01 / C.400 P.2 packaging and media production brief

scope

C400P2-MEDIA-TZ-01 / 1.0 / 14 Nov 2026. Produce a coherent TextToCAD package explaining the historical craft, reconstruction revisions R1-R5, modeled joints and verification limits. Execution delivers texts, explanatory sheets, a 42 s animation, an 8:30 film with Russian narration, a catalogue and an offline RU/EN archive.

This deliverable is a specification. The new film, voice recording and media package it defines have not yet been produced. Engineering baseline: R5. Spec_R5, dated 14 Nov 2026, is a separate specification and cost-data release.

Requirement / item	Content
Basis	Latest located TURBOLET chat brief: TURBOLET-MEDIA-TZ-01/1.0, 14 Nov 2026; local brief_content.json and the five latest chat turns.
Subject	SNECMA C.400 P.2, Atar Volant; target state: free flight in 1957, project designation F-ZWUZ. An experimental flying craft.
Scope	Packaging, explanation, media recording and acceptance. Design changes, manufacturing drawings, physical tests and construction belong to a separate engineering release.
Publication	Prepare files and copy for open distribution. Track actual website/YouTube upload separately; never claim a public link exists before upload.

02 / Analysis of the TURBOLET source brief

analysis

The source defines 20 sections, 12 work packages, eight deliverable groups, nine sheets and 14 acceptance criteria. Its strength is a continuous source-to-CAD-to-voice/video-to-archive process. The latest inspected chat turn is marked interrupted; local HTML/PDF and structured brief files exist. This establishes the brief, not completion of the future film.

Requirement / item	Content
Retain	RU/EN, three text lengths and FAQ, native views, short animation, desktop player, nine chapters/8:30, Russian voice, RU/EN subtitles, QA, archive and sources.
Replace	Replace TURBOLET tail/surface, RD-9 and battery stories with the elevated pilot station, annular tank, Atar, mounts, four landing legs and touchdown roller.
Add	4100/5250 diagonal alternatives, provenance of the 180 mm stroke, conditional R4 calculation, physical interface revision R4→R5, R5 spreadsheet rebuild and original-photo comparison. Ten sheets are required.
Correct transfer risk	The rotor and combustor internals are undeveloped in R5; the outer Combustor casing exists. Any new internal mechanism diagram is a separately sourced schematic derivative.
Freeze sequence	Validate a sample scene and voice before bulk production; complete the script before full recording. Preserve the source sequence; prepare the entry pages alongside editing.

TMR and LLTV inform this document through the analysis already present in the TURBOLET brief. This task does not claim a fresh full reading of those two chats. Their geometry, part counts, history and prices are not transferred.

03 / Two histories: the craft and the digital project

history

Requirement / item	Content
Historical narrative	Atar Volant explored vertical flight using jet lift and gas-jet control. Anchor event: first free flight on 14 May 1957 at Melun-Villaroche, Auguste Morel; H02, pp. 20-22.
Separate states	P.1, piloted P.2, P.3 and C.450 are distinct craft/stages. Label tethered tests, free flight and later museum display separately.
R1 - initial reconstruction	From the task and available images to an overall information model and initial FeedBack package.
R2 - photo comparison	Refinement of landing gear, forks and pilot station; comparison with original imagery. Keep old shots as history, not current R5 views.
R3 - integration	Combined strut/fork/roller motion, mounts and routing, surrogate seating, access and rebuilding. Captions retain each test's actual scope.
R4 - loads and upper joints	Calculation using 2600 kg and 180 mm stroke; modeled upper clevises, pins and backing plates. Two landing-gear variants.
R5 - connected interfaces	Lower stays, knee joints, forks, axles, pipe supports and roller; interface and motion checks. These changes answer the user's reports of disconnected-looking mounts.
14 Nov 2026 - Spec_R5	15 systems, 473 CAD entries, descriptions, readiness and Russia/Texas cost scenarios. An R5 data supplement, not geometric revision R6.

The film distinguishes historical research from model development. Original flight dates do not date digital checks; new editing does not renew an old engineering calculation.

04 / Frozen baseline and readiness limits

baseline

Requirement / item	Content
R5 model	R5/C400P2_R5.FCStd and R5/C400P2_R5_5250.FCStd; STEP, BOM, reports and views. 473 geometric entries and 877 solids; CAD count is not a purchasing count.
Interfaces	342 named checks per variant; scope covers gear and associated rings/shell/supports. Do not extend the result to all craft systems.
R5 motion	0-180 mm, 0-360°; continuous envelopes and 228 states per leg ×4 legs ×2 variants =1824 transform checks, not whole-craft combinations. Roller arm 0-45° with between-sample bounds.
Different clearances	43 mm is a scoped moving-to-fixed clearance; 0.25 mm is designed radial guide clearance; 9.825 mm is a lower bound for the touchdown mechanism. These are not one craft-wide minimum.
FeedBack	Plan ac37b448-f324-456b-baad-0ad67e56a7a2: files generated. engineering/production_release remain unapproved. File completeness is not engineering approval.
Open in R5	Fresh original-photo comparison, spreadsheet-driven parameter rebuild in R5, updated strength/CG and whole-assembly access validation. Latest table test: R4 at 4300 mm.
Existing catalogue	Spec_R5: RU/EN HTML, XLSX, CSV, JSON and 33 price sources. Public values come from estimate_data.json rather than separate manual recalculation.

At execution start, verify inputs against this brief's sources/input_manifest.json. Preserve R1-R5 and Spec_R5 archives; presentation changes use new derivative files.

05 / Configurations and evidence

configuration

Requirement / item	Content
CFG_1957_4100	Main narrative: reconstructed 1957 state, 4100 mm support diagonal inferred from imagery. Label as a reconstruction choice.
CFG_1957_5250	Alternative based on published 5250 mm dimension. Without established dimension endpoints, do not label it proven correct or wrong.
Diagonal ≠ track	Show A-C/B-D reference points and the actual parameter meaning. Do not convert diagonal into transverse track without confirmed support layout/contact points.
180 mm and 2600 kg	2600 kg is the adopted calculation mass; 180 mm is assumed model travel, not an established factory stroke. Record compression, fork angle and variant for each motion shot.
Registration	F-ZWUZ retains project identity. H02 also prints F-ZWWZ; record this discrepancy rather than silently correcting it or creating a new modeled aircraft.
Control scheme	Distinguish main lift, jet-direction mechanism and tangential jets. Define axes and moment signs in model coordinates; verify historical terminology against H02.
Statuses	DOCUMENTED: evidence; RECONSTRUCTED: inferred shape; ASSUMED: calculation assumption; OPEN: unavailable data. QA is separate: PASS/FAIL/NOT_RUN, date and scope.

W02 outputs configuration.json and claims.csv: claim_id, RU/EN wording, configuration, revision, CAD Name, evidence_id, precise locator, evidence status, units/conditions, image rights and action. An unknown may remain open when clearly disclosed.

06 / Plain explanation and the role of TextToCAD

message

Requirement / item	Content
80-120 words RU/EN	Identify the craft, purpose of vertical-jet experimentation, digital result and one open question: gear diagonal.
350-500 words RU/EN	Bottom to top: four legs and roller, load rings and engine, annular tank and bleed air, instruments, seat and two controls. Explain lift through jet direction and force.
900-1200 words RU/EN	1950s research problem → free flight → systems → R1-R5 reconstruction → a mount correction → checks and limits → open materials.
FAQ: 10 questions	What is it? How does it lift? How is it controlled? Why the elevated pilot? What does the roller do? Why two gear sizes? What is verified? What precedes manufacturing? How does TextToCAD help? Why share?
Process example	Disconnected-mount observation → interface faces/axes → backing plate, clevis and pin → corrected model → check → FeedBack. Use actual R4/R5 shots with matched cameras.
Why share	Technical heritage, learning, independent review and better evidence. Invite specific contributions: gear dimension references, joint drawings, instrument identification or issues with CAD Name/view.

Do not revive the mistaken “production car” comparison: the user clarified “craft”. Compare with a production aircraft in purpose, documentation, verification and repeatability. CAD appearance does not establish speed, range, endurance or flight readiness.

07 / Future deliverables

deliverables

Requirement / item	Content
D01 / Passport	JSON/CSV and RU/EN overview: configurations, sources, history, limits, hashes and rights. One claim register across formats.
D02 / Texts	Three lengths and 10 FAQs RU/EN; TXT/JSON/HTML and terminology glossary. Presentation text must not invent performance.
D03 / 10 sheets	20 PNG at 2400×1800 and 20 editable SVG, two RU/EN PDF albums and gallery. Native raster views may be embedded; labels/callouts remain editable.
D04 / 42 seconds	Two RU/EN MP4 files, 1920×1080/24, 1008 frames each; offline player with six stages and deterministic time seeking.
D05 / Recording and editing	RU/EN script, nine chapters/510 s, shot list, timeline.json, pronunciation glossary, voice sample and scene capture plan.
D06 / Film	One 8:30 MP4 with Russian narration; Full HD/24; 12,240 frames. RU/EN SRT and VTT, WAV, utterances and reproducible editing.
D07 / Entry point	index_RU.html/index_EN.html: video, chapters, sheets, history, catalogue, costs, sources, downloads and contacts. Desktop-first, with mobile accessibility.
D08 / Handoff	Both CAD/STEP variants, public FeedBack derivative, Spec_R5 data, instructions, QA, licences and ZIP. Redact personal metadata paths with a log; preserve original FeedBack separately. R1-R4 provide history.

English narration, PPTX and standalone social cards are optional extensions. The baseline includes a film thumbnail, RU/EN YouTube description, nine chapter timecodes and credits.

08 / Ten explanatory sheets

sheets

Requirement / item	Content
L01 / Overview	Entire craft and 8-12 callouts: pilot, engine, tank, four legs, jet lines and roller. Label revision/configuration.
L02 / Inside the shell	Removed shell: engine, rings, tank and equipment shelf. Show actual R5 casings; separate schematic Atar cycle.
L03 / Lift and control	Downward jet, upward thrust and weight; jet direction and tangential outlets. Each arrow has evidence and a defined axis.
L04 / Gear 4100/5250	Matched scale/camera and floor datum, diagonal endpoints. Travel at 0/90/180 mm; fork steering distinct from wheel rotation.
L05 / Load path	Engine bearer → ring → upper joint/stay → damper → fork → axle → wheel. Show actual interfaces, pins and retention.
L06 / Lower joints	Close-ups of lower stay, knee, cuff, eyes, spacers and axles. Matched R4/R5 pair; contact geometry does not establish strength.
L07 / Touchdown roller	Pivot, arm, fork and roller, 0-45°; meaning of pilot indication. Return spring, switch and circuit are open items.
L08 / Pilot station	Original and R5 in comparable views: seat, feet, panel, two controls, sightlines and clearance. Identify the R3 surrogate; broad pilot accommodation is unverified.
L09 / Routes and access	Annular/feeder tanks, bleed air, eight pipe supports, penetrations and access zones. Identify incomplete oil and electrical systems.
L10 / Project status	R1→R5→Spec_R5; readiness across 15 systems, conditional calculations and unpriced entries. Link full catalogue and open questions.

For photo comparisons record camera_id, projection, scale and landmarks. With unknown lens data, claim a comparable view, not exact registration. Replace uncleared archival reproductions with links and original diagrams.

09 / CAD preparation and scene capture

cad-recording

Requirement / item	Content
Native derivatives	Create presentation/native and presentation/animation per variant. Preserve original_Name, system, units, axes, source hash and visibility map.
Engine cutaway	ENG has 17 outer-layout entries, including Combustor casing and centerbody. Rotor and combustor internals are undeveloped. Show casings/cycle; internal geometry is a separately sourced teaching model.
Motion	Strut, fork, wheel and roller use independent groups and absolute-time poses. For cutaways preserve complete rotating parts; mask only stationary casing.
Matched views	Use R5/qa/cameras.json for R4/R5 comparison; add camera_id for original/R5 comparisons. Do not rescale gear variants independently.
Capture	Native PNG without cursor/selection or service panels; deliberate UI capture only for the TextToCAD process case. Record FreeCAD version, viewport, camera, pose, layers and frames.
Export and disassembly	Meshes may be simplified with a log while retaining critical interfaces. An exploded illustration is not a validated removal path. Do not relabel the R3 engine-removal check as R5.
Output	camera_manifest.json, motion_manifest.json, capture_log.json, source PNG/meshes and geometry log. Reopen both derivatives and compare critical parts against masters.

10 / Short animation and desktop player

short-animation

Requirement / item	Content
00:00-00:06	Whole C.400 P.2; 1957, elevated pilot, reconstruction label.
00:06-00:14	Shell reveal, Atar casings, annular tank and qualitative airflow diagram.
00:14-00:20	Jet, weight and thrust; schematic lift-off, not computed flight dynamics.
00:20-00:28	Pilot station → jet control → tangential outlets. One action at a time; label hypotheses.
00:28-00:35	0-180 mm compression with fork/roller motion; both diagonals shown at unchanged scale.
00:35-00:42	Actual R4/R5 joint close-up, return to full craft, TextToCAD role and catalogue link.

RU/EN exports: 1920×1080, 24 fps, exactly 1008 frames/42.000 s; H.264, yuv420p, faststart. Mechanism motion follows geometry; illustrative arrows do not constitute CFD or stability analysis.

Player: pause, six stages, timeline, 0.5×/1×, fullscreen; Space, arrows, Home/End, 1-6, F and visible focus. Support ?t=15&paused=1. Leave text-input keys alone. ready/setTime(t) reproduces identical poses; preserve language and pause state.

Priority: desktops at 1920×1080 and 1366×768; also test 390 px and 200%. Support reduced motion, deliberate audio start and MP4 fallback. If a local server is required, supply a launcher needing no environment installation; viewing must work offline.

11 / 8:30 film outline

film

Requirement / item	Content
01 / 00:00-00:40	What is this craft? An engine lifting itself and its pilot. Show the whole machine and introduce control without a conventional wing.
02 / 00:40-01:30	Atar Volant history, 1957 free flight and Auguste Morel. Distinguish tethered tests and museum photographs from the target state.
03 / 01:30-02:25	Bottom-up systems: gear, structure, engine, tank, equipment and pilot station. External shell and internal view.
04 / 02:25-03:30	Vertical Atar: air, combustion and exhaust. Separate actual R5 casing geometry from illustrative internal processes.
05 / 03:30-04:30	Thrust and jet control; two controls, elevated pilot and touchdown roller. Do not imply an implemented autopilot.
06 / 04:30-05:30	Gear: two diagonals, full adopted travel, forks, stays, pins and pipe supports. Explain the scoped clearance results.
07 / 05:30-06:30	TextToCAD R1-R5 history: photo comparison → mount issue → connected joints → checks → FeedBack. Authentic before/after.
08 / 06:30-07:30	15 systems; complete and open work; conditional R4 loads; priced scope in Russia/Texas, date and exclusions.
09 / 07:30-08:30	Why share, what to download and how to contribute. Gear measurements, evidence, documentation and the next engineering stage. Credits and contacts.

510 s / 12,240 frames at 24 fps. Every shot records shot_id, in/out, camera_id, configuration, revision, pose, layers, action, RU/EN text, evidence_id, asset_id and cue_id. No chapter gaps; render long shots for the narration rather than mindlessly repeating the short loop.

12 / Voice recording and historical inserts

voice

Requirement / item	Content
Pre-recording glossary	C.400 P.2, Atar Volant, SNECMA, TextToCAD, F-ZWUZ, Auguste Morel, Melun-Villaroche; 4100/5250 and 180 mm. Freeze spelling and spoken form before synthesis.
20-30 s sample	Include difficult names, numbers and a long sentence. A reviewer listens and records issues; absent listening, status is NOT_LISTENED.
Russian track	WAV PCM 48 kHz; 120-145 words/minute in spoken portions, with viewing pauses. Measure utterance lengths; do not globally speed speech to fit 8:30.
Final audio	AAC 48 kHz; internal targets −16 LUFS ±1.5 and true peak ≤−1 dBTP. Music optional. Credit synthetic narration; do not imitate historical people's voices.
RU/EN subtitles	SRT/VTT; up to two lines, target 42 characters/line and 12-20 characters/s. Manually review terminology, timing and translated qualifications.
Complete listening	Listen to the entire final encoded MP4. voice_review.json records reviewer, date, 100% coverage, issue timecodes and fixes. ASR does not replace listening.
Historical inserts	Date/period, configuration, archive/author, URL/page and use terms. H02 restricts reproduction: absent permission, include a reference and original explanation instead of scans.
Voice corrections	Update WAV/MP4, SRT/VTT, script, timeline, player and manifest. Relisten to edited sections and check the complete final file.

13 / TextToCAD visual design

visual-system

Use authentic full RU/EN logos, green #10B742, orange #EF4511, paper #FFF8F4, ink #130D0C and peach #FFC2B0. Montserrat 800-900 headings and Manrope body text; include font licences and identity provenance. Contacts: texttocad.org and texttocad@gmail.com.

Requirement / item	Content
Views	Current native R5 geometry and palette. Bright internal groups may be used in derivatives with a legend; colour does not imply temperature or material.
2400×1800 sheets	Start with 65-80% image area, labels ≥30 px and headings ≥56 px. Preserve the full silhouette; use separate close-ups for details.
1920×1080 video	Body text ≥32 px, subtitles ≥42 px and 5% safe margins as targets. Brief on-screen attribution, full credits elsewhere. Test actual-screen readability.
Diagrams	Distinguish air, fuel, hot exhaust, electrical links and force by arrow shape/colour. Routes cannot pass through closed walls without penetrations.
Interface	Black text on bright panels, horizontal table rules, help on demand. Translate user-facing labels; preserve CAD Names.
Two editions	Check RU/EN separately: desktop, 390 px, 200%, light/dark and print. No missing images, incorrect callout targets or stale shots under new revision labels.

14 / Readiness and cost with explicit scope

readiness-cost

Describe geometry, kinematics, historical evidence, calculations and production documentation separately; assign no overall percentage. Casings/interfaces exist; engine internals, damper hydraulics, oil, electrical systems, actuation and working restraint still require development.

R4 assumptions: small angles, three degrees of freedom, fully sprung mass; no thrust, drag, tyre compliance or unsprung masses. Adopted CG height 4.3965 m and Ixx=Iyy=8000 kg·m². R5 mounts have no new strength substantiation.

Requirement / item	Content
R4 calculation	2600 kg, four legs, 180 mm travel, 60 mm sag and ζ=0.55 give k≈106.239 N/mm and c≈9140.94 N·s/m per leg. Equivalent linear model, not original oleopneumatic hardware data.
Landing cases	Level 2 m/s: 113.9 mm, n≈2.934. At 2° tilt, azimuth 0° and 2 m/s: n≈3.316/3.405 for 4100/5250, above assumed n=3. The level 4 m/s case reaches 180 mm. Here n is peak total support reaction / mg.
Spec_R5 scope	473 rows: 376 manufacturing estimates, 43 catalogue analogues, 31 reference entries and 23 quote requests. 419 priced rows; 13 additional open functional packages are outside the total.
4100 / Russia	Base RUB 2,828,930; range RUB 1,451,030-6,561,550. Priced scope only, one set, dated 14 Nov 2026.
4100 / Texas	Base USD 118,966; range USD 59,227-261,754. Local rates and US catalogues; this estimate does not establish local stock.
5250 / both currencies	Russia: base RUB 2,840,050, range 1,456,910-6,579,990. Texas: base USD 119,362, range 59,517-262,270. Alternatives must not be summed.

Excluded: operational engine, unpriced equipment, final assembly, design, tooling, tests and shipping; tax bases vary. Unique-part prices are scenario estimates, not statistical market means. Unknowns stay null/quote required, never zero. Review possible overlap between a complete wheel analogue and separately priced hub.

15 / W01-W04: baseline and sample

work-1

W01 / Freeze inputs

Release owner · Depends on: none

Verify both R5 files, archives, Spec_R5 and reports; record hashes/versions.

Output: Input manifest, inventory, OPEN list.

Acceptance: 473/877 counts and sources match; preserve masters.

W02 / Resolve history and configurations

Editor / engineer · Depends on: W01

Review 1957/museum states, diagonals, registration, control scheme and image rights.

Output: claims.csv, configuration.json, rights.csv.

Acceptance: Every disputed claim is resolved or explicitly OPEN.

W03 / Prepare text and voice sample

Writer / narrator · Depends on: W02

Draft D02, nine-chapter outline and glossary; record 20-30 s.

Output: RU/EN texts, glossary, voice_sample, review.

Acceptance: Terms/sample checked; disclose any missing listening review.

W04 / Capture and check CAD sample

CAD / visualisation · Depends on: W02

Create derivatives, overview, internal view and 5-10 s gear motion. Test an R5 spreadsheet parameter change on a copy and restore it.

Output: Native sample, camera/motion logs, R5 rebuild report.

Acceptance: No missing parts; test pertains to R5. Log failure and preserve master.

16 / W05-W08: images and recording

work-2

W05 / Produce ten sheets

Engineer / designer · Depends on: W03, W04

Capture L01-L10, fresh original/R5 comparisons, matched R4/R5 and 4100/5250 cameras.

Output: D03, source-image manifest and photo comparison.

Acceptance: 20 PNG/SVG and two PDFs; image revisions match labels.

W06 / Build 42 s animation and player

Animator / developer · Depends on: W04, W05

Six stages, independent mechanisms, setTime, RU/EN capture; review both variants throughout travel.

Output: D04, exporter and reference frames.

Acceptance: 1008 frames; deterministic poses, desktop UI and fallback work.

W07 / Freeze edit script

Director / editor · Depends on: W03, W05, W06

Break 510 s into sourced shots, narration and actions; review insert rights.

Output: D05, shot list, timeline, narration text.

Acceptance: Nine gapless chapters; each shot has an asset or capture task.

W08 / Record narration and subtitles

Narrator / editor · Depends on: W07

Record utterances, measure timing, create RU/EN SRT/VTT and listen.

Output: WAV, narration_manifest, subtitles, voice_review.

Acceptance: No name errors, clipped endings or repetitions; record actual listening coverage.

17 / W09-W12: release

work-3

W09 / Edit film

Editor / audio engineer · Depends on: W05, W06, W07, W08

Capture missing long shots; combine narration, CAD, history, titles and audio.

Output: D06, edit project/script and media-info.

Acceptance: 12,240 frames/510 s; meaningful synchronization and clean full decode.

W10 / Assemble shell and data

Developer / release owner · Depends on: W05, W06, W07

Build RU/EN shell, Spec_R5 catalogue and two models; attach final film after W09. Exclude partial obsolete FeedBack.

Output: D07/D08 draft, relative links, credits.

Acceptance: Offline viewing from a fresh folder; currencies/variants remain separate.

W11 / Accept media

Engineer / editor / listener · Depends on: W09, W10

Run Q01-Q18, final listening, cost, image and interface checks; recheck fixes.

Output: acceptance.json, issues.csv, visual/audio reviews.

Acceptance: No blocking defects; NOT_RUN never becomes PASS without execution.

W12 / Seal and write package

Release owner · Depends on: W11

Write new folder/ZIP and manifest/hashes; extract cleanly, open and verify. Copy to the original project folder and verify that copy.

Output: C400P2_MEDIA_R5_M1_YYYYMMDD, ZIP, receipt.

Acceptance: Handoff verified; old archives unchanged. External upload has separate status.

18 / Sequence and stage gates

gates

Requirement / item	Content
G0 / After W01-W02	Freeze inputs, historical configuration, both diagonals and claim rules. An unresolved dimension permits two explicitly labeled alternatives.
G1 / After W03-W04	Review overview, internal view, 5-10 s movement and voice sample. Record R5 rebuild status. Only then scale production.
G2 / After W07	The 510 s script has assets, rights and text; the workflow can proceed to full recording without approval rituals for each shot.
G3 / Rough cut	Full duration assembled. Review meaning, movement, pilot layout, variant consistency and claims about undeveloped parts.
G4 / After W11	Q01-Q18 have recorded outcomes. Engineering OPEN items disclosed; factual, rights, audio, visual geometry and file defects fixed.
G5 / After W12	Package and backup checked after writing/extraction; hashes match. Local delivery complete, external publication tracked separately.

Dependencies: W01→W02→(W03 ▒ W04)→W05→W06→W07→W08→W09; W10 starts after W07, W11 waits for W09/W10, and W12 seals the release. Research, translation and shell work may run in parallel. Estimate dates after G1 using measured capture/render performance.

Log geometry defects by issue_id; master changes require a separate engineering revision. Editorial changes, cameras, colours and voice advance media revision M. Successful packaging does not close engineering gaps.

19 / Q01-Q09: facts and images

qa-engineering

Requirement / item	Content
Q01 / Baseline	Both master hashes unchanged; 473 entries/877 solids, retained QA links and actual test dates.
Q02 / History	Every external numeric claim has a claim_id/locator; no mixed 1957/museum/P.1/P.2 states.
Q03 / Diagonals	4100/5250 shown at equal scale with dimension endpoints; variant labeled throughout.
Q04 / Interfaces	L05/L06 show actual contacts, pins and retention; matched R4/R5 cameras without hidden joints.
Q05 / Kinematics	Both variants, 0-180 mm/0-360°, independent 0-45° roller; reference poses match native states. Collision scope recorded.
Q06 / Pilot/photos	Comparable original/R5 views; identify surrogate, pose and R3 test limits. Fresh photo comparison has its own report.
Q07 / R5 rebuild	On a copy change diagonal through the sheet to a chosen test value, recompute, save/reopen, verify and restore. If FAIL, withdraw the R5 rebuild claim and retain OPEN.
Q08 / Sheets/cutaway	20 PNG +20 SVG +2 PDFs; trace every view, preserve silhouette. Clearly distinguish R5 casings from new schematic internals.
Q09 / Animation	2×1008 frames/42 s; setTime and MP4 match at reference times; correct independent axes.

These are future execution criteria, not tests performed merely by drafting this brief. Retain original R5 report dates; record new results separately.

20 / Q10-Q18: recording and handoff

qa-media

Requirement / item	Content
Q10 / Film	1920×1080/24, 12,240 frames/510 s, nine chapters, clean full decode; inspect starts, ends and transitions.
Q11 / Synchronization	Target cue/action error ≤2 frames after review; narrated part visible unless a transition is intentional.
Q12 / Voice	Listen to 100% of final MP4; glossary verified; no open designation/stress/clipping errors. Store ASR separately.
Q13 / Subtitles	Valid RU/EN SRT/VTT match final audio and avoid critical details; qualifications fully translated.
Q14 / Interface	Both languages at 1920/1366, 390 px, 200%, light/dark/print; links, chapters, keys, pause and MP4 fallback work.
Q15 / Costs	15 systems/473 rows, 419 priced; both variants match Spec_R5; exclusions adjacent to totals; null is not zero.
Q16 / Rights	Every included image, font, voice, CAD and code asset has provenance and use terms. No blanket licence conceals uncertainty.
Q17 / Archive/copy	Clean extraction, offline opening, CRC and SHA-256; backup matches. No tokens, transcripts, temporary files or private absolute paths.
Q18 / Accurate status	PASS/FAIL/NOT_RUN with evidence, date and reviewer; complete FeedBack is not production approval; a brief is not a completed film.

Factual, visual geometry, pricing, rights, link and voice defects block final media release. An unresolved historical dimension or incomplete production design may remain when clearly labeled.

21 / Written package structure and version control

release

Future release: C400P2_MEDIA_R5_M1_YYYYMMDD. R5 identifies engineering input; M1 identifies media. This brief is C400P2-MEDIA-TZ-01/1.0. A voice revision advances M rather than relabeling R5 as R6.

Requirement / item	Content
index_RU/EN.html	Single entry point, status, film/chapters, sheets, catalogue, sources and contacts.
model/4100; model/5250	FCStd/STEP for both alternatives, configuration, date, source and hash.
feedback; catalog	Public FeedBack/Spec_R5 copies: preserve data/status, sanitize metadata. New manifest, change log and references to source-package hashes.
guide; animation; exports	SVG/PNG/PDF; 42 s interactive; MP4, SRT/VTT, thumbnail and YouTube metadata.
storyboard; audio; build	Scripts, timeline, cameras, WAV/utterances; build scripts with pinned dependencies, without node_modules.
sources; rights; qa	Public evidence/locators, rights, reports and open issues. Chat transcripts remain only in internal analysis.
README; manifest; SHA256	RU/EN viewing/rebuild instructions; model→view→sheet→frame→video map; file hashes, ZIP hash in external receipt.

Write to a fresh CONCEPT/C400P2 folder. Copy delivery to the original “C.400 P.2, свободный полёт 1957 года (рег. F-ZWUZ)” project folder. Internal links are relative; test a fresh path with spaces/Cyrillic and then verify the backup hashes.

Preserve original native FeedBack unchanged internally. Its manifest contains personal absolute paths. Create an explicitly labeled public derivative: sanitize paths/service data, record redaction_log and new hashes. Do not label the modified manifest original. Apply the same rule to catalogue metadata.

Change chain: issue_id → CAD Name/claim → decision → revision → dependent image/text/audio rebuild → QA → new archive. Exclude working transcripts, obsolete FeedBack plans and service profiles from public ZIP.

22 / Traceability and first execution step

traceability

Requirement / item	Content
T01 / Method	TURBOLET/COMMUNICATION_BRIEF_20261114/brief_content.json, 1.0; source request 01a1db02-5179-7190-8f86-9ee6fe67d24c. Format transfer: deliverables, short-animation, film, voice, release.
C01 / Request history	R2 photo comparison; loaded gear; R4 180 mm/2600 kg calculation; real upper/lower interfaces; production, project purpose, sharing and TextToCAD questions.
C02 / Current baseline	C400P2/R5/README.md, C400P2_chk.md, qa/gear_audit.json, full_motion.json, feedback.json; cameras and paired views.
C03 / Catalogue	C400P2/Spec_R5/estimate_data.json, system_base.json, open_items.json, manifest.json and CSV/XLSX. All 15 systems are included in D07.
H01 / Museum	Musée de l'Air et de l'Espace, S.N.E.C.M.A C 400 P-2 ATAR Volant page: engine, vertical lift and gas-jet stabilization. URL in sources/public_sources.json.
H02 / AAMS	Prendre l'Air, special issue 3, November 2022, Auguste Morel; pp. 20-22: flight, layout and pilot; p. 2: reproduction terms. Retain PDF link, do not automatically embed scans.
B01 / Branding	texttocad-brand-workflow/SKILL.md and references/materials.md; authentic logos/fonts. Source hashes in input_manifest.

H01 - museum collection entry

Checked 14 Nov 2026; operating-principle context.

H02 - AAMS, Auguste Morel, November 2022

Checked 14 Nov 2026; printed pp.20-22, reproduction terms on p.2.

First practical step: W01-W02 - verify both R5 variants and Spec_R5, complete configuration/evidence matrix, then produce an overview, cutaway of existing casings and a short full-travel gear scene. This establishes real media-production effort before recording the entire 8:30.