



AIRCRAFT MANUFACTURERS
FLIGHT TRAINING ASSOCIATION



COMPETENCY BASED TRAINING & ASSESSMENT Implementation

Key elements for Stakeholders

Foreword

Dear Aviation Training stakeholders,

The **AMFTA CBTA Implementation Manual** has been developed as a global support document for all stakeholders involved in the implementation of Competency-Based Training and Assessment (CBTA). While aligned with the main regulatory frameworks of ICAO, IATA, and EASA, this manual does not replace these foundational documents. Its purpose is to provide practical guidance and a shared understanding to help stakeholders achieve CBTA's core objectives.

This manual is designed to benefit all stakeholders, including ATOs, airlines, operators, and regulators, by offering a clear perspective on CBTA principles and their implementation. It provides insights and tools to support the transition to CBTA, focusing on aligning efforts across the industry. Although the manual does not delve into the specific tasks of instructors, it highlights the critical role they play in CBTA. Instructors are key to transforming training into a process that develops genuine pilot competency - ensuring resilience, adaptability, and sustained performance over time.

In the CBTA framework, special attention must be given to the training and competency of instructors. Their ability to effectively assess, guide, and support pilots is essential to the success of CBTA. To address this priority, AMFTA will publish a dedicated annexe focused on instructor training and standardization. This upcoming document will provide the necessary tools and frameworks to ensure instructors are fully equipped to carry out their essential role and maintain high standards across the industry.

This manual aims to facilitate the implementation of CBTA across all participants, addressing the needs of today's complex aviation environment with clarity, purpose, and measurable results.

A handwritten signature in black ink, appearing to read "Jean-Michel Bigarré", written over a horizontal line.

Capt. Jean-Michel Bigarré
President, AMFTA



Introduction

Pilots need to display **competence and resilience** to face the challenges of increasing operational complexity.

By developing their competencies, pilots must be able to not only execute tasks but also to **cope with unpredictable and unforeseen situations**.

The **AMFTA** objective is to **enhance safety** across the commercial aviation eco-system by publishing recommendations, based on industry and Aircraft Manufacturer (AM) consensus.

AMFTA's guidance will support enhanced training, such as **CBTA/EBT**, to meet pilots, ATOs, and operators needs, regardless of the AM fleet type. This will benefit the overall quality and consistency of pilot training and operations.



CBTA: Competency Based Training and Assessment

EBT: Evidence Based training

ATO: Approved Training Organisation

The objective of this AMFTA document is:

- To present an **overview of CBTA and EBT principles**
- To demonstrate the **value CBTA/EBT brings** to stakeholders in training and flight operations

The successful implementation of CBTA/EBT for an airline or an ATO **requires absolute full support and commitment** of all stakeholders.

With this objective, everyone must understand the **principles, benefits, and key steps of CBTA/EBT**, but not everyone needs to become a specialist.

This manual presents **only the broad outlines** by targeting the centers of interest specific to each stakeholder.

This document aims at presenting CBTA/EBT concepts, and benefits.

It is an introductory and/or complementary document which does not replace nor substitute existing regulatory materials.

CBTA is a global training method geared towards learning rather than just passing a test. It relies on:

- A **Competency Framework** that accurately and objectively defines what is expected from a competent pilot (9 Competencies and associated Observable Behaviors)
- Clear **performance criteria**
- A robust **course design**
- Specific **instructor** qualification and **standardization**
- An **assessment process** allowing us to **predict successful performance on the job** and identifying areas of improvement.

EBT is part of a regulatory-approved CBTA (alternative) recurrent training program. Structured like CBTA, EBT uses international safety and operational data analysis to define the relevant training topics and to define actionable and comprehensive pilot training scenarios, events, and frequency of exposure.

EBT is part of CBTA

CBTA

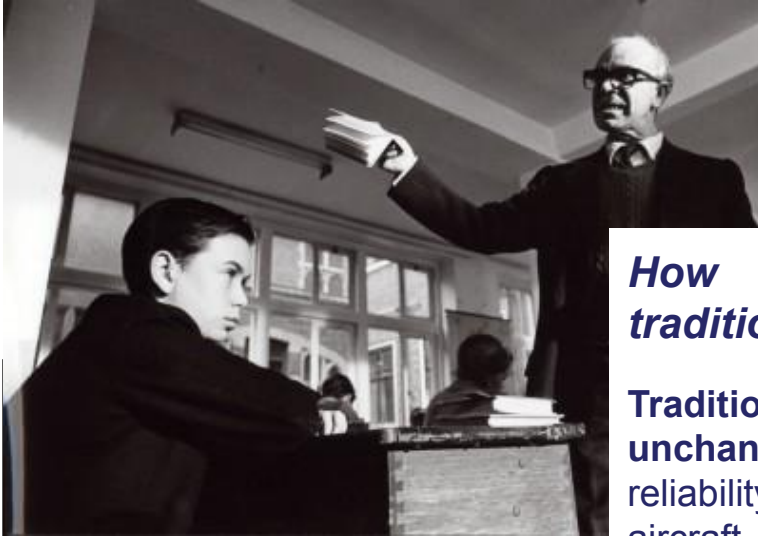
- Train the 9 Pilot Competencies
- Course design allowing competencies development
- Specific Instructor standardization
- Assessment Process
- Data collection & Training needs analysis

EBT

- Is an alternative recurrent training programme
- Uses FDM, LOSA, SMS to proactively identify relevant training topics

FDM: Flight Data Monitoring
LOSA: Line Operations Safety Audit
SMS: Safety Management System

In other words : CBTA is a global training standard, and EBT uses safety, operational and training data to establish training topics for developing competencies (in recurrent training)



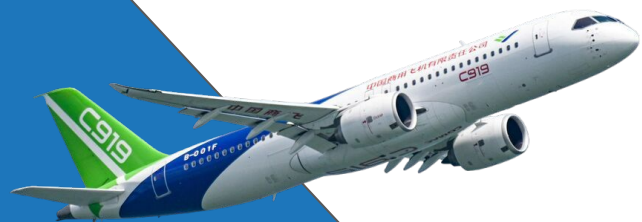
How does CBTA/EBT differ from traditional training ?

Traditional training, has remained fundamentally **unchanged since the 1950s** despite increased reliability and sophistication of modern transport aircraft. Traditional flight training **includes repetitive exposure to events and focusing mainly on the technical skills with less emphasis on the non-technical skills**. Tasks were identified for training repetition because of their prevalence in historical analysis of accidents and incidents. However, accident and incident trends in **recent times show a prevalence of non-technical skills** instead of mechanical/technical causes.

Time spent immersed in training tasks is not the best indicator of producing high-quality, efficient pilots. Pilots can spend a lot of time and emphasis on training tasks, but still be unprepared for the real-life demands of flight operations.

With CBTA/EBT, competencies are dimensions of human performance (as individuals and as a team) used by the instructors to reliably predict successful performance on the job.

Training to competence ensures pilots meet or exceed the regulators' minimum requirements. Consequently this focus on transformation of pilots to a more comprehensive level of performance throughout their career, not just hours logged, or tasks trained, supports the **essential goal** for AMs and operators which is the safe and efficient operation of their aircraft.



CBTA/EBT essential principles:

Objectives of CBTA/EBT

The core objective of **CBTA/EBT** is to equip pilots with these essential **nine competencies** needed for safe and efficient operations.

Despite significant progress in aviation safety over recent decades, the increasing complexity of the aviation environment necessitates an **evolution in pilot training methods** and **a specific instructor's standardization** to maintain the trajectory of **safety improvements**.

9 Competencies

Non-technical:

Problem Solving and Decision Making
Situational Awareness
Leadership and Teamwork
Communication
Workload Management

Technical:

Flight Path Management Automation
Flight Path Management Manual Control
Application of Procedures ...
Application of Knowledge

CBTA/EBT is designed to ensure that pilots not only achieve mastery over necessary competencies, but **also gain increased confidence and resilience** in handling unexpected situations.

It has been observed that some newly licensed pilots, as well as some experienced pilots, trained with traditional training systems, are not learning or acquiring the pilot competencies required to be successful and resilient in complex airline operations.

CBTA/EBT enhanced the quality of training by addressing essential competencies that embed technical and non-technical skills equally, and by focusing on the specific needs of each pilot, thus avoiding re-training and its associated costs.

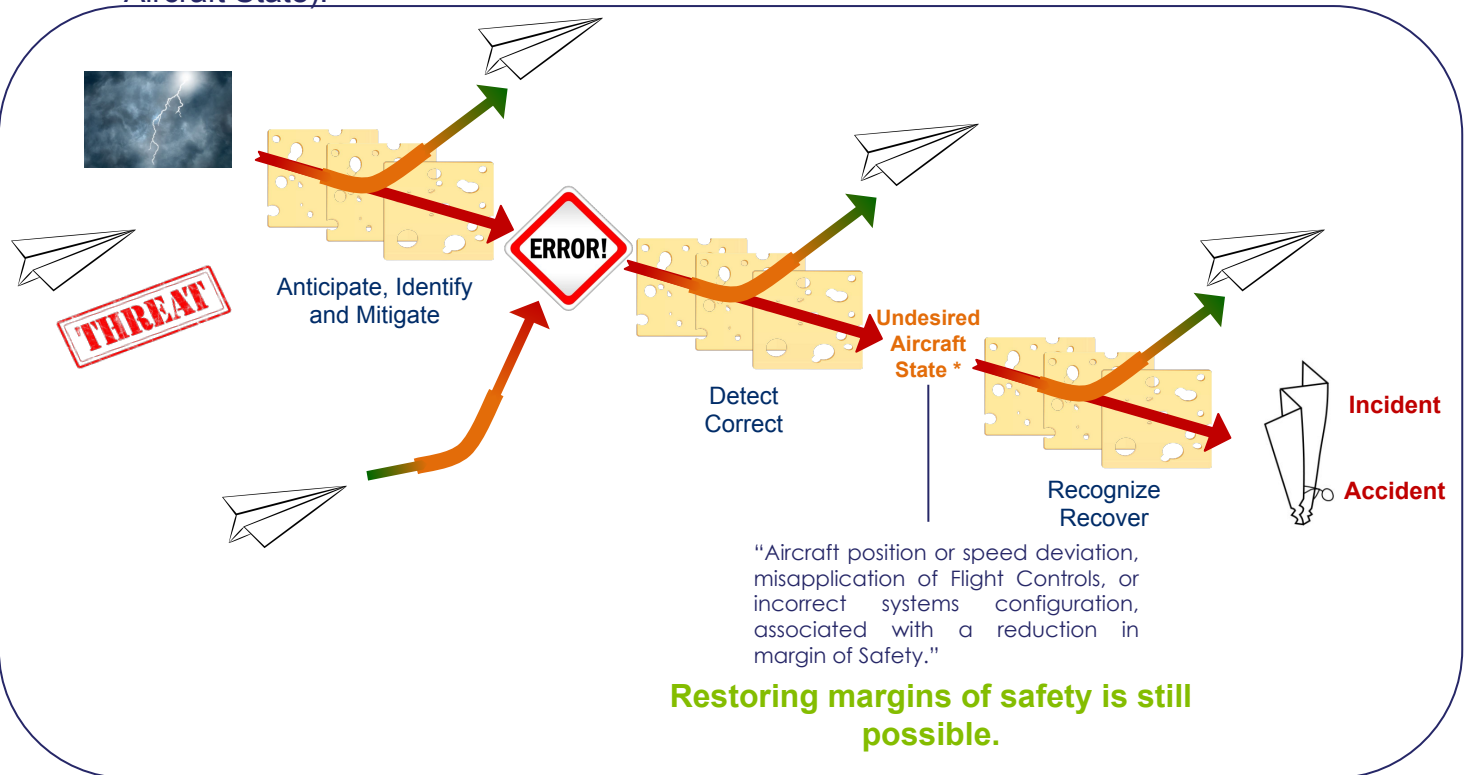


CBTA/EBT essential principles:

The Threats & Errors Management Model (TEM)

Threats & Errors are part of everyday aviation operations.

- Pilot competencies are used to anticipate, identify and mitigate the Threats.
- Pilot competencies are used to detect and correct Errors
- Ultimately Pilot competencies are used to recognize and recover from an UAS (Undesired Aircraft State).



Pilot Competencies & Observable Behaviors

- Pilot competencies are manifested and observed by instructors through behaviors that mobilize the relevant Knowledge, Skills and Attitudes to carry out activities or tasks under specified conditions.

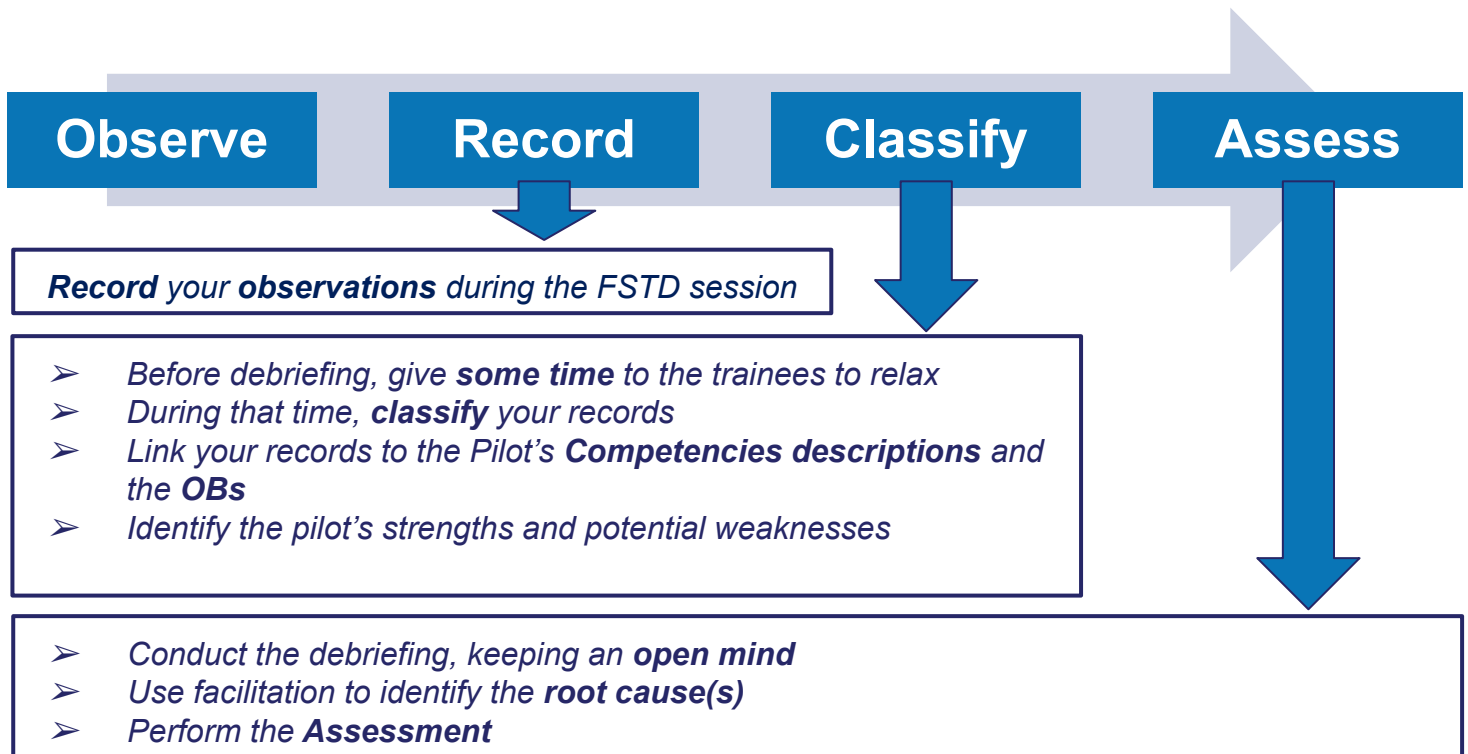
Application of procedures and compliance with regulations (PAC)		Situation awareness and management of information (SA)		Workload management (WLM)	
Description:	Identifies and applies appropriate procedures in accordance with published operating instructions and applicable regulations	Description:	Perceives, comprehends and manages information and anticipates	Description:	Maintains available workload capacity by prioritising and distributing tasks using appropriate resources
OB 1.1	Identifies where to find procedures and regulations	OB 7.1	Monitors and assesses the state of the aeroplane and its systems	OB 8.1	Exercises self-control in all situations
OB 1.2	Applies relevant operating instructions, procedures and techniques in a timely manner	OB 7.2	Monitors and assesses the aeroplane's energy state, and its impact on the flight path	OB 8.2	Plans, prioritises and schedules appropriate tasks effectively
OB 1.3	Follows Standard Operating Procedure (SOP) unless a higher degree of safety dictates appropriate deviation	OB 7.3	Monitors and assesses the general environment as it may affect the flight path	OB 8.3	Manages time efficiently when carrying out tasks
OB 1.4	Operates aircraft systems and associated equipment correctly	OB 7.4	Validates the accuracy of information and checks for gross errors	OB 8.4	Offers and gives assistance
OB 1.5	Monitors aircraft systems status	OB 7.5	Maintains awareness of the people involved in or affected by the operation and their capacity to perform as expected	OB 8.5	Delegates tasks
OB 1.6	Complies with applicable regulations	OB 7.6	Develops effective contingency plans based upon potential risks	OB 8.6	Seeks and accepts assistance, when appropriate
OB 1.7	Applies relevant procedural knowledge	OB 7.7	Responds to indications of reduced situation awareness	OB 8.7	Monitors, reviews and cross-checks actions conscientiously
Application of knowledge (KNO)		Leadership & teamwork (LTW)		Problem-solving - decision-making (PSD)	
Description:	Demonstrates knowledge and understanding of relevant information, operating aircraft systems and the operating environment	Description:	Influences others to contribute to a shared purpose. Collaborates to achieve team objectives	Description:	Identifies precursors, mitigates problems, and makes decisions
OB 2.1	Demonstrates practical and applicable knowledge of limitations and its interaction	OB 5.1	Encourages team participation and open communication	OB 6.1	Identifies, assesses and manages threats and errors in a timely manner
OB 2.2	Demonstrates required knowledge of published operating instructions	OB 5.2	Demonstrates initiative and provides direction when required	OB 6.2	Seeks accurate and adequate information from appropriate sources
OB 2.3	Demonstrates knowledge of the physical environment, the air traffic environment, weather, airports and the operational infrastructure	OB 5.3	Engages others in planning	OB 6.3	Identifies and verifies what and why things have gone wrong, if appropriate
OB 2.4	Demonstrates appropriate knowledge of applicable legislation	OB 5.4	Considers inputs from others	OB 6.4	Persuades in working through problems whilst prioritising safety
OB 2.5	Knows where to source required information	OB 5.5	Gives and receives feedback constructively	OB 6.5	Identifies and considers appropriate options
OB 2.6	Demonstrates a positive interest in acquiring knowledge	OB 5.6	Addresses and resolves conflicts and disagreements in a constructive manner	OB 6.6	Applies appropriate and timely decision-making techniques
OB 2.7	Is able to apply knowledge effectively	OB 5.7	Exercises decisive leadership when required	OB 6.7	Monitors, reviews and adapts decisions as required
Aeroplane flight path management - manual control (FPF)		Aeroplane flight path management - automation (FPA)		Communication (COM)	
Description:	Controls the flight path through manual control	Description:	Controls the flight path through automation	Communicates through appropriate means in the operational environment, in both normal and abnormal situations	
OB 3.1	Controls the aircraft manually with accuracy and smoothness as appropriate to the situation	OB 3.1	Uses appropriate flight management, guidance systems and automation, as installed and applicable to the conditions	Determines that the recipient is ready and able to receive information	
OB 3.2	Monitors and detects deviations from the intended flight path and takes appropriate action	OB 3.2	Monitors and detects deviations from the intended flight path and takes appropriate action	Selects appropriately what, when, how and with whom to communicate	
OB 3.3	Manually controls the aeroplane using the relationship between aeroplane attitude, speed, thrust, and navigation signals or visual information	OB 3.3	Manages the flight path to achieve optimum operational performance	Formulates messages clearly, accurately and concisely	
OB 3.4	Manages the flight path to achieve optimum operational performance	OB 3.4	Maintains the intended flight path during flight using automation whilst managing other tasks and distractions	Interprets that the recipient demonstrates understanding of important information	
OB 3.5	Maintains the intended flight path during manual flight whilst managing other tasks and distractions	OB 3.5	Selects appropriate level and mode of automation in a timely manner considering phase of flight and workload	It actively and demonstrates understanding when receiving information	
OB 3.6	Uses appropriate flight management and guidance systems, as installed and applicable to the conditions	OB 3.6	Effectively monitors automation, including engagement and automatic mode transitions	Appropriate escalation in communication to resolve identified deviations	
OB 3.7	Effectively monitors flight guidance systems including engagement and automatic mode transitions			Interprets non-verbal communication in a manner appropriate to the organisational social culture	

"The Pilot Competencies and Observables Behaviors have been developed by a large expert industry working group. We recommend operators and ATOs not to adapt the OBs to ensure harmonized training data collection and analysis".

CBTA/EBT essential principles:

The ORCA Process: Observe, Record, Classify, Assess

- By collecting evidence, it allows the instructor to develop trainees competencies by accurately identifying strengths and weaknesses

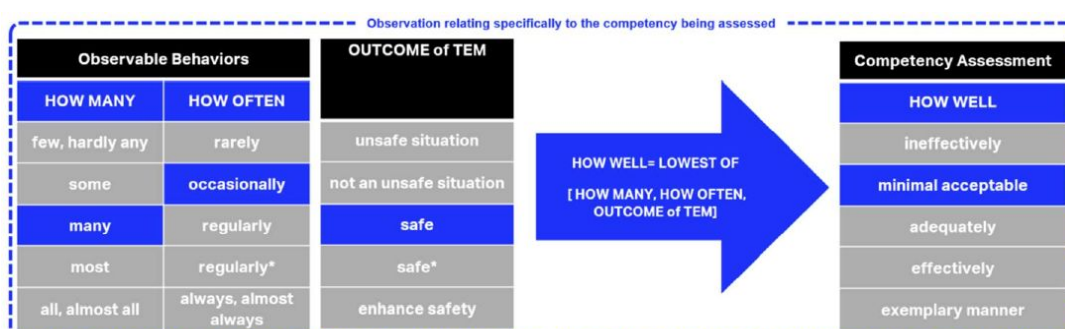


CBTA/EBT essential principles:

The Assessment method

- The Instructors determine if the trainee reaches the required competency standard under given conditions
- The “**How Many**” dimension provides evidence related to the **acquisition of the competency**
- The “**How Often**” dimension provides evidence related to the **robustness of the competency**
- The “**OUTCOME of TEM**” dimension provides evidence related to the **effectiveness** of the competency **as a countermeasure** to Threats & Errors

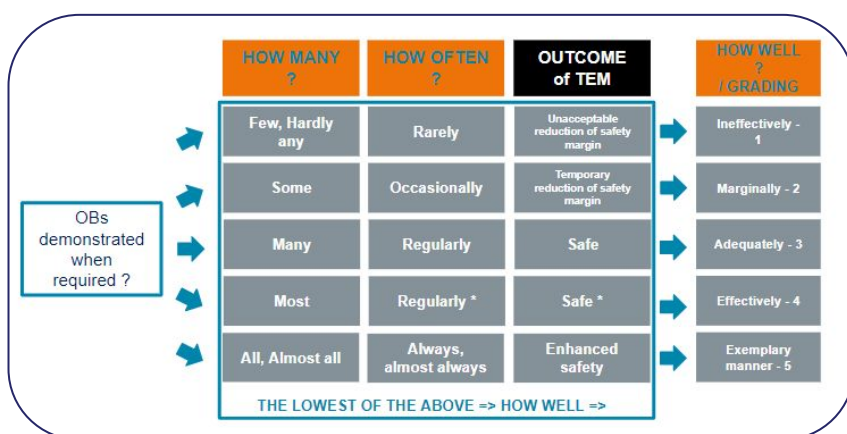
IATA Assessment & Grading method



The competency assessment (**HOW WELL**) is the combination of the number of OBs demonstrated and their frequency of demonstration and the consequential outcome of the Threat and Error Management relating specifically to the competency being assessed.

Source IATA

Other examples of Assessment & Grading method and associated wordings



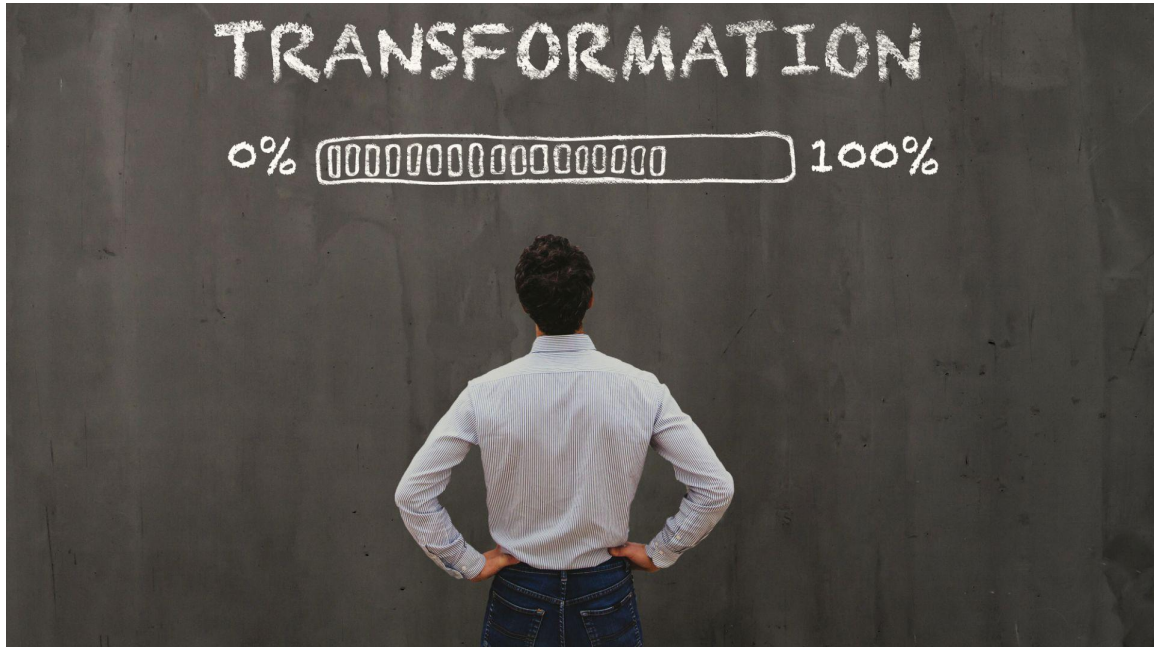
GRADING RUBRIC			Assessment	
Elements of Competence Performance Quality				
HOW MANY? Step 1	HOW OFTEN? Step 2	TEM OUTCOME Step 3	HOW WELL? Step 4	GRADE Step 5
All/Almost all	Always, Almost always	Enhanced Safety Effectiveness and Efficiency	Exemplary manner	5
Most	Almost always	Well managed Safe Operation	Effectively	4
Many	Regularly	Safe Operation	Adequately	3
Some	Occasionally	Safety margin requires improvement	Marginally	2
Few/ Hardly any	Rarely	Unsafe Operation	Ineffectively	1

The regulators give some flexibility to the Operators/ATOs to define the vocabulary to be used and the performance standard in their Operational Manual (OM)

But as for the adapted competency model, **AMFTA strongly recommends** the use of a **standardized system**. (The lowest of How many, How often, Outcome of the TEM gives How well and the corresponding grade, out of 5 grades).

It would be the only viable solution **to take full benefit** of CBTA/EBT **data collection** at a **worldwide** level (Outer Loop). *Please refer to ICAO & IATA publications.*

Benefits of CBTA/EBT for AM/NAA/Airlines/ATO stakeholders



AMFTA Aircraft Manufacturers



Given the challenges of the traditional training ecosystem to provide suitably qualified pilots, **AMs have an interest in CBTA/EBT to enhance operational safety** of their aircraft and the passengers that fly in them.

Since aviation is outcome-driven, in which **leveraging a pilot's performance enhancement is crucial**, competency gaps are detrimental to attaining optimal aircraft operational safety.

Therefore, for pilot training and development, an important **goal is to identify competency gaps**, and to refer to the Competency Framework to define focused pilot's performance areas **to be addressed**.

Benefits of CBTA/EBT for AM/NAA/Airlines/ATO stakeholders

National Aviation Authorities

The goal of **National Aviation Authorities** (NAAs) is to provide regulations, guidance and oversight to ensure the **safety of flight operations**.

NAAs identify aviation safety risks, and develop mitigations, which may include regulatory requirements and guidance. But this **reactive approach may lead to** overloaded, and sometimes irrelevant, or outdated training and checking programmes that **turn the training sessions into a succession of box ticking exercises**.

The NAAs depend on analysis by international organizations such as **International Air Transport Association IATA & International Civil Aviation Organization (ICAO)**. In 2013/14, ICAO published landmark guidance on CBTA/EBT through the *Manual of Evidence-Based Training (Document 9995)*, which focuses on pilot competencies, and the management of the most relevant threats and errors have been identified (**IATA EBT Data Report for Evidence-Based Training**).

ICAO looked at what factors make some pilots **more efficient and safer so that training can focus on those factors**.

Training that reduces operational safety risks benefits NAAs.

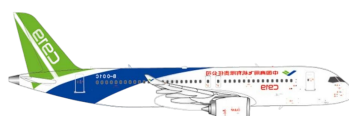
EBT is a safety-targeted training philosophy relying on a proactive and predictive approach using :

- pilot success factors; **the competencies and their development**
- **realistic scenarios** in training close to operational and environmental contexts
- a **reversed order for the recurrent phase** where data (evidence) is collected during the “evaluation” session, then used to tailor the subsequent training session to specifically fit the pilots’ needs
- the principle of **“Equivalence of malfunctions”**. Type specific failures are classified according to Immediacy, Complexity, Degradation of aircraft controls, Loss of instrumentation, Management of the consequences. If a pilot is able to demonstrate a satisfactory level of competence in managing a given situation, it is not necessary to repeat another exercise of the same classification.

CBTA/EBT is a suitable direction **to maintain and improve** the level of aviation **safety**.

The implementation is not as complex as it may look and the NAA will play a key role in the promotion and the adoption of this training standard by airlines and ATO’s

AMFTA is willing to support the NAA into this paradigm shift if necessary.



Benefits of CBTA/EBT for AM/NAA/Airlines/ATO stakeholders

Airline Management

“The aim of CBTA/EBT is to train and assess the competencies required to operate safely and efficiently”
Source IATA

CBTA/EBT's main objective is to **continuously improve safety**, allowing airline management to be confident knowing that the public, the passengers, the crew members, and aircraft are safe.

In addition, CBTA/EBT **aims to improve efficiency**.

As defined by the Oxford Dictionary, efficiency is “a way to achieve maximum productivity with a minimum wasted effort or expense”

For instance, a pilot who is competent and confident will

- be able to compute his descent profile and to **optimise** it, in regards with the ATC constraints and **non predictable variables**
- be **keen to perform** a visual approach when appropriate
- **anticipate threats** to safety and to operations
- **optimize** the use of the aircraft and reduce wear on its systems

- ...

This will translate into **sensible benefits** such as reduction of engine wear, brake wear, additional comfort for passengers, optimization and/or reduction of flight time, reduction of fuel consumption, **savings** on crew costs, **savings** on the aircraft and engines maintenance reserves and on leasing when aircraft are rented by the hour, and so much more.

The implementation of **CBTA/EBT** implies the harnessing of all the airline post holders and departments.

Awareness of the pilots, training and standardization of the instructors, commitment of the pilot management to adhere, manage and promote the **different steps of implementation** and to create adapted training programs, Flight Safety and Quality department, IT department, airline management, pilots representative and unions - all have to share a common understanding and a **common objective to ensure a successful implementation of a CBTA program**.

It is not about self-satisfactory KPI's or a reactive approach of the observed deviations, CBTA is about a **pro-active and even predictive approach of safety and efficiency** through the development of pilot competencies being used as countermeasures to the threats and errors arising during day to day operations..

It should not be seen as an initial inflation of a budget line but as a **global perspective** that will bring **significant savings** in the long term.

It should be noted that CBTA/EBT is not a miracle way to cure a dysfunctional organization, where communication between department and stakeholders is broken, or where there would be a strong opposition between flight crews and ground staff.



Benefits of CBTA/EBT for AM/NAA/Airlines/ATO stakeholders

Pilot Management - Training Managers, Instructors, HoT, TRIs...



“For many decades the industry has used the satisfactory completion of manoeuvres as performance measurement”.

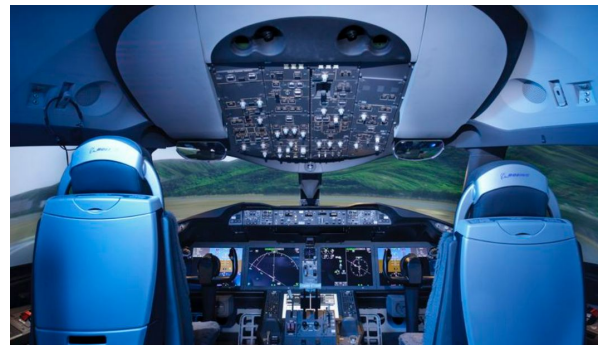
“The paradigm shift of CBTA/EBT is that the pilot performance should be determined across a wider range of competencies, and not simply by the achievement of a predetermined outcome in a specific task or manoeuvre”.

Source IATA

The old “box ticking” approach is over.

The CBTA/EBT approach will increase pilot management confidence that **any pilot** sent back to a cockpit **will have the necessary competencies to operate safely and to manage unforeseen situations.**

CBTA/EBT, by the use of the observable behaviors, and of the ORCA process, is a valuable tool for the instructors and the pilot management to deliver, to the pilots, an **accurate, factual and reliable** assessment of their performance.



The assessment method, the factual elements, the use of **self-assessment and facilitation** allow the instructor to describe a performance with objectivity.

Unlike the traditional training method, where the recurrent training session is done to “prepare” for the checking session, with CBTA/EBT the **evaluation session is done first** before the training session.

Should any weakness be identified during the evaluation session, it will be addressed right during the tailored training session by a **specific Scenario Based Training** session aiming to enhance the necessary competency.

Benefits of CBTA/EBT for AM/NAA/Airlines/ATO stakeholders

...Pilot Management



Whether the CBTA/EBT program is created and **implemented internally** or with the support of a **service provider**, the pilot management will play a key role in the success of the set up.

All instructors and pilots need to understand and adhere to the concept from their first flight hour, it's not only about providing relevant and reliable information or regulatory documents, it is above all about the learning process to make a more resilient pilot thereby enhancing safety for all populations and for the specific operations of the airline.



All **instructors** will have to be **trained and standardized** on the necessary pedagogical methods.

For **CBTA**, some instructors & engineers will have to be **trained specifically** on the **course design** (Instructional System Design using ADDIE Model as described in **ICAO Doc 9868**).

IT tools will have to be carefully selected to enable an accurate follow-up of the pilot performances and ensure reliable data gathering.



To transition from a traditional legacy training to CBTA/EBT takes time and may normally take 3 years or more to reach the baseline EBT stage. A yearly **Instructor Concordance Assurance Program** will have to be established to reach instructors alignment and to update them on the latest evolutions (*this will be detailed further in this document*)

Benefits of CBTA/EBT for AM/NAA/Airlines/ATO stakeholders

Pilot Unions & Associations

Pilot **unions are staunch advocates** for ensuring the **highest safety** standards. They play a pivotal role in the implementation of safety protocols, leading to a safer environment for pilots and passengers alike.

The safety **benefits of CBTA/EBT** ensure buy-in of pilots who have been exposed to it, and the trust of pilot unions.

Pilots need to become familiar with the **9 competencies** and with the **observable behaviors**.

Discussing them with their **peers** and with the **instructors** will allow them to develop a **common understanding**.



This understanding will increase their awareness about their **strengths and weaknesses** when they receive feedback from the instructors/examiners, particularly on the non-technical skills, and this could potentially allow them as well to **discuss with factual elements** in case of disagreement.

Finally, **to dispel concern over change**, it also has to be explained that the **data gathering** of the CBTA/EBT program is **absolutely confidential**, and will never be used for any purpose other than improving the airline safety and efficiency and the **global industry safety and efficiency**.

The implementation of CBTA/EBT requires harnessing of all airlines' departments and all postholders. It is a **paradigm shift** that will take time, effort and money.

No punitive action can be taken using CBTA/EBT IT tools and data gathering without jeopardizing the whole system.

Benefits of CBTA/EBT for AM/NAA/Airlines/ATO stakeholders

Pilot



Since the early days of aviation a good pilot is a pilot with **good airmanship**.

But nobody has ever been able to provide a **clear definition** of airmanship. CBTA brings a clear definition :

“Airmanship is the consistent use of good judgement and well-developed Knowledge, Skills and Attitudes to accomplish flight objectives”.

ICAO Annex 1

Moreover, the **Competency Framework and the Observable Behaviors** give pilots an accurate description of the **Knowledge, Skills and Attitudes** they have **to demonstrate**, and the **ORCA*** process defines a clear methodology to assess the **level of performance** objectively.

They are tools for pilots to self evaluate their daily performance and to understand and **discuss with instructors and evaluators**.

The use of the **TEM model** also helps pilots to perceive their daily operational environment, **anticipating and mitigating the potential threats and detecting and correcting the errors** in a more dynamic way, keeping an open mind, contrary to routine endless briefings that are almost sung like songs but rarely reach their objective.



***ORCA Observe Record Classify Assess (see Page 16)**

Implementation Principles



Traditional Training

In traditional recurrent training and checking Flight Simulation Training Device (FSTD) programs, operators conduct mainly task-based training and assessment.

Often composed of 2 consecutive FSTD sessions every 6 months, the first one being the TRAINING mainly dedicated to prepare the second which is the CHECKING.



Mixed EBT

Mixed EBT is an intermediate phase when transitioning from traditional training and checking to the BASELINE EBT program. It's a period during which EBT program elements are progressively applied, to the maximum extent permissible, under existing rules.

It combines the mandatory exercises of the traditional training and integrates EBT elements.

Still composed of 2 FSTD sessions every six months, but these 2 sessions are reversed.

The first one is the EVALUATION, and the second one is the TRAINING aiming to develop pilot's performance, based on individual strengths and weaknesses identified during the first session.

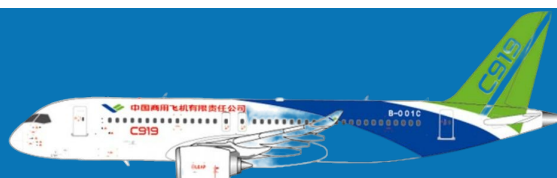


Baseline EBT

Baseline EBT means that "the recurrent training and assessment is fully dedicated to the application of EBT, and the revalidation or renewal of the pilot's licenses is accomplished in accordance with EBT regulations described by the NAA. It takes a significant amount of resources to be implemented successfully (Management, IT, SMS, pilots, instructors, course developers, authorities...) Therefore a 3 years period is necessary to reach the objective.

"The baseline EBT program is based on a robust methodology and reliable worldwide data acquisition and analysis... The baseline EBT program is aircraft generation-specific. It does not require detailed analysis or program design by the operator or the ATO. It only needs the necessary adaptation to aircraft type and operation, and the development of an adapted competency model, and a grading system"

Source IATA



Enhanced EBT (scope under study, not immediately applicable)

"An enhanced EBT program is an EBT program that focuses on specific operational risks that have been identified by the authority, operator, or AM".

It requires the same level of operator data robustness as described in the EBT Data Report and its amendment(s)...

Implementation Timeline

Stage 1: 0 to 12 Months

Integration of CBTA Principles
into Recurrent Cycles



- Train **pilot competencies** in existing recurrent training (syllabus tasks) while assessing competencies using a defined and appropriate training method using **CBTA grading scales** and associated sections, developing and enhancing data analysis capability.
 - Establish a **communication plan** for internal and external stakeholders
 - Focus on **facilitative briefing and debriefing**, **CRM**, and **TEM**
 - Conduct the **evaluation** (check) on day 1 of the simulator session; conduct **training** on day 2.
 - Deploy an **instructor standardization** program focusing on the pilot competencies and the instructor-evaluator competencies.

Stage 2: 12 to 48 Months...

Implementation of Mixed EBT



- Set up ongoing **information sessions** for program status updates with internal and external stakeholders.
 - Prepare a **Mixed EBT implementation plan** and safety risk assessment.
 - Conduct **pre-EBT training effectiveness reviews**, and plan for follow-up training effectiveness.
 - Incorporate **EBT instructor competency assessment**.
 - Distribute **EBT assessment** and **training topics** over a 3-year period.
 - Incorporate **module design** to promote resilience development and scenario elements that focus on specific competencies.
 - Implement **EBT program**.

Stage 3: from 48 months ongoing...

Implementation of Baseline EBT



- Incorporate **equivalency of malfunctions** and **approach-type clustering** (training on each characteristic) over 3-year programme.
 - Review **training effectiveness** for competency and performance metrics
 - Measure **training system performance** for analytical/statistical trend analysis
 - Establish **continuous improvement** of the EBT training programme
 - Incorporate **instructor-evaluator recurrent standardization** focusing on instructor-evaluator competencies and concordance

Stage 4: Case by case basis

Implementation of Enhanced EBT
(scope under study, not immediately applicable)



- Incorporate **adaptation to the EBT program** to mitigate specific operator risks identified by the regulator, operator, or the AM. Any adaptation of the training topic and associated frequency must be sustained by a safety case and approved by the National Aviation Authority.
 - Ensure to **maintain the suitability** of the EBT program for operational relevance, design integrity and data analysis.

