



STRATOS

INTELLIGENCE-DRIVEN AVIATION

EBT/CBTA Platform Handbook

What it is, how it's built for your airline, and every module inside it — explained without the technical jargon.

Prepared for internal and client use
September 2026

1. What Is STRATOS EBT/CBTA?

EBT/CBTA is a training methodology. STRATOS EBT/CBTA is the platform built natively to run it.

It helps to separate two things that sound similar but aren't. “EBT/CBTA” is not a product — it's an internationally recognized training methodology: a set of rules, from ICAO and IATA, for how pilots and cabin crew should be evaluated against defined competencies instead of a simple pass/fail mark. “STRATOS EBT/CBTA” is the software product built to run that methodology day to day for an airline.

The distinction matters because most training-record tools were not built this way. They were built as general-purpose record-keeping tools first, and the EBT/CBTA competency structure was bolted on afterward. STRATOS was built the other way around: the grading logic, the data model, and every screen in the product are constructed directly from the EBT/CBTA framework from day one. It is native to the methodology, not adapted to it.

What problem it actually solves

Very few airlines today are still purely on paper. In practice, most fill out training evaluations using a basic Electronic Training Records (ETR) tool, plain Excel spreadsheets, or an older legacy system that was never designed around EBT/CBTA competencies in the first place. All three approaches share the same weakness: they can store a grade, but they cannot natively calculate it against the competency framework, and they cannot turn a stack of individual evaluations into fleet-wide intelligence.

STRATOS EBT/CBTA is built to replace all three of those options — paper, spreadsheets, and generic legacy ETR systems alike — with a single platform where every evaluation form, grading rule, and analytics view is native to the EBT/CBTA methodology itself.

The moment an examiner submits a form, STRATOS automatically:

- Calculates the pilot's competency grades using the airline's official EBT/CBTA scoring rules
- Generates a clean, signed PDF report of the evaluation
- Adds the result to that pilot's full training history
- Feeds the result into fleet-wide analytics dashboards the Training Director can see in real time

Where it's built and proven

STRATOS is the product of an Egypt/Estonia-based aviation technology venture, in daily production use at El Masria Universal Airlines (“AlMasria”), which remains the platform's founding reference client and proving ground.

1.1 What the Product Is Built On

Beyond the feature list, four working principles run through every module in this handbook — they're the reason the product looks the way it does:

- **Absolute precision** — aviation data gets the same rigor a flight deck demands. Grading rules, competency mappings, and regulatory alignment are treated as non-negotiable, not approximated.

- **Architectural foresight** — every module, form, and database structure is built to plug into a wider, future-proof system — which is why pilot and cabin-crew evaluation already coexist on one platform, and why new modules can be added without reworking what already exists.
- **Actionable clarity** — complex aviation metrics are deliberately distilled into high-visibility insights — a risk ranking, a heatmap, a coaching summary — rather than raw numbers a Director has to interpret alone.
- **Continuous integration** — the platform is built around a feedback loop, not a one-way record: an evaluation feeds analytics, analytics feed coaching and risk flags, and trainee feedback feeds back into how training itself is run.

1.2 What This Means for Your Training Department

A Training Director doesn't need another records system — there's usually already one, even if it's just a shared spreadsheet. What's actually in short supply is defensible evidence, standardization across the examiner pool, and hours back in the training department's week. That's the gap STRATOS EBT/CBTA is built to close:

- **Audit-ready by design** — every grade traces back to the specific observed behavior it came from, so an ECAA, GACA, or IOSA audit is answered with real evidence on demand, not reconstructed from memory the week before an inspection.
- **A standardized examiner pool** — examiner concordance (Section 6.5) gives the Training Director objective, ongoing evidence that grading standards are applied evenly across every TRE and TRI — usually the first thing an inspector asks about and the hardest thing to prove on paper.
- **Protects a just, non-punitive safety culture** — this is the philosophy EBT/CBTA itself is built on: competency data is there to identify training needs, not to single out individual pilots. STRATOS keeps that intent intact by turning results into coaching and remedial guidance rather than a disciplinary record.
- **Time back for the training department** — an evaluation that used to mean a paper trail, a manual write-up, and a spreadsheet update now produces its own report, its own record, and its own analytics the moment it's submitted.
- **A record that holds up beyond the training department** — the same audit trail that satisfies a regulator also stands up for insurance review and internal safety investigations, because it was captured at the time of the evaluation, not reconstructed afterward.

2. The Methodology Behind the Product

These are the industry terms worth understanding once, since the rest of the handbook builds on them.

EBT — Evidence-Based Training

EBT is ICAO's methodology for evaluating pilots against a defined set of core competencies — things like Application of Procedures, Communication, Leadership & Teamwork, Problem Solving, and Workload Management — instead of a single pass/fail mark for a whole session. STRATOS grades against the full nine competencies in this framework.

CBTA — Competency-Based Training and Assessment

CBTA is IATA's parallel methodology, applied more broadly across training and assessment. “EBT/CBTA” together is the modern, competency-focused standard that STRATOS is built natively around.

ETR — Electronic Training Records

This is the precise category for the product itself: a digital system of record for training evaluations, built around the EBT/CBTA methodology. It is not a Learning Management System (LMS) — it doesn't deliver e-learning courses — and it is not (yet) a full Training Management System (TMS) — it doesn't handle scheduling or rostering. What it does, it does natively and deeply: capturing, grading, and analyzing real evaluation data against the international competency framework, in a way that generic ETR tools, spreadsheets, and legacy systems were never built to do.

3. Who Uses STRATOS

The platform is built around three roles, each with a different screen and a different job:

- **Training Director** — sees everything: every pilot, every examiner, every form, fleet-wide dashboards, and administrative controls. Manages user accounts and oversees the training program as a whole.
- **Examiner (TRE/TRI/Instructor)** — fills out evaluation forms during and after a simulator session, line check, or cabin-crew assessment, applying the same competency standard the rest of the examiner pool is held to. Sees their own evaluation history and the pilots they've assessed.
- **Trainee (Pilot / Cabin Crew)** — is the subject of the evaluation, and participates directly through the trainee feedback loop (Module 6.6) after each training session.

Pilot records and cabin-crew records are kept securely separate within the system (each department only sees its own data), even though both run on the same platform.

4. The Evaluation Forms

Everything in STRATOS starts with one of the airline's official evaluation forms, digitized exactly as the regulator and the airline already use them. These forms are built directly from real, currently-in-use Egyptian airline documentation — not a generic template — which makes them some of the most detailed, operationally accurate EBT-aligned evaluation forms running at any Egyptian carrier today.

F-001	Simulator Check The periodic evaluation a pilot completes in the flight simulator, graded directly across all nine core EBT competencies.
F-002	Line Check An in-flight evaluation of a pilot during real operations. Structured into four sections — Threat & Error Management, CRM/Non-Technical Skills, EBT Competency, and Knowledge — with the full nine-competency model inside the EBT section.
F-003	Training / Evaluation Monitor An earlier, ongoing training-monitor form used alongside F-001 and F-002. It still runs on the airline's original technical and CRM category structure and is being carried forward toward the same nine-competency model as the other two forms.
F-077	Cabin Crew Assessment The annual evaluation for cabin crew, using a categorical scoring framework suited to cabin operations rather than the pilot nine-competency model — by design, not as a gap.

4.1 What's Actually Inside a Form

Every form follows the same underlying anatomy, whichever of the four it is:

- **Header details** — pilot or crew member, rank, aircraft type, date, examiner, and session type, captured once and reused everywhere that record appears.
- **Competency grading blocks** — for F-001 and F-002, this is the nine EBT competencies; for F-077, the cabin-specific categorical scale; for F-003, the legacy technical and CRM categories. Each block is scored using the airline's official rules, not a generic average.
- **Threat & Error Management (TEM)** — a dedicated section capturing any threats or errors that came up during the session and how the crew managed them — a core requirement of the EBT/CBTA methodology, not an optional add-on.
- **Observed-behavior detail** — the specific behaviors the examiner actually saw, not just a final number — this is what lets STRATOS later explain why a grade was what it was.
- **Free-text comments** — space for the examiner's own notes and context on the session, tied directly to the record.

- **Sign-off block** — the formal approval step (examiner, trainee, inspector, and operations training manager where required) that closes the record out.

5. How We Set Up STRATOS for an Airline

The platform is implemented around the airline's own standards — not the other way around.

An airline coming to STRATOS starts from one of two places, and the platform is built to handle both without asking the airline to change its own paperwork or standards:

- **The airline has a training manual but no digital forms yet** — we take the airline's own Operations Manual and governing training documents and build the digital forms directly from them, matching the airline's exact structure, wording, and scoring rules.
- **The airline already has its own forms it wants to keep using** — we implement those exact forms on the platform as they are, so examiners see the same layout and standards they already know, just digitized.

Either way, the outcome is the same: the airline gets a platform that speaks its own language from day one, not a generic tool it has to adapt to.

5.1 The Setup Stages

1. Documentation intake — we collect the airline's training manual and/or its existing paper or digital evaluation forms.
2. Form build — our team recreates each form on the platform, rule for rule: the same competency structure, the same scoring logic, the same sign-off requirements as the source document.
3. Data and account setup — pilot and crew rosters, examiner and Director accounts, and department structure (pilots vs. cabin crew) are entered into the system.
4. Go-live — the platform is ready to use instantly. Examiners start filling out the same forms they already know how to use, now digital — with grading, reporting, and analytics running automatically from the first submitted evaluation.

Why this matters

Because the forms are built from the airline's own manual or existing paperwork rather than a fixed template, onboarding doesn't require the airline to redesign its training standards to fit the software — the software is fitted to the airline.

6. The Modules — What STRATOS Actually Does

STRATOS is organized into modules. Each one covers a distinct part of the training-evaluation workflow — and the analytics layer is where the platform goes furthest beyond a digital filing cabinet.

6.1 Digital Evaluation Forms

The starting point for every record in the system — F-001, F-002, F-003, and F-077, built to the airline's own structure as described in Section 5. Built-in validation reduces the data-entry errors common with paper and spreadsheets, and every form records the specific behaviors observed, not just a final number.

6.2 Competency Grading Engine

The calculation layer behind every form. Once an examiner enters their observations, STRATOS automatically works out the pilot's grade on each competency, using the airline's official EBT/CBTA rules — including the “lowest of three” principle used across the industry, where a competency grade reflects the weakest of: how many good behaviors were demonstrated, how consistently, and how any threats or errors were handled.

- Grades run on a five-band scale, from S1 (Unsatisfactory) to S5 (Excellent)
- A borderline or failing grade on any competency automatically flags the pilot for mandatory remedial training
- The same grading logic is applied consistently every time — removing the inconsistency that creeps in with manual, spreadsheet-based scoring

6.3 Instant Reports & Records

The moment a form is submitted, STRATOS generates a polished, professional PDF report of the evaluation — ready to file, print, or share — and stores it permanently against that pilot's record, with a full audit trail of any later edits.

- A pending-approval step before a submitted evaluation becomes final, so a Director can review before it's locked in
- Post-submission editing is supported when a correction is genuinely needed — the PDF report is automatically regenerated to match
- Deleting a record follows a controlled, cascading process with a detailed audit trail, rather than a record simply disappearing

6.4 The AI Coaching Assistant

For pilots with enough evaluation history, an AI assistant reviews the pilot's latest result alongside their past performance and drafts a plain-language coaching summary — explaining what the trend shows and what to focus on next, in words a Training Director or the pilot can immediately understand.

- Looks at patterns across a pilot's history, not just a single day's score
- Produces written, human-readable coaching notes and remediation suggestions — not just numbers

- Runs only once there's enough history to say something meaningful
- Compute is switched on deliberately by the Training Director, as a cost-control measure

6.5 Data Analysis — Micro, Macro & Trend Intelligence

This is the heart of what sets STRATOS apart from every alternative an airline might otherwise be using — paper, Excel, or a generic ETR tool. All three of those can store a grade. None of them can turn that grade into organizational intelligence the way STRATOS does, at three distinct levels of analysis:

Micro analysis — the single evaluation, examined closely

A category-by-category breakdown of one specific exam, automatically detecting whether that form uses numeric or categorical scoring and presenting the result accordingly. This is the closest, most granular view — exactly what happened in this one session, competency by competency.

Macro analysis — the cohort, compared side by side

A comparison across every pilot in a training group, class, rank, or aircraft type, using each pilot's latest exam. Macro analysis is what instantly surfaces a shared weakness across a whole cohort — the difference between “one pilot struggled” and “this entire class is weak on the same competency,” which points to a training-program issue rather than an individual one.

- Template coverage view — which pilots have and haven't completed each training module, filterable by rank
- A per-skill, per-attempt heatmap that automatically flags any skill with more than three borderline results across a pilot's attempts

Trend analysis — the pilot, followed over time

A chronological view of a single pilot's full history on a given form, with per-skill and per-category pass rates charted over time. This is what turns a series of disconnected evaluations into a visible trajectory — improving, plateauing, or slipping — long before it would be obvious from looking at any single report.

- A dedicated Line Check (F-002) competency profile — methodology-level metrics computed across a pilot's entire line-check history, not just their most recent result

Fleet-wide dashboards

Sitting above all three levels is a fleet-wide competency dashboard that bundles five analytical views into one screen: key performance indicators, a pilot risk ranking, the competency distribution across the whole fleet, a quarter-over-quarter trend, and examiner concordance — how consistently different examiners grade against each other, so the Training Director can see if standards are being applied evenly across the team.

Predictive risk flagging

Rather than making a Director scroll through every pilot's record to spot a problem, STRATOS automatically surfaces only the pilots whose patterns suggest they need attention — turning analysis into a short, actionable list instead of a wall of numbers.

Why this is the real differentiator

Grading and digital records are table stakes — any ETR tool or well-built spreadsheet can store a score. Micro, macro, and trend analysis, examiner concordance, and predictive risk flagging are what turn STRATOS from a records system into a genuine training-intelligence platform. This analytics layer is the single biggest reason STRATOS replaces paper, Excel, and legacy ETR tools rather than just digitizing

alongside them.

6.6 Trainee Feedback Loop

After a training session, the Director can generate a short-lived QR code or link that the trainee scans — no login required. The trainee rates their ground and simulator training experience and can leave free-text comments, tied to the specific instructor and aircraft type. Directors see all this feedback rolled up in a dedicated dashboard.

- No account or password needed for trainees to give feedback
- Links expire automatically for security (24 hours by default)
- Feedback closes the loop between how training is delivered and how it's graded

6.7 Notifications

A live notification system alerts relevant users — within their own department — when something needs attention: a new evaluation has been processed, an AI coaching summary is ready, or a result needs follow-up.

6.8 Administration & Security

- Create, activate, and remove Examiner and Director accounts, with a clear “pending” state for new users awaiting department assignment
- Pilot data and cabin-crew data are kept structurally separate at the database level — not just hidden in the interface — so a security review or an auditor gets a real, verifiable answer about data isolation
- Secure login is handled by a dedicated, managed authentication service rather than a custom-built login system
- A Director-only switch controls whether the AI Assistant's compute is running, as a deliberate cost-control measure

7. What Makes This Different — Beyond Grading and Records

It's easy to describe STRATOS as “digital forms plus grading” and stop there — but that undersells what actually separates it from paper, Excel, and legacy ETR tools:

- **Built native to the methodology, not adapted to it:** every screen, rule, and data field traces back to the EBT/CBTA framework itself, rather than a generic system with competencies bolted on.
- **Analysis at three altitudes:** micro (single exam), macro (cohort), and trend (individual pilot over time) — the depth of analysis no spreadsheet or paper file can offer (Section 6.5).
- **From individual grade to organizational intelligence:** a single evaluation becomes part of a fleet-wide picture the moment it's submitted, instead of sitting in a folder or a spreadsheet tab.
- **Built around the airline's own manual and forms:** onboarding fits the platform to the airline's existing standards, not the other way around (Section 5).
- **Consistency:** every grade is calculated the same way, every time, removing the person-to-person and spreadsheet-formula variation common elsewhere.
- **Speed:** a polished report exists the instant a form is submitted — no manual write-up or re-typing.
- **Foresight:** predictive risk flagging and AI coaching summaries surface problems before they become bigger issues, rather than waiting for someone to notice.
- **Accountability:** examiner-to-examiner grading consistency (concordance) is tracked, so standards can be verified as being applied evenly.
- **Already multi-line-of-business:** pilot and cabin-crew evaluation run on the same platform today, with real data separation between departments.
- **Regulator-facing from day one:** audit readiness isn't a feature bolted on before an inspection — it's a byproduct of how every record is captured (Section 1.2).
- **Built for the safety culture the methodology demands:** EBT/CBTA exists to move training away from punitive pass/fail checks; STRATOS is built to protect that intent in how results are surfaced and used.

8. Current Status — Honest Picture

STRATOS is live and in daily production use, but it is not yet a fully complete EBT/CBTA system end-to-end. This section is here so the handbook stays accurate rather than promotional. EBT/CBTA is a voluntary upgrade path in Egypt today, not yet a regulatory mandate — so STRATOS is positioned commercially as an operational improvement airlines can choose to adopt, not as a compliance requirement.

Area	Status	Notes
Pilot forms (F-001, F-002)	Live	Full 9-competency EBT structure in daily use
Training monitor (F-003)	In progress	Still on legacy technical/CRM categories; migrating to the 9-competency model
Cabin crew form (F-077)	Live	Uses a categorical scale suited to cabin operations, by design
Grading engine	Live	Automated, rule-based, consistent
Reports & audit trail	Live	Instant PDF generation, edit history retained
AI Coaching Assistant	Live	Active once a pilot has enough evaluation history
Micro / macro / trend analytics	Live	Per-exam, cohort, and pilot-history views
Fleet dashboards & risk flagging	Live	KPIs, examiner concordance, predictive risk ranking
Trainee feedback (QR)	Live	No-login flow, time-limited links
Digital signatures	In progress	Not yet confirmed as real e-signatures on all forms
Certification-expiry tracking	Planned	No automatic “recurrency due” alerts yet
Scheduling / rostering	Not started	Deliberately out of scope for now — not a TMS

9. What's Coming Next

1. Full migration of F-003 onto the same nine-competency model already live on F-001 and F-002.
2. Digital signatures on all forms — a real captured-signature-and-lock step for TRE/TRI, trainee, and inspector sign-off.
3. Automatic certification-expiry (“recurrency”) tracking, so a pilot's next required check is flagged automatically instead of tracked manually.

4. Support for a second airline client, which requires separating data by airline (not just by department) inside the system — the main technical step to onboarding beyond the first customer.
5. A bounded scheduling layer — assigning a pilot to a simulator slot, instructor, and date — without turning STRATOS into a full resourcing/rostering product.

10. Glossary

- **EBT:** Evidence-Based Training — ICAO's competency-focused training and evaluation methodology.
- **CBTA:** Competency-Based Training and Assessment — IATA's parallel methodology.
- **ETR:** Electronic Training Records — the precise product category for STRATOS today.
- **TEM:** Threat & Error Management — tracking how crew identify and handle threats and errors during a session.
- **Just Culture:** the non-punitive safety philosophy EBT/CBTA is built on — evaluation data is used to identify training needs, not to assign blame.
- **Concordance:** how consistently different examiners grade the same competencies against each other — the standardization signal a Training Director and a regulator both look for.
- **IOSA / ECAA / GACA:** IOSA is IATA's operational safety audit; ECAA and GACA are the Egyptian and Saudi civil aviation regulators. All three are the kinds of audits STRATOS's records are built to answer.
- **TRE / TRI:** Type Rating Examiner / Type Rating Instructor — qualified examiners who conduct and sign off evaluations.
- **S1–S5:** The five-band grading scale STRATOS uses, from S1 (Unsatisfactory, below 70%) to S5 (Excellent, above 95%).
- **Micro / Macro / Trend analysis:** STRATOS's three analytical altitudes — a single exam, a cohort comparison, and a pilot's history over time (Section 6.5).
- **LMS:** Learning Management System — delivers e-learning courses. STRATOS is not an LMS.
- **TMS:** Training Management System — handles scheduling and rostering. STRATOS is not yet a full TMS.