The Arbour Hull Core

Lives alongside: Arbour City Geography — Skeleton (Session One). Not a worldbuilding document in the usual sense — this is a working reference for drafting scenes set in the Luminary or Meridian Districts, translating the locked engineering (tapered pressure-vessel hull, ring-frame construction, several-Pyramids launch mass) into the specific physical sensations a character would actually notice without ever being told why. Nothing here should be exposited on the page. It should simply be true of the space, the way gravity is true of it.

The One Rule

Everything in the hull-core was built to resist being crushed from outside, not to look a particular way. Every visual or sensory detail below should trace back to that one fact. The Sprawl was built by people solving "how do we make a wall?" The hull-core was built by people solving "how do we keep several thousand tonnes per square metre of ocean from finding the one weak point in this hull", — and the answer to that question, three centuries later, with no ocean anywhere nearby, still looks like an answer to a question nobody currently alive is asking.

Why the Floors Are Level (and Why That Took Generations)

This addresses a real, worth-stating question: the ship rests at a genuine incline (roughly 15-20° from horizontal, per *Arbour City Geography*), so why doesn't everyone inside it spend their whole life walking on a slope?

The original decks were built perpendicular to the ship's long axis — flat relative to the ship itself, since that axis functioned as the effective "down" under the sustained acceleration of the voyage. This means two things were true at the moment of impact, and both still matter: the decks were genuinely flat, continuous, walkable surfaces, with none of the jagged or uneven geometry a casual reader might otherwise picture; and, because the ship's axis itself is now lying at an angle relative to the ground, those same flat decks came to rest tilted at that same angle relative to true, gravity-level ground. A deck this size, tilted ~17°, is not subtle — it's roughly three and a half times steeper than a real-world wheelchair ramp's maximum legal slope. Inherited, not introduced: the tilt was never built into the ship on purpose, but it was very much there on the first day anyone

tried to live on these decks after the crash.

This is not a problem the founding generation solved once. It is a problem every generation has kept solving, a little more completely than the last. Levelling a deck this size — building up the downhill side, cutting into or building platforms over the uphill side, re-laying entire floor sections — is exactly the kind of slow, unglamorous, structurally significant labour that fits everything else this project already says about how Arbour treats its inherited ship: nobody alive remembers a single decision to do it, because nobody alive was there for the decision. It simply became something each generation did a bit more of, the same way the tier system calcified and the Frames stayed cordoned off — not a plan, sediment.

This work has never been purely one or the other — purely automated or purely manual — and which one dominated has shifted significantly over the generations. See *Arbour City Geography*, "Who Actually Built the City — ARC's Hand in the Hull-Core," for the full treatment: early generations worked closely with ARC's original deployment and construction-direction systems, but trust in ARC's instructions eroded over centuries as its memory degraded, and present-day construction and floor-levelling work is now predominantly hands-on, built from accumulated practical knowledge of how a given section actually behaves — much closer to the Sprawl's own self-taught, salvage-based competence than to anything resembling automated direction. Some of what reads, today, as inherited-but-unexplained construction is the manual work of the present generation. Some of it is older, ARC-directed work from a period when its instructions were trusted and sometimes wrong, that nobody since has had reason or resources to undo. Nobody currently living can reliably tell which is which.

What this means for present-day texture, and what it should never become:

- **Most floors in the present-day hull-core read as ordinary and level**, because three centuries of this slow correction work have actually finished the job in the heavily-trafficked, long-inhabited core of Luminary and upper Meridian. A character standing in a well-established hull-core room or corridor should feel nothing unusual underfoot.
- **The correction is least complete at the edges — newer, less-developed, or less-trafficked sections of the hull-core**, where the work simply hasn't reached yet, or was never worth the labour for a space that doesn't see enough use to justify it. This is a free, reusable detail: a tilted floor, a subtly built-up threshold, a room where furniture has visibly been shimmed or wedged rather than properly levelled, reads immediately as *newer to habitation* or *lower priority* without anyone needing to say so.
- **The correction itself is visible, if you know to look for it**, in exactly the way everything else inherited in the hull-core is visible without being understood: a floor that's subtly built up higher on one side than structural logic would predict, a doorway whose lower lip doesn't sit where the original hatch-frame does, a room where the "floor" is visibly a later addition sitting at a slightly different level than the bones of the wall around it. Nobody currently living reads any of this as "we re-levelled this because the ship used to lean." It simply reads as old, layered, lived-in — one more texture in a city built on top of itself for ten generations.
- **This should never become something a character consciously articulates** as "the ship is on an incline, which is why we had to level the floors." Per the document's existing

core principle, the wrongness and the correction both stay felt, not understood — a held-onto unease in an unfinished space, an unremarked-on ordinariness in a finished one, never a stated piece of ship history.

What a Body Notices First

Walls are never flat for long. A corridor in the hull-core rarely runs straight and square, the way Sprawl construction does. It curves, gently, continuously — following the original ring-frame geometry of the hull rather than any human sense of "a room." A person who grew up in the Sprawl, walking into the Luminary for the first time, will feel this before they can name it: a faint, persistent sense of being inside something that doesn't quite agree with the idea of corners.

Doorways are not doorways. They are hatches — circular or rounded-rectangular, often recessed into walls thick enough that stepping through one means walking through a short tunnel of wall before reaching the room itself. Many were never resized for casual daily use; centuries of habitation have widened some, left others exactly as built. A resident who has lived their whole life around one particular hatch can tell you, without thinking about it, exactly how to turn their shoulders to pass through without brushing both sides at once.

Sound behaves incorrectly, in a specific way. Pressure-rated construction is built to transmit force evenly across a curved surface, not to dampen it — the opposite of what most acoustic engineering tries to do. A voice in a hull-core corridor doesn't echo the way a voice in an ordinary room echoes. It carries along the curve, sometimes arriving at a listener's ear from a direction that doesn't match where the speaker is actually standing. Long-time residents stop noticing this. Newcomers find it unsettling without being able to say exactly why a familiar voice suddenly sounds like it's coming from the wrong wall.

Everything is thicker than it needs to be. Not dramatically, not in a way anyone would consciously measure — but a load-bearing wall in the hull-core is reliably, quietly more substantial than the same wall would need to be if it were holding up nothing but the ceiling above it. People who've spent their whole lives around this construction read it, without ever framing it this way, as a kind of permanence. It feels old in the specific way that "built to survive something enormous" feels old, even to someone who has never once wondered what that enormous thing was.

Temperature and air move differently near the original hull plating. The metal itself — original ring-frame and hull-skin material, still structurally active after three centuries — holds heat and cold longer than anything built later. A hand against an exterior-facing hull-core wall in winter finds it colder than the air around it; in the rare moments Cordis's twin suns bring real heat, the same wall stays warm long after the air has cooled. Residents calibrate their sense of season partly by which walls in their home are doing this, without necessarily understanding that the metal is, in some structural sense, still remembering an ocean.

Specific, Reusable Details

A short list of concrete, drop-in images — not meant to all appear in one scene, but available individually wherever a corridor, room, or doorway needs texture:

- A hatch-door's release mechanism — a heavy, circular handle, turned rather than pushed, occasionally still bearing a faint manufacturer's stamp in a script nobody currently reads as anything but decoration.
- A "dead" equipment pocket (see Arbour City Geography skeleton, Part One) repurposed as a cupboard, a shrine, a child's hiding spot — its walls a different, more deliberate curve than the room built up around it, large enough to suggest it was meant for something, never quite explained to whoever's using it now.
- A ring-frame seam running floor to ceiling at perfectly regular intervals down a long corridor — never remarked on by residents, immediately obvious to a Sprawl-born visitor counting them without meaning to.
- A wall section that booms, very slightly, underhand — struck without thinking, the way anyone taps a surface absentmindedly — that no Sprawl-born wall would ever do, because no Sprawl-born wall is hollow-but-armoured in quite that specific way.
- Condensation patterns that follow the original hull's curve rather than the room's actual ceiling line — visible after a humid day, gone by evening, never quite where the room's own geometry would predict.
- A corridor that's audibly busier two turns away than it has any visible reason to be — sound finding its way along the curve from somewhere the listener can't yet see.

What This Should Never Become

This reference exists to be felt, not explained. No character — not even Wren, not even an Azure Branch engineer — should ever stand in a hull-core corridor and think the words "pressure vessel" or "built for the ocean." Nobody alive has the framework for that read. The wrongness should register exactly the way it's described above: as old, as heavy, as slightly off in ways nobody has ever had reason to investigate. If a scene ever needs a character to *consciously* notice and wonder, that wondering should produce confusion or unease, never comprehension — comprehension belongs to the reader, not to anyone on the page, until and unless the story deliberately decides otherwise.

Open Follow-Ups

- [x] **Whether the Tabularium itself sits in hull-core or Sprawl construction** — ✓ resolved, new document: *The Tabularium* (World & Lore → Locations & Sensory Detail).

Both, deliberately — lower public floors are Sprawl-adjacent, upper restricted floors are genuine hull-core construction.

- [ ] **A specific name or in-world term for hull-core construction**, if one is wanted — something a Sprawl resident might call it colloquially (distinct from "Luminary" or "Meridian," which name the place, not the architecture itself).
- [ ] **Specific locations where the floor-levelling correction is visibly incomplete** — worth identifying one or two concrete spaces (a specific corridor, a specific room) where this texture could be used deliberately in early drafting, now that the mechanism is established.
- [ ] **Whether the floor-levelling work has its own informal vocabulary**, the way "the shed" and "tastes of the system" exist for other inherited hardships — a Sprawl- or hull-core-specific term for newer, not-yet-levelled space, if one is wanted.

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