



PART 1

About COGVATION

Who COGVATION is, how the engagement model works, and why cognitive performance training exists now.

IN THIS PART

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- Our Delivery Model
- Organizational Structure
- The Client Relationship
- Our Philosophy

About COGVATION

PART 1 — COMPANY OVERVIEW

Before an instructor teaches a single ACT session, it helps to understand exactly who built the program, why it exists, and how COGVATION's relationship with a client airline actually works.

1.1

Who We Are

COGVATION is a founder-owned company that designs cognitive-performance training systems for aviation operators. It is not a division of any airline, and it is not a generic corporate training vendor with an aviation logo pasted on the cover. It is a standalone company, wholly owned by its founder, Khaled M. Alossi, built specifically around one problem: how flight crews and maintenance teams actually think, decide, and check each other under real operational pressure.

That focus comes from the founder's own seat in the industry. Khaled M. Alossi is an active Aircrew Program Designee on the Embraer 170, which means COGVATION's training is designed by someone who sits inside the certification and evaluation process it is meant to strengthen — not by an outside consultancy translating a general leadership curriculum into aviation vocabulary after the fact.

That distinction shapes everything else in this manual. Every scenario, every checklist habit, and every governance mechanism described in the ACT program is grounded in flight-deck and hangar-floor human factors research — the same body of evidence behind Crew Resource Management, Threat and Error Management, and the industry's documented human-error patterns — rather than in generic soft-skills content adapted for an aviation audience.

COGVATION was founded on a simple observation: most cognitive-skills training available to airlines was written for a general corporate audience and then relabeled for aviation, with flight-deck or hangar-floor terminology swapped in but the underlying scenarios, judgment calls, and failure modes left generic. Crews notice the difference immediately, and that gap in credibility undermines the training before it has a chance to change behavior. COGVATION's founding premise was to close that gap by building from the operating environment outward, rather than from a generic curriculum inward.

COGVATION exists to build cognitive-performance training the way the rest of aviation training is built: from operational evidence, evaluated by people who actually fly and maintain the aircraft.

What COGVATION Is Not

It is worth being explicit about what COGVATION is not, because instructors will sometimes be asked this directly by the crews they train. COGVATION is not a subsidiary of any airline it serves, and it is not owned or controlled by any client. It is not a certification authority, a regulator, or a substitute for any

airline's existing FAA-approved training program — ACT is a supplemental cognitive-performance layer that sits alongside required technical and procedural training, not a replacement for it. And it is not a one-time workshop vendor: COGVATION's engagement model is built around a continuing relationship, not a single delivered course.

Instructors should also understand what makes COGVATION's content credible in a room full of experienced aviation professionals. Because the founder holds an active Aircrew Program Designee role, the scenarios, language, and judgment calls embedded in ACT are pressure-tested against the same standards a Designee applies during real evaluations — not written by a training-content team working from a distance and handed off for aviation-specific editing afterward.

How This Manual Fits

This instructor manual is the operational counterpart to that credibility. Everything in the parts that follow — the ACT competency model, the scenario library, the assessment rubrics, and the CCC's event-review process — exists because COGVATION built it that way on purpose, not because a client asked for a training binder and COGVATION assembled generic material to fill it. Reading this Part first gives an instructor the company-level context that makes the rest of the manual make sense: who built this, why it looks the way it does, and what COGVATION expects an instructor to protect when they deliver it.

Key Takeaways

- COGVATION is a standalone company, 100% owned by founder Khaled M. Alossi — not a division of any airline.
- Its founder is an active E170 Aircrew Program Designee, which grounds ACT in real evaluation standards.
- ACT supplements, and never replaces, a client's required FAA-approved technical and procedural training.
- COGVATION's credibility rests on ACT working across every client it serves, not on any single client's budget.

1.2

Our Model: Build, Train, Govern

COGVATION does not embed staff inside a client airline to run its cognitive training program indefinitely. Instead, COGVATION delivers ACT as a contracted service built around three sequential commitments to each client, so the program becomes a durable capability the airline owns and operates — not a dependency on an outside vendor's continued presence.

Build

COGVATION designs the client's Aircrew Cognitive Training (ACT) curriculum from the ground up: the three core competencies of Focus, Direction, and Cognitive Cooperation, the scenario library that exercises them, and the assessment approach used to evaluate them. This curriculum is built specifically for the client's fleet, operating environment, and existing safety culture — it is not a shared, off-the-shelf template.

Train

COGVATION certifies the client's own instructors to deliver ACT directly to their own pilots and maintenance technicians. This is the core of the engagement: COGVATION does not stand at the front of the client's recurring training classes indefinitely. It trains and certifies the client's ACT Instructor Corps so the client's own people deliver the program, session after session, class after class.

Govern

COGVATION stands up a Cognitive Cooperation Council (CCC) for the client — a governance and event-review body that keeps the ACT curriculum current, reviews how it performs against real operational events, and continuously improves it. The CCC is where COGVATION and the client's own leadership meet on an ongoing basis, long after the initial curriculum build is complete.

Together, these three commitments describe a contracted service relationship, not an internal department of the client airline. COGVATION remains a separate company throughout the engagement; what transfers to the client is capability — a certified instructor corps and a functioning governance council — not COGVATION's own staff or ownership of the company.

Why This Order Matters

Build, Train, and Govern are listed in that order because each step depends on the one before it, and skipping ahead undermines the whole model. A curriculum handed to instructors before it has been properly built produces inconsistent delivery from the first cohort onward. Instructor certification granted without a finished curriculum forces instructors to improvise content in the classroom. And governance introduced only after problems surface, rather than designed in from the start, turns the CCC into a damage-control exercise instead of the continuous-improvement function it is meant to be.

For an instructor, the practical implication is this: by the time you are certified to teach ACT, the curriculum you are delivering has already been through COGVATION's build process, and the CCC that will review your sessions and the events they surface is already standing. You are stepping into a system that was deliberately sequenced to be ready for you, not one you are expected to help assemble on the fly.

- Build defines what is taught — the curriculum, scenarios, and assessment criteria.
- Train defines who teaches it — the client's own certified ACT Instructor Corps.
- Govern defines how it stays current — the CCC's ongoing review of events and outcomes.

A Contracted Service, Not a Department

It is worth restating plainly: at no point in the Build, Train, Govern model does COGVATION become part of the client airline's own organization, and at no point does the client airline become part of COGVATION. COGVATION delivers ACT as a contracted service, governed by a license and an ongoing CCC relationship, in the same way an airline contracts with any specialized external provider for a capability it chooses not to build entirely from scratch in-house.

This matters for how instructors should describe the program to their own colleagues. An ACT instructor is a member of their own airline's staff, certified against an external, independently maintained standard — comparable in spirit to how a mechanic holds an FAA airframe and powerplant certificate that exists independently of any one employer. The certificate travels with the person and

the standard; the employer changes the context, not the standard itself.

1.3

Organizational Structure

COGVATION sits above every client engagement as the parent company. Two structures extend from COGVATION into each client relationship: the ACT program itself, and the CCC that governs it. Each client, in turn, connects into that structure through its own people — its certified instructors and its CCC seat representatives — rather than through COGVATION staff embedded on-site.

Entity	Role	Relationship
COGVATION	Parent company; owns and licenses the training system	100% founder-owned; contracts with airline operators as clients
ACT (Aircrew Cognitive Training)	The training program: Focus, Direction, Cognitive Cooperation	Built by COGVATION; licensed to and delivered by each client
CCC (Cognitive Cooperation Council)	Governance and event-review body for the ACT program	Stood up by COGVATION; staffed jointly with client-side seats
Client's ACT Instructor Corps	The client airline's own instructors, certified to deliver ACT	Client-side; trained and certified by COGVATION
Client's CCC Seat Representatives	The client airline's own leaders who sit on the CCC	Client-side; participate in ongoing governance and review

This structure is deliberately consistent across every client COGVATION works with: COGVATION at the top, the ACT program and CCC as the two structures it stands up for a client, and the client's own instructor corps and CCC seats as the two points where the client organization connects into that structure.

Reading the Chain of Ownership

It helps to read the table above as a chain rather than a flat list. COGVATION owns the training system at the top of the chain. ACT and the CCC are the two mechanisms COGVATION uses to deliver and sustain that system inside a specific client, ACT as the curriculum layer and the CCC as the governance layer that watches over it. The client's Instructor Corps and CCC seat representatives are where a real airline's own people connect into that chain: instructors deliver ACT day to day, and seat representatives bring operational reality back into the CCC's review process.

No client owns or controls COGVATION, the ACT curriculum design, or the CCC's governance authority. What a client owns is its own certified instructor corps and its seats at the CCC table, the operational half of the relationship. This separation is what allows COGVATION to serve multiple airline clients over time without any one client's internal politics or turnover disrupting the underlying training system.

Where Instructors Sit in This Structure

For the purposes of this manual, the most important row in the table above is the ACT Instructor Corps. As an instructor, you are a client-side employee, certified by COGVATION but employed and scheduled by your own airline — you are not a COGVATION contractor working inside someone else's operation. Your reporting line for day-to-day training duties runs through your own airline's training department, while your certification standard, curriculum content, and continuing-education requirements as an ACT instructor run through COGVATION.

This dual relationship is intentional, not a gap in the org chart. It keeps instructors embedded in the operation they are training — scheduled alongside the crews they teach, subject to the same reporting culture — while keeping the standard they teach to consistent and independently maintained by COGVATION across every client the company serves.

When a question arises about curriculum content, assessment standards, or how a specific scenario should be run, the answer comes from COGVATION's certification standard, not from local improvisation. When a question arises about scheduling, classroom logistics, or how ACT sessions fit into the broader training calendar, that answer comes from the client airline's own training department. Knowing which line a given question falls on is one of the simplest ways an instructor can tell whether they are operating inside the standard or inside local logistics.

1.4

The Client Relationship Model

Every COGVATION client engagement follows the same broad arc, moving from a licensed curriculum to a self-sufficient, client-run program with COGVATION remaining involved through ongoing governance. COGVATION's flagship client illustrates the model in practice.

It is worth noting why this manual leans on COGVATION's flagship client as the example throughout. As COGVATION's flagship client, this operator was the first to carry the ACT program from initial curriculum build through instructor certification and into ongoing CCC governance — which means this client's experience is the most complete, real-world illustration of how the full engagement model plays out over time. Future COGVATION clients will follow the same three phases, adapted to their own fleet and operating environment.

Phase One: Curriculum Licensing

The engagement begins with COGVATION building and licensing the ACT curriculum to the client. For COGVATION's flagship client, this meant a curriculum shaped around the client's own fleet operations and existing safety culture, delivered as a licensed program rather than a one-time consulting deliverable — ACT continues to belong to COGVATION as the licensor while the client operates it under license.

Licensing, rather than a one-time work-for-hire handoff, matters because it keeps COGVATION accountable for the curriculum's ongoing quality. If ACT were simply delivered once and handed over outright, there would be no structural reason for COGVATION to keep improving it, and no structural mechanism for the client to request changes as its own operation evolves. The license keeps both sides at the table.

Phase Two: Instructor Certification

COGVATION then certifies the client's own instructors to deliver the licensed curriculum. At this operator, this produced the ACT Instructor Corps referenced throughout this manual: the client's own instructors, certified by COGVATION, delivering ACT directly to its pilots and maintenance technicians.

Certification is not a one-time credential handed out and forgotten. Instructors are trained on the curriculum's content, on how to run and debrief the scenario-based exercises at the heart of ACT, and on how to recognize when a session has surfaced something worth escalating to the CCC rather than resolving quietly in the room. This last point is what separates an ACT instructor from a conventional classroom trainer: part of the role is feeding real signal back into governance, not just delivering content.

Phase Three: Ongoing CCC Participation

The relationship does not end once instructors are certified. COGVATION and the client continue to meet through the Cognitive Cooperation Council, where client-side seat representatives — at this operator, drawn from its own operational leadership — review real events, assess how the ACT curriculum is performing, and work with COGVATION to refine it over time.

These three phases repeat on a cycle, not just once at the start of the relationship. As the client's fleet, routes, or safety findings evolve, the CCC surfaces what needs updating, COGVATION revises the licensed curriculum, and the client's Instructor Corps is recertified against the updated material — the same three phases, run again, keeping the program current rather than letting it calcify after its initial launch.

COGVATION's flagship client — not COGVATION's owner and not an internal division of COGVATION. The relationship is a licensed, governed partnership between two separate companies, built to outlast any single training cycle.

1.5

Our Philosophy: Why Cognition, Why Now

COGVATION was not built in a vacuum. It was built in response to a broader shift already underway across commercial aviation training: a move away from rigid, maneuver-counting syllabi and toward training that is evidence-based and competency-based — designed around the actual skills crews need and the actual failure patterns the data shows, rather than a fixed checklist of exercises repeated by tradition.

The clearest regulatory expression of that shift is the European Union Aviation Safety Agency's Evidence Based Training (EBT) framework, which reorients recurrent pilot training around demonstrated competencies and real operational data rather than a fixed list of maneuvers ([EASA, Evidence Based Training \(EBT\)](#)). COGVATION reads this not as a niche regulatory update, but as a market signal: the industry itself has concluded that competency and evidence produce better-prepared crews than rote repetition.

EBT did not appear in isolation. It sits alongside a longer arc of aviation training reform that includes Crew Resource Management and Threat and Error Management — both born from the same underlying insight, that technical proficiency alone does not prevent every accident, and that how a

crew thinks, decides, and cross-checks under pressure is itself a trainable, evaluable skill set. EBT is best understood as that insight finally being written into a formal, competency-based training and evaluation framework rather than remaining an informal best practice passed down instructor to instructor.

ACT is built around that same signal, applied specifically to cognition. Just as EBT asks training providers to evaluate demonstrated competency rather than maneuver counts, ACT asks operators to treat focus, direction, and cognitive cooperation as trainable, assessable competencies in their own right — skills that can be built deliberately, evaluated honestly, and governed continuously through a body like the CCC, rather than assumed to exist simply because a crew member holds a valid certificate.

This is why COGVATION exists now, and why it exists as a separate, founder-led company rather than as an in-house training initiative at any single airline: the shift toward evidence-based, competency-based training is industry-wide, and the operators who move early gain a training system built for where the industry is going, not for where it has been.

Why a Standalone Company

A cognitive-performance training system built and owned inside a single airline tends to reflect that airline's internal politics, budget cycles, and turnover — it rises and falls with whoever happens to champion it internally. Building COGVATION as an independent company insulates the ACT curriculum and the CCC's governance standards from any one client's internal changes, and lets the evidence base behind ACT keep growing as COGVATION works with additional operators over time.

It also means COGVATION's incentives point in a specific direction: the company's credibility depends on ACT actually working, on real flight decks and hangar floors, for every client it serves — not on preserving a single internal program's budget line at one airline. That incentive alignment is part of why this manual treats governance through the CCC as a first-class feature of the program, rather than an afterthought bolted on to satisfy an audit.

The industry has already decided that evidence and competency beat rote repetition. COGVATION was built to bring that same standard to how aviation professionals think, decide, and check each other — not just to how they operate the aircraft.

What This Means for an Instructor

Concretely, this philosophy shows up in how ACT sessions are run and assessed. Instructors are not asked to confirm that a crew member completed a set number of exercises; they are asked to evaluate whether that crew member can actually demonstrate focus, direction, and cognitive cooperation under realistic scenario pressure, and to document that judgment honestly. That is the same evidence-based, competency-based standard EASA's EBT framework applies to flying skills, applied here to cognitive ones.

It also means the CCC's event-review function is not a bureaucratic add-on — it is the mechanism that keeps ACT evidence-based in practice, not just in name. Every real operational event the CCC reviews is a data point that can sharpen the curriculum, the same way real flight-data monitoring sharpens an EBT-based training program over time. An instructor's honest reporting into that process is what keeps

the whole system grounded in evidence rather than assumption.