A PAPERCRAFT FILM / MAKING OF

PAPER HARBOR

A folded-paper harbour town wakes at dawn on a tabletop. A paper sailboat casts off, crosses layered paper waves past a striped lighthouse, and a paper sun rises on a rod. Fifteen seconds in one continuous shot, built from one prompt by Claude Opus 5.5 in headless Blender with the Scenario Blender Plugin and the Scenario MCP.

0:15
one shot

82 min
session, fix included

39
generations, 13 models

2,036.5
credits (CU)

One brief, no follow-ups.

The session received one prompt: shared rules and the brief below. It ran headless on one Mac (Apple M5 Max, 48 GB, shared with other renders) with Blender 5.2.1, the Scenario Blender Plugin and the Scenario MCP, and made every decision itself. After the film was finished, one review note asked for one fix.

THE BRIEF, AS THE SESSION RECEIVED IT

PAPER HARBOR. 15 seconds, one continuous shot. A cosy tabletop diorama of a folded-paper harbour town at dawn, papercraft style with tilt-shift miniature depth of field. Paper waves ripple in layers, paper boats bob and one sails out of the harbour, a paper lighthouse beam turns, gulls on thin wires flap, and a paper sun on a rod rises behind the town. Soft warm studio light, visible paper grain and folds. Sound: light pizzicato strings and celesta, paper rustle, gentle waves and a gull cry.

Scenario where it helps most: paper and card stocks (Scenario Texture or PATINA), paper-cut signage, bunting and shop fronts (GPT Image 2), a few hero paper props (image to 3D), a soft dawn backdrop (skybox or a GPT Image 2 painted card), music and sound effects.

Frame 24: the quay of Foldwick, just before the sailboat casts off.

The rules it worked to

Blender and Scenario only, every name invented (the town of Foldwick, five shops, the keeper), test renders opened and fixed before the final, exactly 360 frames at 24 fps in EEVEE, a full render inside about 45 minutes, a live build timelapse, and every generated asset filed in one Scenario collection, PAPER HARBOR.

Five fronts, one sign, thirty flags.

GPT Image 2 drew all of the town's printed art at high quality: five shop fronts, the FOLDWICK HARBOUR sign, a sheet of bunting, a sheet of clouds and the dawn sky. The prompts quote every sign exactly, and the letters came back legible.

Left: the five fronts, 1024 x 1280 each. Right: the sign and the bunting and cloud sheets (transparent), and the dawn backdrop.

Flat, full-bleed fronts

Each shop was asked for as a flat, straight-on front elevation, the facade filling the image edge to edge, orthographic with no perspective. The image then wraps the front of a folded-card house as it is. Every card also carries the watercolour stock's normal map, so the print keeps a paper tooth.

Cut from the alpha

The sign, the bunting and the clouds came back on transparent backgrounds. The agent found each piece's box from the alpha channel and mapped it onto its own card: eight flag designs became 30 flags on twine between the lamp posts, and three clouds from a sheet of six hang on wires.

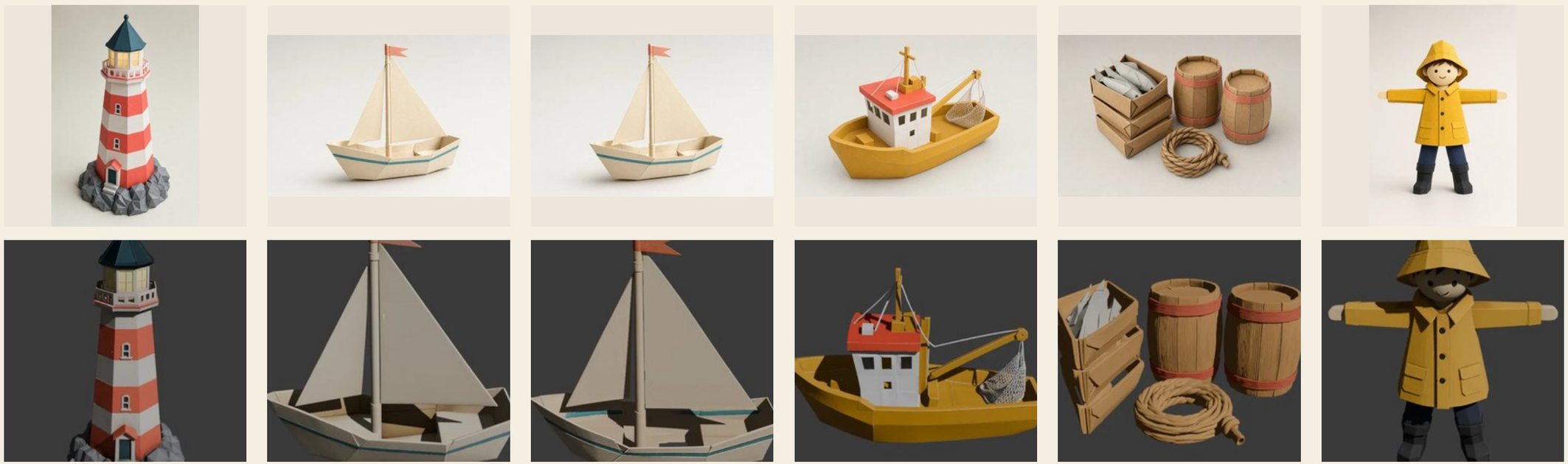
A painted sky at 4K

The dawn backdrop is a watercolour sky with no sun, land or text, at 2048 x 1024. Magnific Upscaler Precision doubled it to 4096 x 2048 for the curved card behind the town. Asset describe read its style as “Dreamy Watercolor Pastels”.

A photo of a paper model, then the model.

For each hero prop GPT Image 2 drew a product photo of a handmade paper model: whole, centred, three-quarter view, plain background. Scenario's recommend tool ranked the image-to-3D models, and each mesh replaced a grey proxy through a Scenario Blender Plugin asset slot.

concept above, mesh below



Lighthouse
Hunyuan 3D 3.1 Pro

Sailboat
Hunyuan 3D 3.1 Pro

Same concept
Tripo 3.1, runner-up

Trawler
Meshy 7.1

Crates
Rodin Gen-2.5

Keeper
Tripo 3.1, rigged

Ranked, then spread

recommend, at quality priority, ranked Hunyuan 3D 3.1 Pro, Tripo 3.1, Hitem3D, Meshy 7.1 and Rodin Gen-2.5, and the props went to four of them. The lighthouse came with its own paper-rock base. Scans above 600,000 faces were decimated to 25 %.

A shoot-out for the hero

The same sailboat concept went to Hunyuan 3D 3.1 Pro and to Tripo 3.1. Hunyuan won: a cleaner mesh at 300k triangles against 1.9 million. It is the boat that sails out of the harbour.

The keeper

Drawn in a T-pose, then rigged by Tripo Rigging with an idle cycle. Two Uthana text-to-motion jobs failed with server errors and were refunded, so the goodbye wave is keyed by hand on one arm.

Eight sheets for every colour in town.

PATINA Material generated five full PBR sets (albedo, normal, smoothness, metallic, height), and the Scenario Blender Plugin applied each one to a hidden swatch. Scenario Texture generated three printed papers for the origami boats.

Watercolour
PATINA

Card stock
PATINA

Kraft
PATINA

Crumple
PATINA

Oak
PATINA

Newsprint
Scenario Texture

Washi dots
Scenario Texture

Washi waves
Scenario Texture

Tinted, not repainted

Every paper colour is a copy of one stock. The agent measured each stock's mean albedo and multiplied the albedo by the target colour divided by that mean, so pale and dark sheets land on the same colour and keep their fibres. Roughness sits in a matte 0.72 to 0.93, with sheen and a 12 % translucent mix so backlit paper glows.

Where each sheet went

Watercolour: walls, promenade, foam, gulls, the sun and every paper core. Card stock: 17 wave layers, roofs, hills and trees. Kraft: the diorama board. Crumple: the quay wall and the breakwater rocks. Oak: the workbench, with its grain straightened.

A pale core on every cut

After the first review, every solidified piece (53 objects) got a pale paper-core material on its rim faces, so each cut edge shows the lighter card inside. The three origami boats wear the printed papers over the card-stock grain.

A studio around the table, then colour on the clay.

Scenario Skybox GPT painted a cosy craft studio at dawn as a 360 panorama, and HDRI Skybox converted it into the world light, applied with the plugin's apply_world. Everything else in the frame is Blender, written in Python.

Scenario Skybox GPT: the studio, 2048 x 1024.

A clay pass of the finished scene.

The same frame in the film.

An 8-bit caveat

The HDRI job returned 8-bit previews only, not the EXR it was asked for, so the world is LDR at strength 0.28. Kept low on purpose: a low warm raking key from the sun side, a cool lavender fill, a warm rim and a soft overhead bounce carry the dawn.

Light that moves

The key and rim warm over the shot, a spot light turns inside the lighthouse beam, a glow sits behind the paper sun, and the windows and lamps are emissive. The look is a saved state, Dawn, with Blue hour as the alternative.

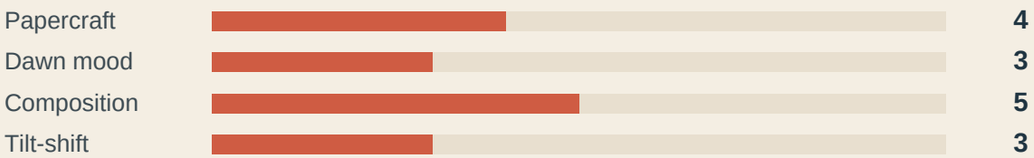
The clay is Blender

17 scalloped wave strips, 15 folded-card houses, origami boats and gulls on bent wires, built at real miniature scale. One plugin camera path, 45 mm at f/2.8 focused on the sailboat, gives the tilt-shift look from real depth of field.

It graded its own frames, then changed them.

The agent opened its own test renders first, then sent stills to Scenario's analysis tools. Asset analyze, briefed as a senior art director, scored four criteria out of 10 and listed fixes. Each note ended in a change or a stated reason to keep the frame.

First critique, key light only



“No dawn direction.” A low warm raking key, a cool fill, the world lowered.

“Zero thickness.” A pale paper core on every cut edge, 53 objects.

“Warmth stops at the hills.” Far wave layers blended up to 32 % toward dawn peach.

“Right third is dead.” The shot ends on the lighthouse, the sun beside it.

“A post-gradient blur.” Kept: it is real depth of field, judged from a still.

Second critique

“The lantern isn’t emitting.” An emissive band on the glass, a stronger lantern light; the second half rendered again.

“Visible rig wires.” Kept: the brief asks for gulls on thin wires.

Its own eyes first

Before any critique, its own test renders led it to raise and widen the camera, extend the board 27 cm so the route reaches open sea, move the sun beside the lighthouse and add 7 wave layers behind the breakwater.

Quality Gate 96, then 98

asset_quality_gate_run passed a render near the end of the shot at 96/100, then the final still at frame 75 at 98/100. Both runs came before the fix pass.

Caption and describe

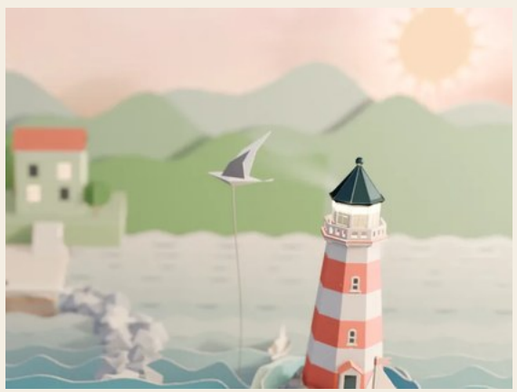
Asset caption read a render back as “a papercraft-style coastal village with colorful houses, a harbor… layered blue paper waves”, which is what the brief asked for.

Frame 75 of the film, the frame the final Quality Gate scored.

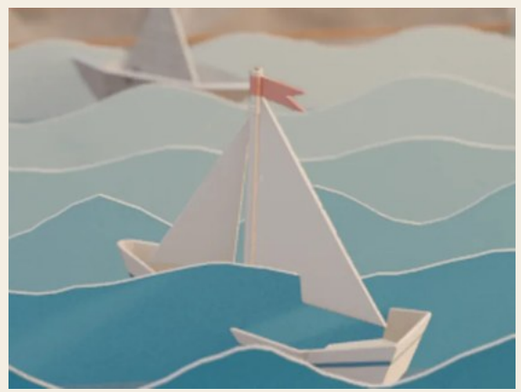
One review note, measured before anything moved.

After the film was finished, one review note asked for two changes: the lighthouse floats, and the sailboat rides too low. The session was resumed once for it. Timing, camera, lights, soundtrack and every other object stayed as they were.

Before, frame 300



After, frame 300



Hull before, frame 165

Hull after, frame 165

Why it floated

The slot proxy's origin sat at the world origin, so scaling the slot to 80 % had carried the lighthouse and its rocks 14 cm above the sea card, away from the rock pad. The beam stayed at the design point and turned in mid-air beside the tower.

An islet chosen against the route

Dropping it in place would have put the rocks across the sailboat's route. The agent scored candidate centres against the hull on every frame, a gull, a paper boat and the framing, and chose one 2.8 cm clear of the hull. Two scalloped paper collars ring the rocks and the beam moved with the tower.

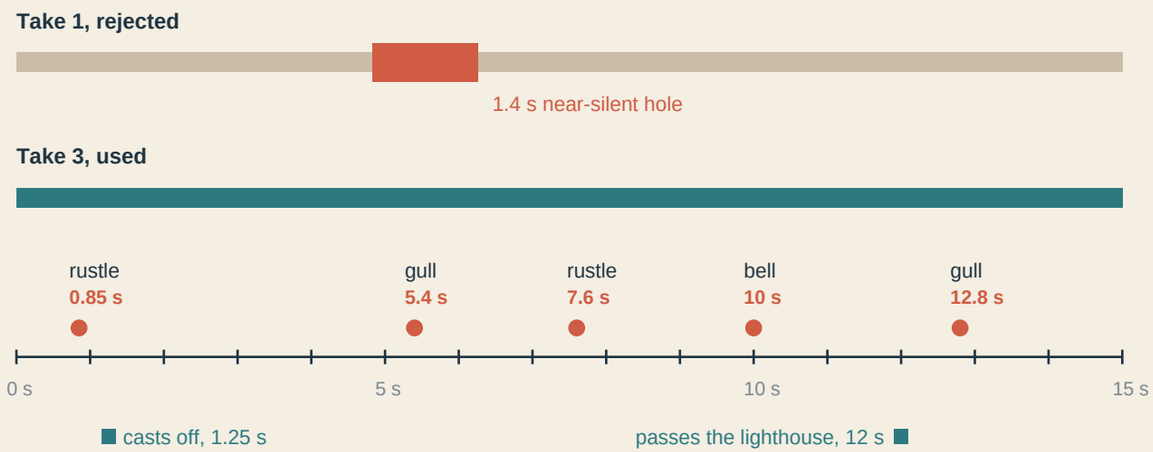
A height curve for the hull

Projecting the strip tops through the camera onto nine points on the 2.1 cm hull showed 90 % cover or more on 290 of 360 frames. A solved height curve keeps 2.5 to 11.5 mm of hull behind the waves on every frame. The re-render took 5 min 51 s.

Pizzicato, a bell buoy, and the bill in credits.

ElevenLabs Music v2 wrote three takes of pizzicato strings and celesta; ElevenLabs Sound Effects 2 made the paper rustle, the gull, the bell buoy and a looping water bed. Each effect sits on a moment in the picture.

The 15-second tape



dots: sound cues; squares: picture events

A silence detector ran on take 1 and found a 1.4 s near-silent hole at 4.8 s, so the agent asked for two more takes with a “continuous, no pauses” prompt. Take 3 (18 s, 100 BPM, D major) was trimmed and fitted to 15 s, then mixed under the water bed and the five cues and limited. The second gull is pitched up 6 %.

The receipt

	jobs	CU
GPT Image 2	14	655
Hunyuan 3D 3.1 Pro	2	240
Tripo 3.1	2	180
Magnific Upscaler Precision	1	180
Meshy 7.1	1	140
PATINA Material	5	129
ElevenLabs Sound Effects 2	4	120
ElevenLabs Music v2	3	90
Scenario Texture	3	84
Rodin Gen-2.5	1	80
Tripo Rigging	1	70
Scenario Skybox GPT	1	32
HDRI Skybox	1	22
Analysis: analyze, gate, describe, caption	6	14.5
45 finished Scenario calls	**45**	**2,036.5**

Charged credits from the session's Scenario job records. Two Uthana text-to-motion jobs failed and were refunded, so they are not counted. 82 minutes of session time, fix pass included.