route
- injuring ordinary crew
- spreading heat, vapour, fire, or pressure
- reducing altitude
- shifting the failure into another system
- completing the action at a serious cost

Failure should not merely invite the same attempt again.

The valve may open but burn the character. The line may be severed but release active vapour. The ballast may move but leave the gun deck unusable.

The situation moves forward even when the outcome is costly.

## Buying Time

Some actions contain danger without solving it.

A character may hold a damaged valve closed, keep a pump operating manually, brace a bending frame, maintain emergency trim, defend a repair party, or reduce strain by changing course.

These actions may prevent the danger clock from advancing for one interval.

They buy time. They do not remove the underlying problem.

## Physical Obstacles

The overall failure does not possess physical durability. Individual obstacles may.

A character may need to:

- break through a jammed door
- force a warped hatch
- sever a seized chain
- cut tangled rigging
- break a locked valve handle
- open a pressure housing
- clear wreckage from a control station
- remove debris from a vent pipe
- break an internal grille blocking access

Use the chosen game's ordinary rules for forcing, dismantling, damaging, or breaking objects.

Different methods produce different results. Forcing a door may preserve it. Breaking it may be faster but destroy the compartment seal. Smashing a grille may send fragments deeper into the pipe.

Clearing an obstacle usually creates access. It does not automatically solve the complete failure.

## Functional Machinery

Characters may choose to destroy functioning machinery.

Breaking a jammed door provides access. Breaking a regulator removes control. Cutting a pressure line stops the flow but releases its contents. Destroying a pump coupling may end destructive vibration while also stopping circulation.

Destructive intervention may produce rapid progress.

It should also leave a different surviving ship.

## The Crew During an Emergency

The ordinary crew continues working around the characters.

A trained crew may maintain basic steering, secure guns and cargo, move prepared ballast, evacuate compartments, fight small fires, carry orders, and keep another system operating.

The characters become necessary where judgment, authority, unusual capability, or exceptional danger is involved.

A character may organise the crew instead of acting directly. Leadership may mark progress, prevent escalation, complete a routine task, open an intervention route, or restore order.

Crew quality matters. An exhausted, depleted, or frightened crew may require leadership before it can contribute.

## Characters Do Not Need to Be Engineers

An engineer may diagnose field-centre drift. A sailor may notice rigging taking load too early. A gunner may secure a loose carriage. A soldier may carry an injured mechanic through smoke. A navigator may find denser air. A carpenter may shore a frame.

Characters contribute through what they can observe and physically accomplish.

They do not need the complete theory of Éterlumin before their actions matter.

## Every Response Has a Cost

Solutions may consume:

- altitude
- lift reserve
- cooling reserve
- machinery stores and lubricants
- sail area
- ammunition
- ballast
- cargo
- structural tolerance
- time
- crew endurance
- tactical position

Dumping ballast may stop a descent but leave the vessel unable to correct a later climb. Cutting away a mast may save the hull while leaving the ship to drift. Firing a full broadside may cripple the enemy while worsening an existing list.

A strong scene asks which cost the crew is prepared to accept.

## Completing the Intervention

Filling the intervention clock means the crew has created the conditions needed to control the failure.

The crew may still need to open the prepared vent, issue the corrected command, release shifted ballast, cut an isolated line, separate a damaged section, arrest the descent, or hold a mechanism until landing.

The final action should be clear. When the difficult work is complete, do not demand another arbitrary test merely to delay success.

The state of the surviving vessel depends on the chosen solution.

VESSEL DESIGN FOR PLAY

# Setting Up an Airship Map

An airship map does not need to be a complete naval architect's plan.

It needs to help the players understand:

- where they are
- what lies above and below them
- how they can reach a problem
- which systems are connected
- what may block their route
- what will be lost if they damage part of the vessel

The following guidance presents an example approach. It is a suggestion for preparing a playable map, not a mandatory design for every airship.

Different shipyards, nations, vessel classes, refits, captured ships, and individual engineers arrange their systems differently. The map should serve the adventure first.

For emergency play, identify five map anchors: the failing system, its control point, the access route, the obstruction, and the system or resource at risk. Failure nodes are the valves, pumps, joints, relays, and other points where damage or blockage can begin or spread a problem.

## Begin with the Ship's Role

Before drawing compartments, decide what the vessel was built to do.

A warship needs gun decks, magazines, reinforced frames, damage-control routes, and space for a large crew.

A merchant vessel needs holds, cargo-handling routes, secure storage, and enough engineering capacity to complete long passages economically.

A scout or courier sacrifices space and redundancy for speed.

A command ship needs signalling stations, chart rooms, observation positions, additional officers, and ways to coordinate other vessels.

A converted ship may contain awkward passages, sealed former compartments, mismatched machinery, and systems added wherever space could be found.

The role tells the Game Master which areas deserve detail.

## Use More Than One View

Airships are vertical environments. A single deck plan may hide the most important part of the vessel.

For play, it is useful to prepare:

A side view

This shows the position of the decks, masts, sky-keel, lift-lungs, active chambers, ballast, major rigging routes, and access shafts.

One or more deck plans

These show rooms, doors, ladders, companionways, gun positions, control stations, and movement routes.

**FIGURE 4** Engineering Hold and Sky-Keel Deck Plan

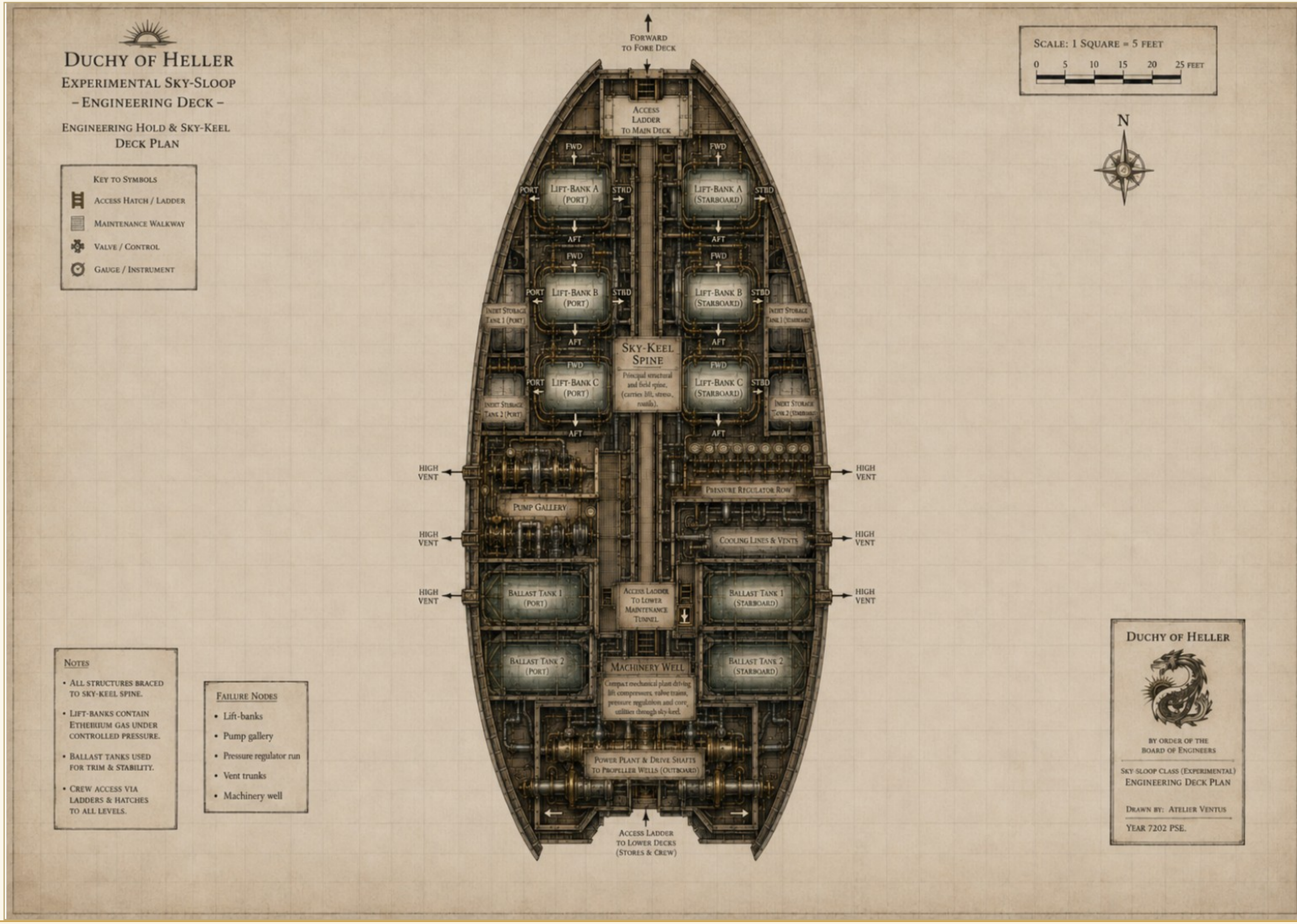
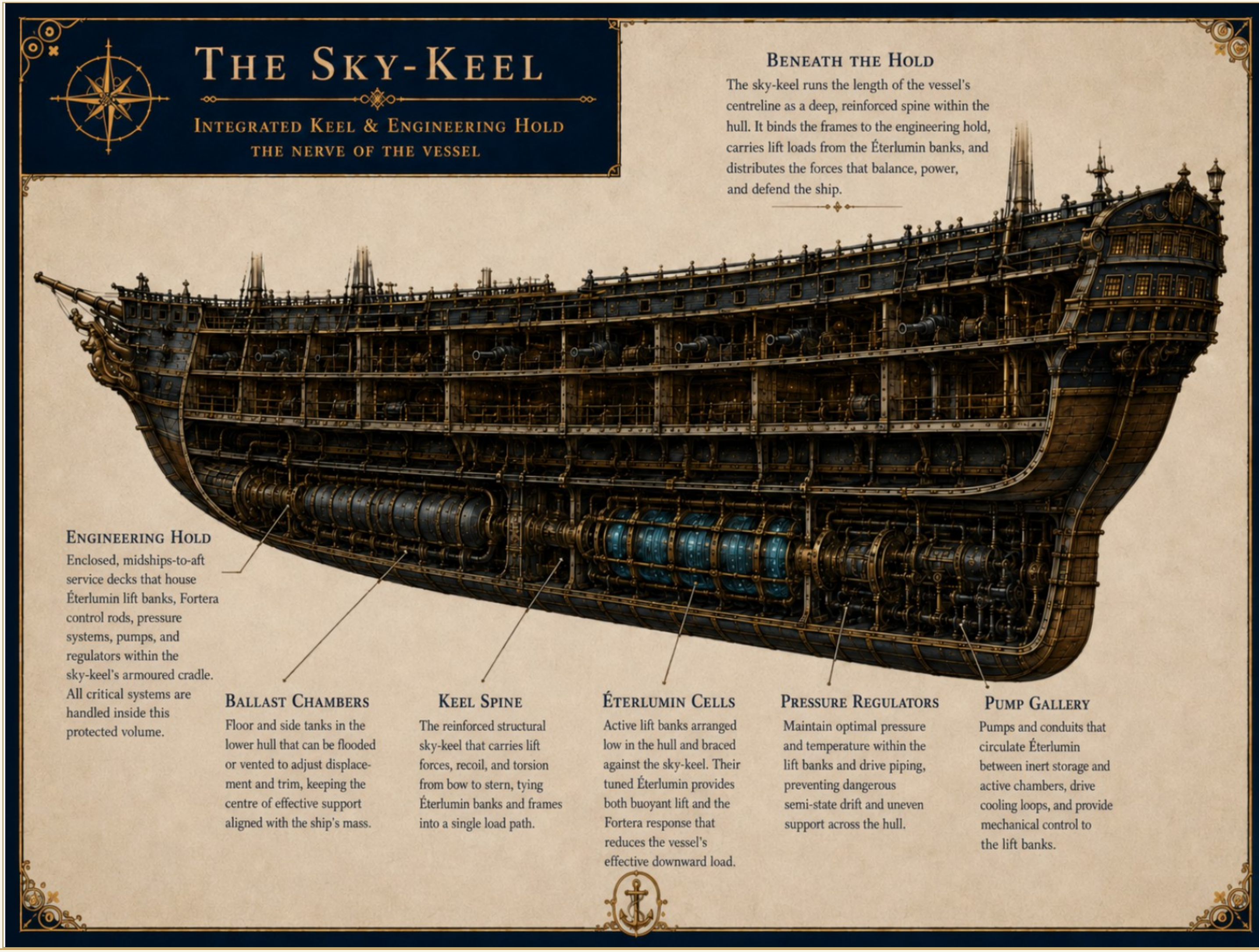


FIGURE 5 **The Sky-Keel**



> The side view explains how the ship works. The deck plans explain how characters move through it. Neither drawing needs to be perfectly to scale. They need only agree about which spaces connect.
>
> Figure 4. Figure 4 provides a worked deck-plan example. It is a playable arrangement and suggestion, not a mandatory layout for every airship.
>
> Figure 5. Example: Valdegracian Armoured Sky-Keel. A suggested full-length integrated arrangement beneath the principal decks. Valdegracian construction favours heavier protection, structural resilience, and concentrated firepower. Albion uses the same broad architecture with lighter armour and more modular sections that can be isolated or replaced more quickly. Individual vessels differ by class, shipyard, and refit.

### Draw the Major Structural Line First

Begin with the sky-keel.

It is the principal spine of the vessel and should run through the lower or central body of the hull in a position where its forces can be carried into the frames.

The sky-keel is not merely a narrow beam visible in one room. It may pass through:

- inspection galleries
- reinforced frame spaces
- lift-bank mountings
- machinery compartments
- sealed structural sections
- ballast areas
- access tunnels

Some portions may be exposed for inspection. Others may be enclosed behind plating, timber, machinery, or pressure housings.

Mark at least two places where characters can reach it. This makes structural damage playable rather than abstract.

### Place the Lift System Around the Structure

The active chambers or lift-lungs should connect to the sky-keel and surrounding frames.

They do not need to occupy one enormous engineering room. A large vessel may distribute them into:

- forward lift banks
- central lift banks
- aft lift banks
- port and starboard sections
- paired lift-lungs
- smaller independent chambers

Distributed systems create redundancy. They also create distance.

A problem in the forward bank may require characters to cross half the ship while the deck angle continues to change.

On the map, show:

- the location of each major bank
- the nearest access point
- the control route
- the vent route
- the structural connection
- any narrow passage or sealed door between it and the crew

The active system should feel like part of the ship's structure, not a miraculous object placed in an otherwise ordinary hold.

### Separate Storage from Activation

Inert Éterlumin storage should not be treated as the same space as the active chambers.

Storage tanks contain the stable transported medium. Transfer pumps and pipes move it toward the active system.

A useful map may therefore separate:

- inert storage tanks
- transfer pumps
- preparation or regulation spaces
- active chambers
- emergency vents

This separation creates meaningful choices.

A damaged active chamber may be isolated while the storage tanks remain intact. A broken transfer line may prevent replenishment without immediately removing lift. A storage leak may threaten breathing inside a closed compartment without destabilising an active bank.

The exact arrangement depends on the ship. The important point is that storage, transfer, and activation are connected but distinct.

### Suggested Engineering Spaces

A large airship's engineering department may include some or all of the following areas.

Not every vessel requires every space. Smaller ships may combine several functions in one compartment, while large warships may divide them between decks and watches.

### Engineering Control Station

This is where the lift watch reads instruments and issues ordinary commands to the drive. It may contain:

- pressure gauges
- temperature gauges
- reference instruments
- bank controls
- trim controls
- speaking tubes or signal lines
- emergency isolation controls
- record boards
- tables of current load and reserve

The control station should be near enough to the machinery to receive reliable readings. It should not be placed inside the most dangerous active chamber.

A damaged vessel may therefore leave the engineers able to read the failure but unable to reach its cause.

### Lift-Bank Compartments

These contain the working chambers, regulators, rods, mountings, and local controls for part of the vessel's lift system.

They may be divided into forward, central, aft, port, and starboard sections. A bank compartment should normally have:

- a main access route
- a local isolation point
- an emergency vent connection
- a structural connection to the sky-keel
- enough space for maintenance
- at least one place where damage can obstruct movement

These are strong locations for technical emergencies because the characters can see, hear, and physically interact with the system.

### Lift-Lung Galleries

A large lift-lung may extend through more than one deck. Characters may access it from inspection galleries running beside or around its supporting frame.

A gallery may include:

- bladder inspection points
- pressure housings
- tension braces
- local gauges
- repair platforms
- narrow ladders
- overhead pipes
- emergency release mechanisms

The lift-lung itself should not feel like an ordinary room. It is a large working assembly occupying the space around the characters.

### Pump and Transfer Room

This room moves inert Éterlumin from storage toward the active system. It may also contain valves allowing sections of the transfer network to be isolated.

A pump-room failure may cause:

- loss of replenishment
- unexpected pressure
- contamination between batches
- a leak into an occupied compartment
- a pump continuing to run against a closed line
- vibration through connected pipes

The pump room provides a useful intermediate location between safe storage and dangerous activation.

### Cooling Machinery

Cooling equipment may occupy a dedicated machinery room or be distributed beside the lift banks.

The map should show:

- pumps
- coolant lines
- heat exchangers
- air intakes
- discharge routes
- maintenance access
- manual emergency controls

Cooling machinery does not need to be adjacent to every chamber. Pipes can carry cooling medium through the ship.

This means a blockage or damaged pump in one compartment may overheat a bank elsewhere.

### Vent Trunks

Emergency vents require a path from the active system to the exterior of the vessel. A vent is therefore more than a valve.

It may include:

- a local release control
- a pipe or trunk
- inspection covers
- grilles
- external shutters
- high discharge points
- isolation sections

Show where the vent travels. This allows a blockage to exist somewhere other than beside the overheating bank.

A character may need to open a hot access panel on one deck, clear debris on another, and reach the external shutter above.

Vents should discharge away from ordinary crew spaces, flames, powder, and machinery intakes whenever the design allows. A refitted or damaged ship may no longer meet that standard.

### Inert Storage

Storage tanks should be protected from ordinary impacts, fire, and casual access. They may be placed:

- low in the hull
- beside reinforced frames
- in several separated compartments
- behind isolation doors
- away from magazines, galleys, and open flame

The map does not need to show every cylinder. It should show the storage compartments and the routes connecting them to the transfer system.

### Ballast Spaces

Ballast may be distributed throughout the vessel. Possible locations include:

- lower tanks
- shot lockers
- movable weight racks
- cargo spaces designated for trim
- pumping trunks between tanks
- emergency dump points

The map should show which ballast can be moved and where it can be moved.

"Shift ballast forward" becomes meaningful only when the players understand that someone must reach the controls, open a route, move the weight, or operate the pumps.

### Sky-Keel Inspection Passage

A large vessel may have a narrow passage following part of the sky-keel. It provides access to:

- structural joints
- alignment marks
- support frames
- resonator mountings
- strain indicators
- emergency braces

This passage is useful in play because it places characters close to the vessel's most important structure.

It may also be cramped, hot, noisy, dark, and difficult to evacuate.

### Sail-Control Routes

Sails provide ordinary propulsion. A playable map should show how the upper rig and the working decks connect.

A useful map may include:

- mast access
- rigging stations
- capstans and winches
- major sheets, braces, and halyards
- emergency cutting points
- exterior maintenance routes
- spare line and repair stores
- routes between working decks and the upper works

Damage here may leave lift intact while the vessel loses speed, steering authority, or the ability to answer a change in wind.

### Damage-Control Stations

A vessel should have places where emergency equipment is stored. These may contain:

- axes
- saws
- wedges
- braces
- repair timber
- chain
- rope
- protective cloth
- extinguishing equipment
- breathing covers
- portable lamps
- medical supplies

A damage-control station gives characters somewhere to obtain the correct tools. It also creates a meaningful problem when the nearest station lies beyond the damaged area.

### Show Access, Not Only Rooms

The spaces between compartments are as important as the compartments themselves.

Mark:

- doors
- pressure doors
- hatches
- ladders
- companionways
- narrow passages
- crawl spaces
- maintenance galleries
- vertical shafts
- exterior walkways
- routes through gun decks
- routes through cargo spaces

Then ask what can happen to those routes.

A door may warp. A ladder may break. Cargo may block a passage. Smoke may make one route unusable. A damaged gun may cover the only safe approach. A character may need to cross the exterior hull because the internal route has collapsed.

A good airship map provides more than one route to important systems, but those routes should carry different risks.

### Include Physical Obstacles

Place a few objects that can become obstacles during play.

Examples include:

- a heavy access door
- a removable grille
- an inspection plate
- a valve wheel
- a pipe junction
- a chain-operated shutter
- a maintenance crane
- a structural brace
- a movable ammunition rack
- a cargo winch
- a loose gun carriage
- a narrow exterior platform

These objects give characters something physical to force, secure, dismantle, cut, or break. They also help non-engineer characters contribute.

A soldier may know nothing about pressure regulation but can break a warped hatch. A sailor can reach an exterior vent. A gunner can move a carriage blocking the passage. A carpenter can brace a failing frame.

### Do Not Draw Every Pipe

A complete pipe network would make most maps unreadable. Instead, show only the main connections relevant to play.

Use simple lines or labels for:

- Éterlumin transfer
- cooling
- emergency venting
- control signals
- ballast movement
- major rigging routes

The map needs to answer:

- Where does this line begin?
- Where does it go?
- Which compartments does it cross?
- Where can it be isolated?
- Where can it become blocked or damaged?

Anything beyond that can remain descriptive.

## Mark the Ship's Failure Nodes

A failure node is a place where damage or obstruction creates a playable problem.

Examples include:

- an isolation valve
- a vent junction
- a pump
- a regulator
- a control-line relay
- a lift-lung mounting
- a sky-keel joint
- a ballast transfer point
- a capstan, winch, or pump drive
- a cooling manifold

Choose a small number. Do not turn every room into a trap. Three to six important nodes are enough for most vessels.

For each node, note:

- what warning appears when it fails
- what system it affects
- which route reaches it
- what may obstruct that route
- what can be repaired
- what can be broken
- what is lost if it is destroyed

These notes allow the Game Master to build an emergency quickly.

### A Minimal Playable Airship Map

A Game Master does not need to map the complete vessel. For a simple but functional airship, include:

1. command deck or bridge
2. main deck or gun deck
3. crew and passenger spaces
4. engineering control station
5. forward lift bank
6. aft lift bank
7. pump and cooling space
8. inert storage
9. sky-keel access
10. ballast controls or ballast spaces
11. main sail-control routes and mast access
12. at least two vent routes
13. one damage-control station
14. two routes between the main deck and engineering

This is enough to run most emergencies. Additional decks can be added when the adventure needs them.

Add role-dependent spaces when they matter: magazines and powder routes, a sick berth or casualty station, boats or descent equipment, firebreaks and closable bulkheads, external maintenance access, cargo handling, laboratories, or signalling rooms.

### Example Arrangement: Aurora Ventus

The following is one suggested way to represent Aurora Ventus for play.

It is an example map arrangement, not a complete or immutable technical plan. The actual map may be simplified, expanded, or rearranged to suit the adventure while preserving the vessel's established features.

### Upper Works

The upper areas contain:

- exposed decks
- helm and command positions
- masts and rigging
- fighting tops
- observation positions
- entrances to the downward observation cage
- exterior vent outlets
- access to maintenance platforms

Problems here are exposed to wind, enemy fire, altitude, and rapid movement.

### Main Decks

The central decks contain:

- gun positions
- command and signalling spaces
- officers' areas
- crew passages
- stores
- major companionways
- access to engineering control
- routes toward the side masts and observation cage

These areas connect the visible life of the ship to the machinery below. They are also likely to become crowded during battle.

### Engineering Control Level

This level contains the primary engineering control station and access toward the major lift banks. It may include:

- reference instruments
- bank controls
- pressure and temperature boards
- trim controls
- communication with the bridge
- access to local isolation stations
- a damage-control locker

The engineers can observe much of the ship's condition here. They cannot physically repair every system from this room.

### Forward and Aft Lift Areas

The major lift assemblies are distributed along the vessel rather than placed in one chamber.

Inspection galleries and maintenance passages connect them to the engineering level and sky-keel.

Each major area should have:

- local controls
- vent connections
- isolation points
- structural mountings
- at least one difficult access route

The forward and aft banks should be far enough apart that a crew cannot respond to both instantly.

### Lower Engineering Level

The lower level follows the deep sky-keel and contains the heaviest structural and machinery spaces. It may include:

- sky-keel inspection passages
- transfer pumps
- cooling machinery
- inert storage compartments
- ballast tanks or ballast controls
- pump drive mechanisms
- maintenance access
- emergency braces
- lower damage-control equipment

This level should feel cramped and functional. It is where heat, vibration, noise, and structural movement are most obvious.

### Vent Routes

Aurora Ventus should have several vent trunks leading from the lift systems toward safe exterior discharge points.

For the campaign emergency involving the starboard vents, the map needs only to establish:

- which banks feed the affected vents
- where their local controls are
- where the vent faceplates can be reached
- which passages lead there
- what lies nearby if active Éterlumin escapes

The exact pipe geometry is less important than the route the characters must take.

## Turning the Map into an Emergency

To create a playable airship failure, choose five things from the map.

1. The affected system

The aft lift bank, cooling machinery, a vent route, steering linkage, ballast control, or sky-keel joint.

2. The warning

Heat, vibration, delayed response, pressure drift, smoke, vapour, changing deck angle, or an unfamiliar sound.

3. The blocked route

A warped door, collapsed passage, fire, enemy boarders, loose cargo, damaged ladder, or exposed exterior crossing.

4. The necessary intervention

Reach the valve, clear the pipe, shift ballast, shore the frame, sever the connection, or release pressure.

5. The cost

Lost altitude, damaged machinery, abandoned cargo, disabled weapons, injured crew, lost time, or permanent reduction of the vessel's capability.

The map gives the failure a physical location. The clocks give it urgency. The characters' decisions turn it into an adventure.

## Map Checklist

Before using an airship map, confirm that the players can identify:

| PLAYERS CAN IDENTIFY | THE GAME MASTER KNOWS |
|---|---|
| ☐ the bow and stern | ☐ where a failure can begin |
| ☐ port and starboard | ☐ how warning signs reach the crew |
| ☐ the upper and lower decks | ☐ which routes may become blocked |
| ☐ the command position | ☐ what can be forced or broken |
| ☐ the engineering control station | ☐ which system is lost if the characters use a destructive solution |
| ☐ the major lift areas | ☐ where the ship can be abandoned |
| ☐ the sky-keel | |
| ☐ the nearest vent route | |
| ☐ the nearest ballast control | |
| ☐ the main sail-control routes | |
| ☐ at least one damage-control station | |
| ☐ at least two ways to reach engineering | |

The map does not need to answer every engineering question. It needs to make the next decision visible.

TEN-MINUTE PREPARATION SHEET

# Prepare a Playable Ship

Use this sheet when the adventure needs a usable ship quickly. It is a preparation aid, not a required universal layout.

## Ship and Role

Ship

Role

What makes it unusual

## Draw These Areas

1. Command
2. Main working deck
3. Engineering control
4. Forward lift
5. Aft lift
6. Storage and pumps
7. Cooling and ballast
8. Sky-keel access

## Add to the Map

- [ ] two routes into engineering
- [ ] one exterior route
- [ ] one damage-control station
- [ ] three failure nodes
- [ ] two physical obstacles
- [ ] one system the crew cannot afford to lose
- [ ] one place from which the vessel can be abandoned

## For Each Failure Node

- [ ] warning sign
- [ ] system affected
- [ ] route to reach it
- [ ] possible obstruction
- [ ] what can be repaired
- [ ] what can be broken
- [ ] what is lost if destroyed

## Build the Emergency

Affected system

Warning

Blocked route

Necessary intervention

Cost

## Set the Clocks

Intervention clock

Danger clock

Danger advances after

What buys time

What happens when danger fills

DEFAULT
Use six segments for each clock when uncertain. Advance danger after each round, major action, manoeuvre, scene, or watch, according to the pace of the emergency.

OPTIONAL BY VESSEL ROLE Warships may need magazines and powder routes. Add a sick berth, casualty station, boats or descent equipment, firebreaks, closable bulkheads, external maintenance access, cargo handling, laboratories, or signalling rooms only when the vessel or adventure needs them.

Draw only what can create a decision. Add more detail only when the adventure needs it.

WORKED EXAMPLES

# Campaign Example: Sabotage aboard Aurora Ventus

This example comes from the campaign in which the airship procedures were first used at the table. The scene was deliberately designed as a complex emergency rather than a single engineering test.

Its purpose was to create the look and feel of an adventure aboard a living vessel: several problems unfolding at once, different stations and access routes, frightened crew, physical obstacles, technical decisions, and meaningful work for characters with very different abilities.

A pressure node has been forced out of agreement. The manifold saws between 240 and 270 kPa. The bell housing reaches 83°C. Two starboard vents are gagged and pass only about sixty percent of their normal flow. Blue Éterlumin haze gathers in the compartment. The ship loses lift unevenly and lurches hard enough to throw crew from their feet.

Write:

Restore Starboard Venting: 6

Starboard Bank Runs Away: 6

The danger clock advances after every round of actions while the pressure node remains active.

The first useful actions are diagnosis. Crew members compare the manifold, the bell temperature, valve B3, buoyancy lever S2, and the regulator seat. This reveals that the throat has been salted with an anticatalyst and that the vents are not merely slow. They have been deliberately gagged.

The diagnosis marks progress because it identifies the safe sequence. It does not clear the vents.

The vent faceplates are wooden and have swollen or jammed under heat and pressure. The crew can work them loose carefully, but time is short. In play, they use chisels, hammers, and a boarding axe to break through the faceplates and reach the blocked passages.

Breaking the faceplates creates access. The faceplates are physical obstacles. The runaway pressure node remains represented by the clocks.

Two vents must be cleared. One character may keep the crew organised and the deck safe. Another may monitor the manifold and call the release sequence. Others break the obstructions, pull debris from the throats, cool the surrounding fittings, or hold a control in position.

Useful actions may make progress, create access, or prevent the danger clock from advancing. A failed action may injure a crew member, drive debris deeper into a vent, release active vapour, or accelerate the pressure rise.

When both vents are clear, the crew still has to prepare for the release and open them in the correct order. Completing the intervention clock creates that opportunity. The final release is part of the established solution, not another arbitrary test.

In the campaign, Aurora Ventus survives, but survival does not erase the cost. Three engineers are dead, the ship requires emergency work, and her arrival is delayed by two days.

## Campaign Example: The Loss of La Estela Veloz

La Estela Veloz comes from the same campaign and demonstrates the other end of the failure model. The scene was played as a catastrophe already in motion, so the characters could act on its consequences but could not honestly repair the destroyed vessel.

The characters witness a sudden flash, a brief pause, and a roar that tears the ship from the sky. By the time anyone aboard another vessel can respond, the failure has already crossed into catastrophe.

Do not create an intervention clock when the characters have no credible opportunity to intervene.

Instead, change the objective. The play may now concern:

- protecting Aurora Ventus and the remaining ships from a second act of sabotage
- accounting for crew and securing exposed engineering spaces
- recovering evidence before fire, weather, or distance destroys it
- identifying whether the explosion was mechanical failure, enemy action, or murder
- preventing panic, false accusation, or the saboteur's escape

A catastrophe does not end play. It changes what can still be saved.

La Estela Veloz therefore is not presented as a repair puzzle. Her loss establishes the stakes and redirects play toward survival, evidence, and the threat of further sabotage. Aurora Ventus shows the crew fighting to prevent the same fate from reaching another vessel.

## Example: Recovering from a Dive

A warship descends rapidly to attack from above. During recovery, the crew discovers that recent drive use has consumed more thermal reserve than expected.

The ship can pull out, but not while maintaining full sail and preparing another broadside.

The captain must choose:

- spill wind from the sails and lose speed after the pass
- silence part of the gun deck and send its crew to cooling stations
- dump ballast and accept later difficulty descending
- continue the attack and trust the sky-keel to endure the correction

The danger does not come from random failure.

It comes from asking the vessel to perform several demanding acts with insufficient reserve.

## Questions for Airship Scenes

- What is the first sign that something is wrong?
- Which part of the vessel is now carrying too much load?
- Who must leave safety to reach the problem?
- What ordinary duty is neglected while the crew responds?
- What resource can solve the immediate danger?
- What later problem will spending that resource create?
- What does the enemy notice?
- What happens if the crew preserves the mission instead of the ship?
- What happens if they preserve the ship instead of the mission?

## The Principle of Fair Danger

Show the warning.

Make the consequence clear.

Allow the crew to act.

Let success consume something when the situation demands it.

Permit failure to change the scene before it ends the story.

The sky is unforgiving.

It is not arbitrary.

## The General Rule

Use clocks for the developing emergency.

Use tests for uncertain interventions.

Use ordinary object rules for things that can physically be forced, cleared, dismantled, or broken.

Let the crew buy time. Let destructive solutions work when they make sense. Make their consequences real.

The characters are racing to understand, reach, alter, and sometimes destroy the correct parts of the vessel before the danger overtakes them.

V TRADITIONS AND THE LIMITS OF KNOWLEDGE

FLEET DOCTRINE

# Different Traditions of Flight

The physical laws are shared.

The solutions are national.

## Valdegracia

Valdegracian vessels favour protection, firepower, distributed containment, and structural resilience.

Their full-length sky-keels are commonly enclosed within heavily armoured engineering structures intended to preserve structural continuity and essential machinery under sustained damage.

Their broad hulls carry powerful batteries and spread the lift system so that damage removes part of the vessel's capacity rather than immediately disabling the entire installation.

Heavy frames, armour, and firepower allow them to hold formation and continue fighting under punishment.

The cost is greater support demand, slower manoeuvre, and a broad turning circle.

A Valdegracian warship is built to remain where doctrine placed it.

## Albion

Albion favours long-range operation, speed, and the ability to choose when and where to engage.

Albion retains the same broad full-length sky-keel arrangement, but uses lighter armour and more modular engineering sections that can be isolated or replaced more quickly.

Efficient sail plans, careful weight economy, generous stores, and disciplined maintenance allow its vessels to cover great distances and remain far from supporting ports.

Their doctrine rewards reconnaissance, rapid concentration, raiding, reinforcement, and attack across a wide theatre.

The cost is lighter protection and less tolerance for prolonged punishment once speed, rigging, or steering is lost.

## The Duchy of Heller

Heller works from Valdegracian foundations but adapts whatever it can acquire, capture, study, or improve.

Its engineers combine systems from different traditions and modify vessels for specific operational roles.

The result can be unusually capable.

It can also be difficult to standardise, repair, or replace.

Aurora Ventus reflects this approach. She combines a deep sky-keel, angled strakes, heavy side-masts, fighting tops, a downward observation cage, and a drive arranged around her command and field-management role.

She remains capable of entering water.

The sea is no longer her natural element.

## Stroomdijk

Stroomdijk favours practical construction, commercial efficiency, and the defence of trade.

Its merchant yards build compact, well-organised vessels around useful cargo capacity, manageable crews, standard fittings, and repairs that can be completed in ordinary ports.

Company and provincial ships are usually armed to protect convoys, deny boarding, and survive raiders rather than seek a decisive line battle.

The result is a fleet of working vessels and capable escorts shaped more by merchants, shipwrights, and crowded trade routes than by the prestige of a royal battle line.

Even its strongest ships cannot match Valdegracia's protection and firepower or Albion's operational reach and speed, but they are rarely wasteful and seldom helpless.

## Luminore

Luminore favours refined hull forms, strong sailing qualities, powerful batteries, and carefully prepared fleet action.

Its vessels are technically ambitious and often individually excellent, with close attention paid to balance, handling, gunnery, and the quality of their officers.

The fleet is smaller than those of the greatest powers and cannot afford careless attrition.

Luminorian captains therefore seek favourable conditions, preserve the fleet's striking power, and commit decisively when preparation and position favour them.

LIMITS OF KNOWLEDGE

# What Engineers Know

By 7202 PSE, trained engineers can measure and predict ordinary airship behaviour with considerable accuracy.

They know how operation changes with:

- Éterlumin grade
- chamber pressure
- temperature
- pulse pattern
- load
- alignment
- altitude
- atmospheric conditions
- cooling capacity
- structural condition
- recent drive use
- nearby interference

They can calculate whether a vessel will rise.

They can estimate its operating ceiling.

They can determine how quickly a bank may be changed without exceeding the frame's permitted load.

They can recognise leakage, overheating, calibration drift, field-centre movement, and resonance instability.

They can build machines that fly repeatedly.

# What Engineers Do Not Know

No accepted theory fully explains:

- why Éterlumin responds to calibrated Fortera pulses
- where reduced or redirected load is ultimately carried
- why some source geometries strengthen the response
- why contradictory patterns produce disequilibrium
- why local Fortera use can weaken later workings
- why lunar conditions affect some stable systems
- why old chambers sometimes answer patterns unknown to modern engineering

These gaps do not prevent practical flight.

A shipwright can build a stable hull without possessing a final theory of matter.

A navigator can trust a compass while scholars still dispute the full cause of magnetism.

The measurements hold.

The ships rise.

The danger begins when confidence travels farther than evidence.

# Common Misunderstandings

## “Éterlumin is only a lifting gas.”

Incomplete.

Active Éterlumin is lighter than air, but it also produces the measured drive response that reduces the vessel's effective downward load.

Ordinary buoyancy alone cannot support the present fleets.

## “The drive makes the ship weightless.”

False.

The vessel retains weight, mass, momentum, and structural strain.

## “A lightened ship is easy to turn.”

False.

Its downward load is reduced. Its mass and momentum remain.

## “A punctured lift-lung always explodes.”

False.

It may leak, collapse, burn, destabilise another bank, or cause loss of lift. Explosion requires ignition, powder, other combustibles, severe disequilibrium, or another violent failure.

## “A drive stops the instant its pulse is cut.”

False.

Residual motion or support may persist for several beats, depending on the charge and the pattern previously imparted.

## “A falling airship always explodes.”

False.

The fall, structural destruction, fire, and magazine explosion are related risks, but they are not the same event.

## “Engineers understand Éterlumin.”

They understand how to work with it.

That is not the same thing.

# The Rule of the Sky

A novice sees a ship rise and believes gravity has been defeated.

A sailor sees the canvas catch and believes the wind carries her.

An engineer hears the rods answer and knows that every force still requires somewhere to go.

Each has seen part of the truth.

The vessel remains inside a balance of air, pressure, heat, structure, motion, and a response no living theory has fully explained.

That balance can cross an ocean.

It can carry a broadside.

It can decide a war.

It can fail because one valve answered late.

> Éterlumin makes flight possible. Discipline keeps it possible.

MAR DE ORO | GM REFERENCE

# AIRSHIP EMERGENCY CHEAT SHEET

Use clocks for the developing danger. Use checks for uncertain actions. Use object rules only for physical obstacles.

**SPECULATION**
Only Éterlumin and Fortera

**ENERGY**
Conserved

**MASS**
Cannot be reduced

**THRUST**
No free or reactionless drive

## 1. Set the Scene

Problem. State what is failing in ordinary language.

Intervention clock. 4 segments for a contained problem, 6 for a serious emergency, 8 for several systems or locations.

Danger clock. Name the approaching consequence. Use the same size unless time is unusually short or generous.

Interval. Choose when danger advances: after a round, major action, manoeuvre, scene, or watch. Tell the players.

Warning. Give something visible, audible, or physical: heat, pressure drift, vibration, vapour, changing deck angle, or an unfamiliar sound.

Map anchors. Mark the failing system, control point, access route, obstruction, and the system or resource at risk.

## 2. Run Each Interval

1. Describe how the ship is changing.
2. Ask each player: What do you do? Do not begin with a named skill.
3. Test only when the action is uncertain, rushed, dangerous, or beyond routine procedure.
4. Apply progress, time bought, access created, danger reduced, or a consequence.
5. Let the ordinary crew continue routine emergency work.
6. Advance danger unless someone specifically bought time.

## 3. End the Emergency

Intervention fills. The crew controls the failure or reaches one clear final step. Do not demand an arbitrary extra test.

Danger fills. The named consequence occurs. It may begin a new clock or change the objective.

Catastrophe. Play shifts from repair to choosing where the ship falls, what survives, and who escapes.

## What an Action Can Do

Make progress. Mark 1 segment. Mark 2 for an exceptionally effective, perfectly prepared, or seriously costly method.

Buy time. Prevent the danger clock from advancing once. The underlying problem remains.

Create access. Open a route, expose a control, clear wreckage, or place another character where they can act.

Reduce danger. Remove one harmful effect, protect the crew, or prevent additional escalation.

## Results

Success. The situation changes. Repeating the same completed task gives no further progress.

Failure. Apply a consequence rather than asking for the same unchanged attempt again.

Useful consequences: advance danger; inflict injury; damage tools; close a route; lose altitude; injure crew; spread heat, vapour, or fire; create a connected failure; or allow success at a serious cost.

## Objects and Machinery

Physical obstacle. A jammed door, warped hatch, grille, chain, or blockage may be forced, dismantled, cleared, cut, or broken using the chosen game's ordinary object rules.

The failure has no durability. Only the physical obstacle does.

Functional machinery. Destroying a regulator, line, support, or control can solve the immediate danger, but it permanently removes or changes a capability.

## The Ordinary Crew

A trained crew can maintain basic steering, secure guns and cargo, move prepared ballast, evacuate compartments, fight small fires, carry orders, and follow established emergency procedures.

Player characters are needed where judgment, authority, unusual capability, or exceptional danger matters.

## Keep the Scene Fair

Show the warning. Make the consequence clear. Let several approaches work. Let destructive solutions work when they make sense. Make their cost real.

THE SHIP IS THE BATTLEFIELD. THE CHOICES ARE THE ENCOUNTER.

MAR DE ORO | GM WORKSHEET

# AIRSHIP EMERGENCY SETUP

Make the developing danger visible before play begins.

| PROBLEM | LOCATION | WARNING | INTERVAL |
| --- | --- | --- | --- |
| | | | |

## INTERVENTION CLOCK

Name

○ ○ ○ ○ ○ ○ ○ ○

Final step

## DANGER CLOCK

Name

○ ○ ○ ○ ○ ○ ○ ○

Consequence

## KEY DECISIONS

| | |
| --- | --- |
| Blocked route | What buys time |
| What can be forced or broken | What is lost |

**REMEMBER** Show the warning. State the consequence. Let several approaches work. Let destructive solutions work when they make sense. Make their cost real.

THE SHIP IS THE BATTLEFIELD. THE CHOICES ARE THE ENCOUNTER.

# The Sky is Work. We Make it Hold.

*Flight in Mar de Oro is a discipline, not a miracle.*

This illustrated chapter explores how airships truly work in 7202 Post Sundering Era: Éterlumin lift, the sky-keel, sails, ballast, engineering watches, structural strain, failure, recovery, and the culture of crews who live between clouds and war.

## Inside You Will Find:

- the principles of lift, motion, and airship engineering
- the structure of lift banks, sky-keels, and engineering spaces
- guidance for shipboard emergencies, failures, and recoveries
- playable advice for crew roles, airship maps, and adventure scenes
- a one-page GM reference cheat sheet

*For captains, engineers, Game Masters, and readers who want the sky to feel real.*

**Éterlumin makes flight possible. Discipline keeps it possible.**

A System-Neutral Setting Chapter for Mar de Oro

Johnny Crown