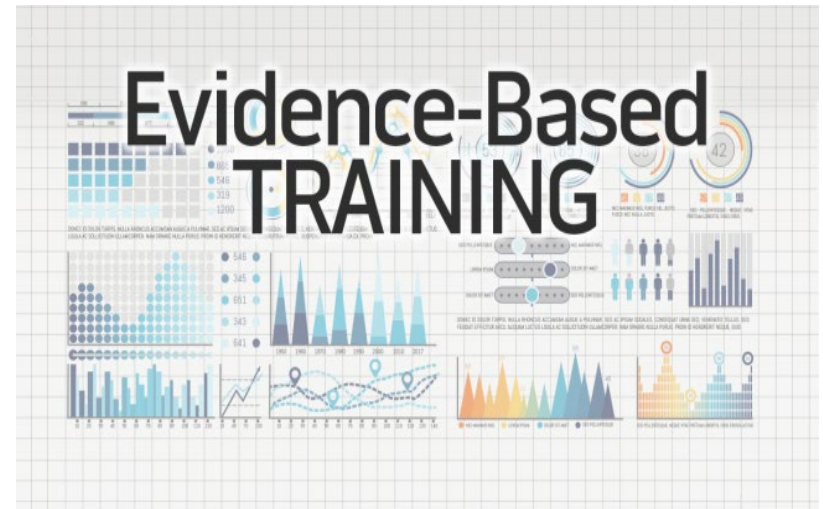




# Navigating the Future: EBT Implementation in GCAA

Competence-Based Training and  
Assessment Approach/Evidence-Based  
Training (CBTA/EBT) Workshop

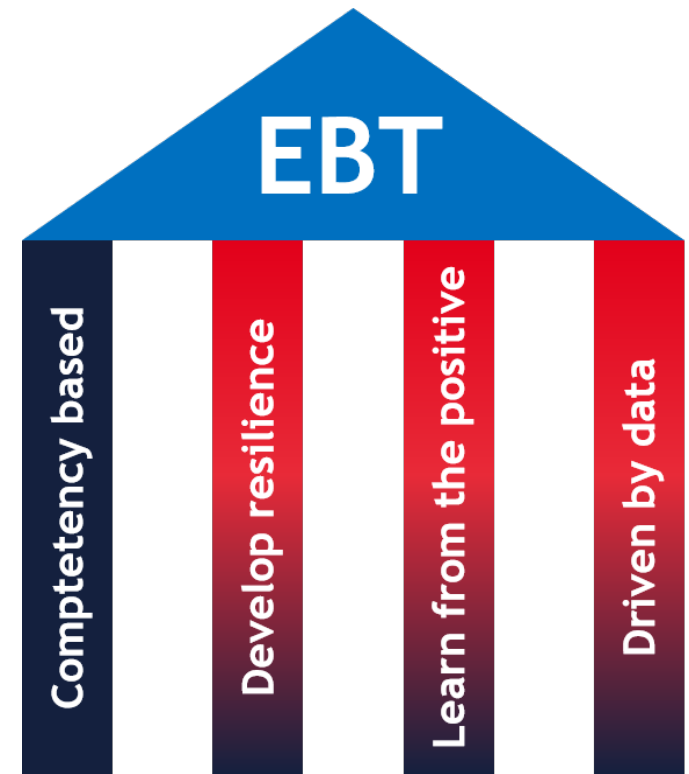
Capt. Khaled Al Sheebani  
GCAA Flight Operations Inspector  
Dubai, UAE, 25-26 September 2024





# AGENDA

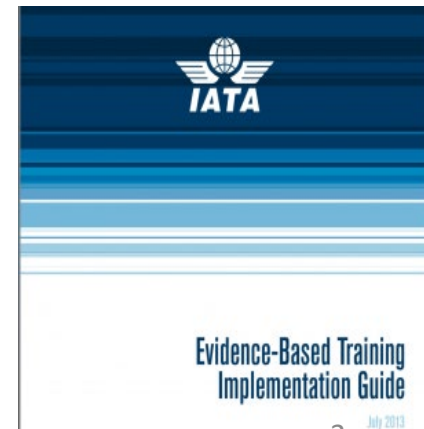
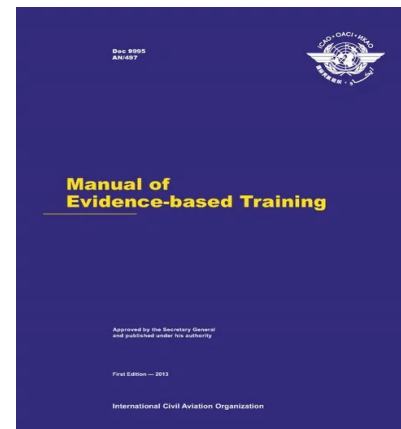
1. WHAT IS EBT?
2. WHY EBT?
3. GCAA CAR REGULATIONS AND IMPLEMENTATION.
4. CHALLENGES
5. SUMMARY.





## WHAT IS EBT?

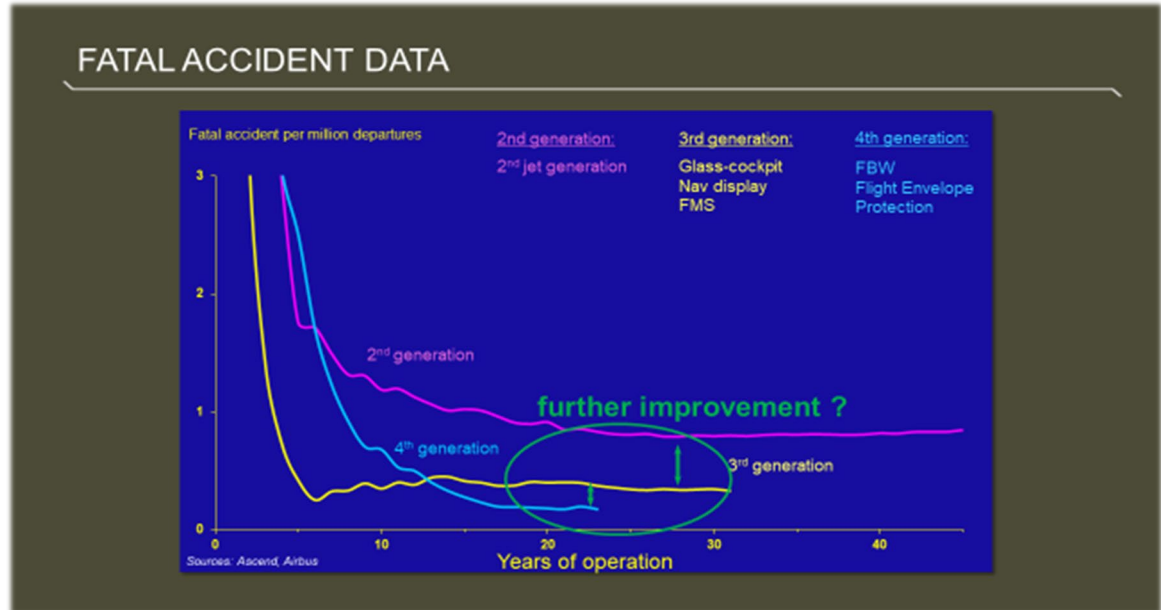
- **Definition:** Training and assessment based on operational data that is characterized by developing and assessing the overall capability of a trainee across a range of core competencies rather than by measuring the performance in individual events or manoeuvres.
- **Objective:** To enhance the safety and efficiency of aviation operations through competency-based training.
- ICAO has defined competency as “A combination of knowledge, skills and attitudes required to perform a task to the prescribed standard.”
- The data sources are:
  - Data from ICAO and IATA initiatives.
  - Flight data analysis,
  - Flight observations (e.g. LOSA programs) and;
  - Air safety reports.





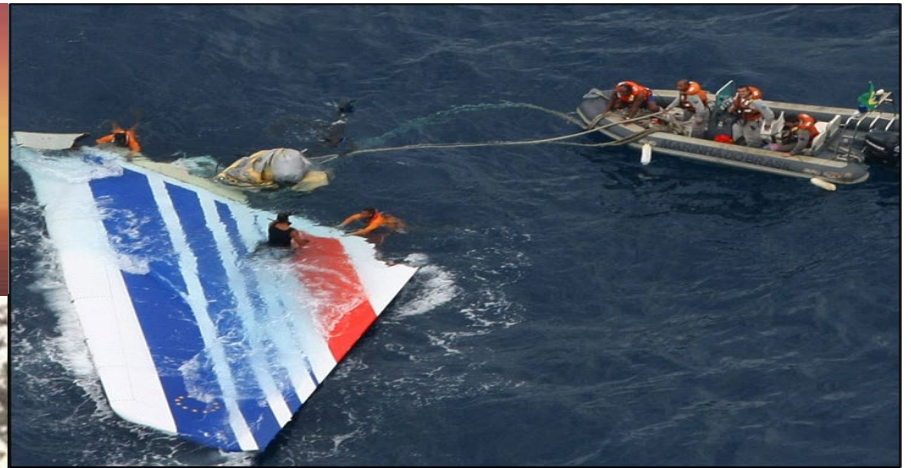
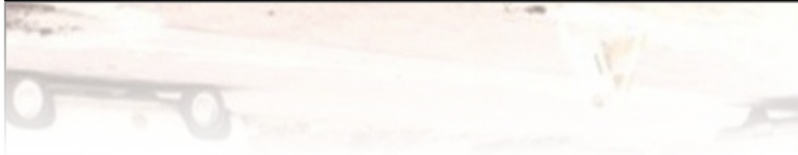
# WHY EBT?

- The early generations of airline pilot training were simply about repeating pilot exposure to “worst case” events in training, which was considered sufficient and safe.
- Growing complexity of aviation operations and the need for adaptive and proficient pilots.





# WHY EBT?







# GCAA CAR REGULATIONS AND IMPLEMENTATION.

- The General Civil Aviation Authority Civil Aviation Regulations govern civil aviation in the UAE, ensuring that all aviation activities meet safety, security, and operational standards.
- The Aviation Safety Affairs Sector in the GCAA regulates personnel and organizations' licensing and certifications through :
  - **Flight Operations Department;**
  - **Crew Licensing Department.**
- The GCAA CARs align with the International Civil Aviation Organization (ICAO), ensuring the UAE complies with international best practices.



# THE GCAA JOURNEY

1. Initially, the General Civil Aviation Authority collaborated with other authorities to gain experience.
2. Then, worked with industry stakeholders who had already commenced their efforts to develop the program.
3. Acquire specialized talent to support the authority in certification processes and policy development.
4. GCAA continues developing new tools to support future approvals and oversight of the EBT program.



# GCAA CAR REGULATIONS AND IMPLEMENTATION.

## 1. Pilot Training in GCAA regulations:

- I. CAR-FCL.
- II. CAR-AIR OPS.
- III. Other documents under E-Publications (i.e. AMC's and Safety Decisions).

## 2. Steps of Implementing EBT in the GCAA

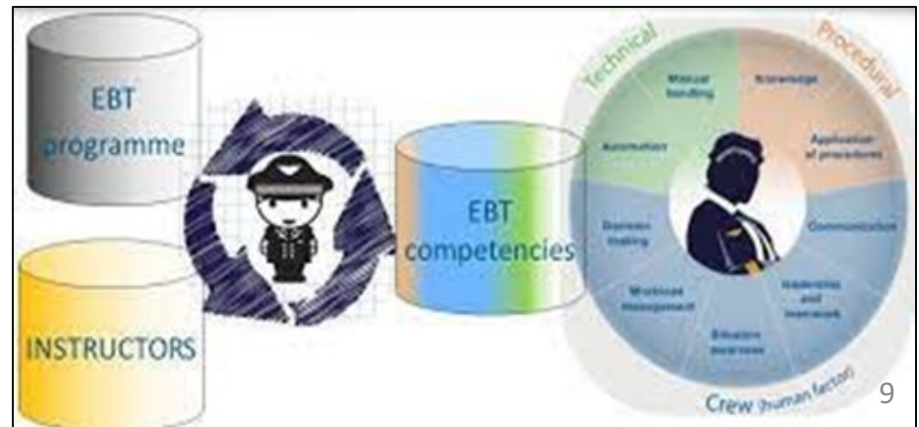
- I. SAFETY DECISION 2021-11, Issue 01, Date of issue: June, 20th 2021
- II. CAR-AIR OPS regulation (implemented by mid-2023) contains the EBT elements:
  - a) ORO.FC.231 Evidence-based training, and
  - b) ORO.FC.232 EBT programme assessment and training topics





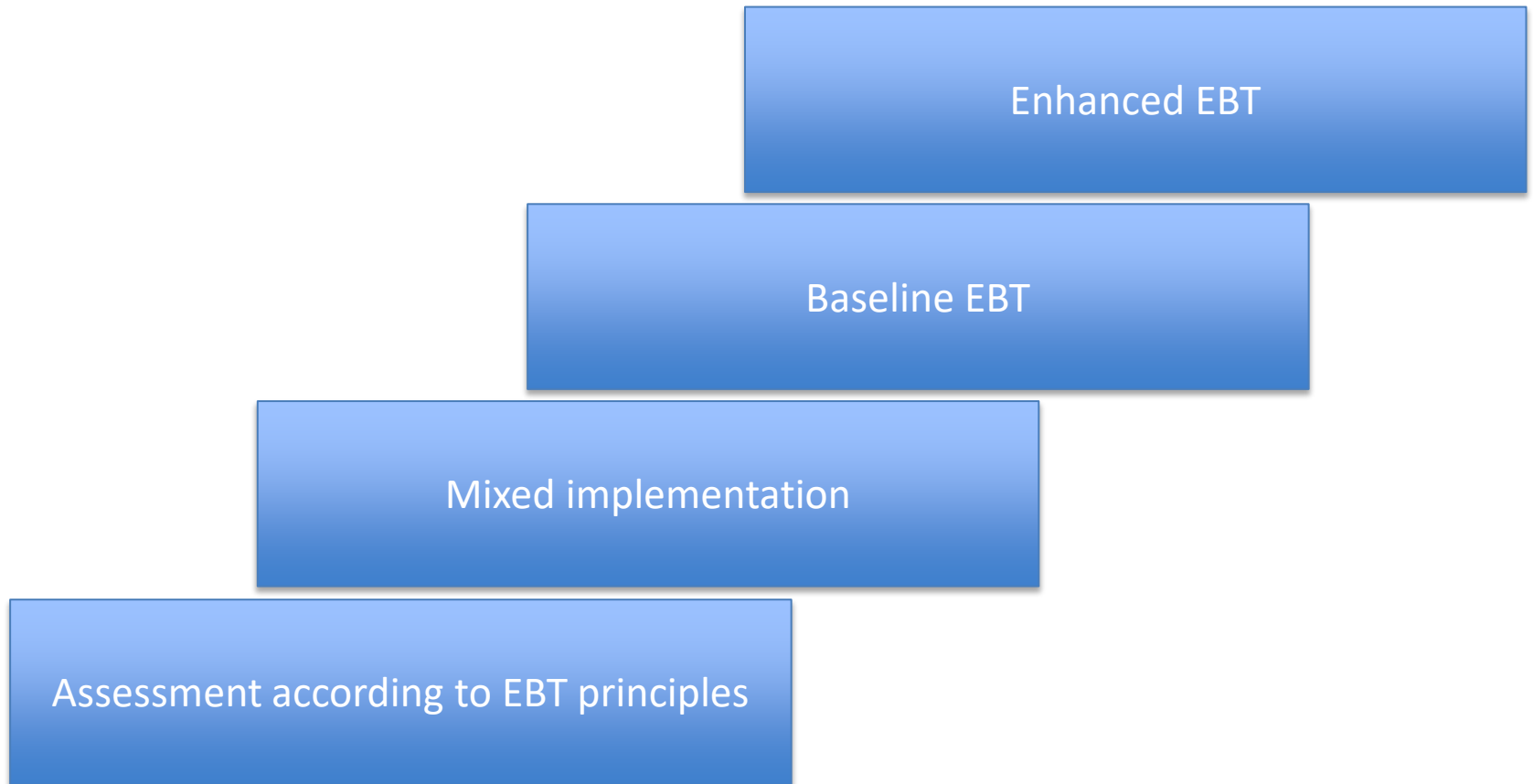
# THE GCAA MINIMUM REQUIREMENTS FOR IMPLEMENTATION OF EBT:

- Development of a competency framework with an associated assessment and grading system;
- Training of instructors including standardization, fault-analysis techniques and inter-rater reliability assurance;
- Provision of information to pilots regarding the principles and methodology of the program, the performance criteria that are being applied as well as the assessed core competencies; and
- Continuous evaluation of the program.





# EBT PHASES OF IMPLEMENTATION





# FRAMEWORK

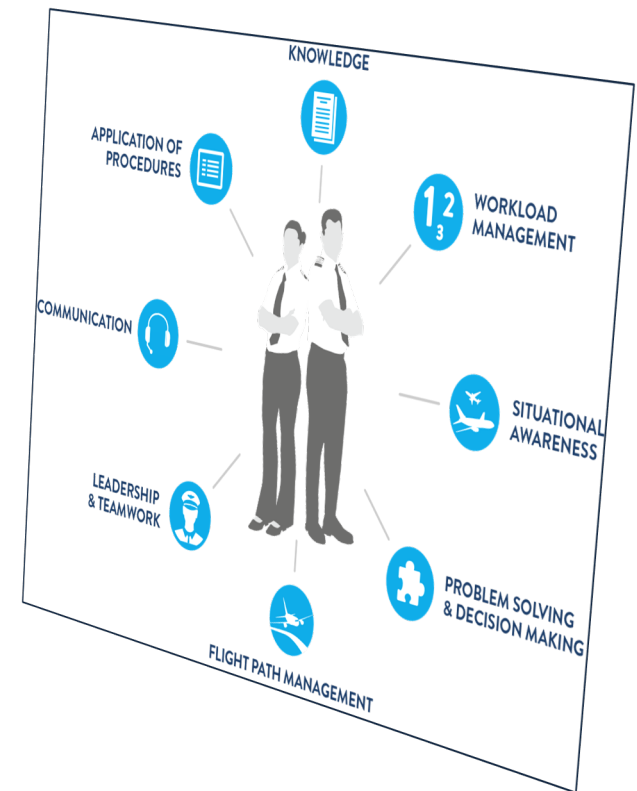
- EBT program elements for pilot recurrent:
  - 1) A minimum of two EBT modules within the validity period of the type rating.
  - 2) Line evaluation of competence; and
  - 3) Ground training (Tech ground training and SEP training).
  
- Instructors training for the EBT program:
  - 1) Competency framework
  - 2) Instructor concordance assurance programme (ICAP)
  - 3) grading system.
  - 4) EBT assessment of competency.
  - 5) Annual refresher training



# COMPETENCY FRAMEWORK

## RECOMMENDED EBT COMPETENCIES

1. Knowledge (KNO)
2. Application of Procedures (APK)
3. Communication (COM)
4. Flight path management automation (FPA)
5. Flight path management manual (FPM)
6. Leadership & teamwork (LTW)
7. Problem solving & decision-making (PSD)
8. Situation awareness (SAW)
9. Workload management (WLM)





# Flight path management automation (FPA)

## Aeroplane flight path management — automation (FPA)

**Description:** Controls the flight path through automation

- OB 3.1 Uses appropriate flight management, guidance systems and automation, as installed and applicable to the conditions
- OB 3.2 Monitors and detects deviations from the intended flight path and takes appropriate action
- OB 3.3 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
- OB 3.5 Selects appropriate level and mode of automation in a timely manner considering phase of flight and workload
- OB 3.6 Effectively monitors automation, including engagement and automatic mode transitions

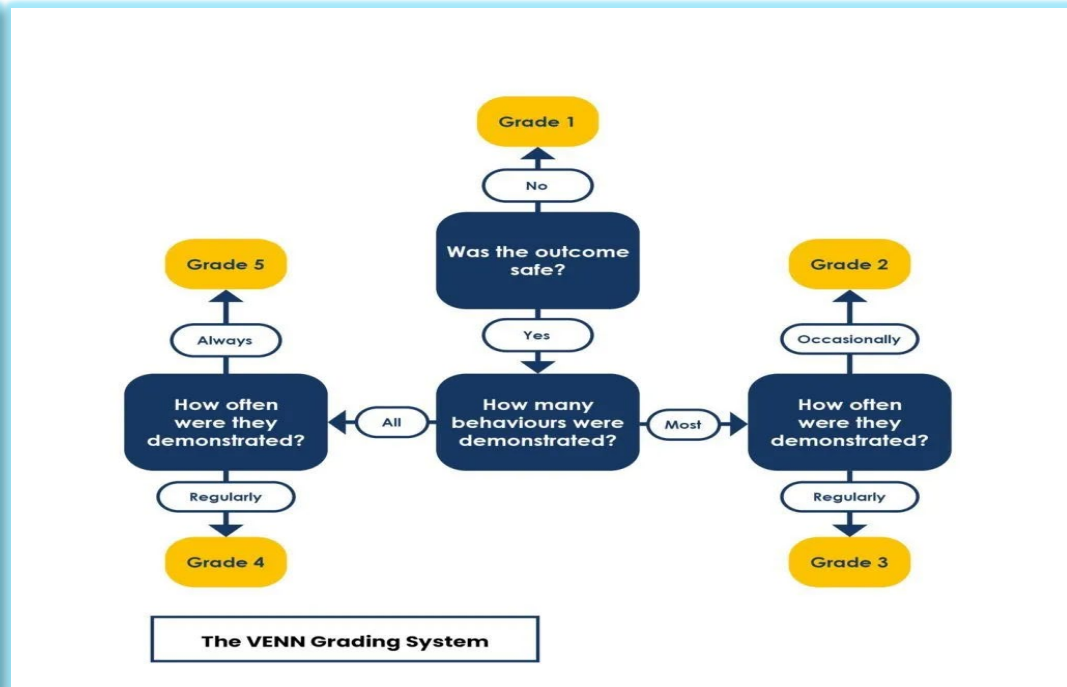
AMC1 ORO.FC.231(b) Evidence-based training



# INSTRUCTOR TRAINING

EBT instructors should achieve competence in the following areas:

Manage Safety  
Prepare the Training Environment  
Manage the Trainee  
Conduct Training  
Perform assessment  
Perform course evaluation  
Continuously improve performance  
ICAO Doc 9868 Ch6





# CHALLENGES

- Development of EBT Programmes.
- Evaluation of pilot programs and application of accurate competency assessments.
- Instructor Concordance Assurance Programme
- Collection of constructive feedback for improvement.
- Maintaining a structured approach for continuous monitoring and evaluation of the programme.





## SUMMARY

- EBT and ATQP are different training programs.
- The pilot must know what is EBT training. Also, the phases of the EBT programs.
- A description of the EBT training and assessment methodology acceptable to the GCAA should be published in the Operations Manual. The methodology should include procedures in the event that crew members do not achieve the defined level of competence in the EBT module.
- Instructors must be also trained to deliver the EBT programs and assessment methodology.
- The program needs to be established and introduced in phases
- The aim of the program is to enhance pilot resilience and efficiency.
- Continues evaluation and data collection through the feedback system from all end users.

# THANK YOU





# REFERENCES

1. GCAA CAR-AIR OPS ORO.FC.231 Evidence-based training
2. SAFETY DECISION 2021-11. Issue 01  
Date of issue: June, 20th 2021  
SUBJECT: ADOPTION OF EVIDENCE-BASED TRAINING (EBT) FOR RECURRENT PILOT TRAINING
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