



# DLH EBT - COURSE DESIGN

ICAO-IAC-IATA CBTA/EBT WEBINAR – MOSCOW 26.11.2020

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# EBT REGULATIONS



Design of EBT Modules consists the combination of several requirements:

- Competencies
- Training Topics
- Malfunction Clustering
- Approach Types

# EBT MIXED IMPLEMENTATION

## FCL compliance



## Integration of additional topics

# DATA COLLECTION

## COMPANY EVIDENCE MEETING

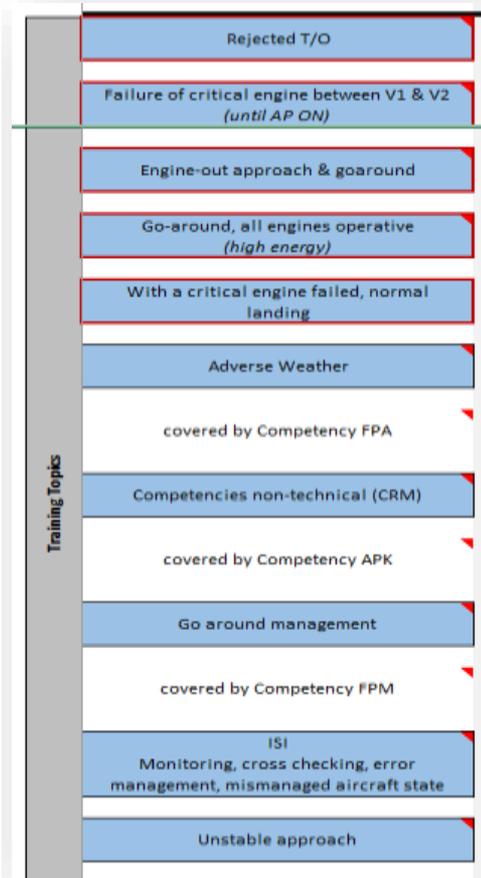
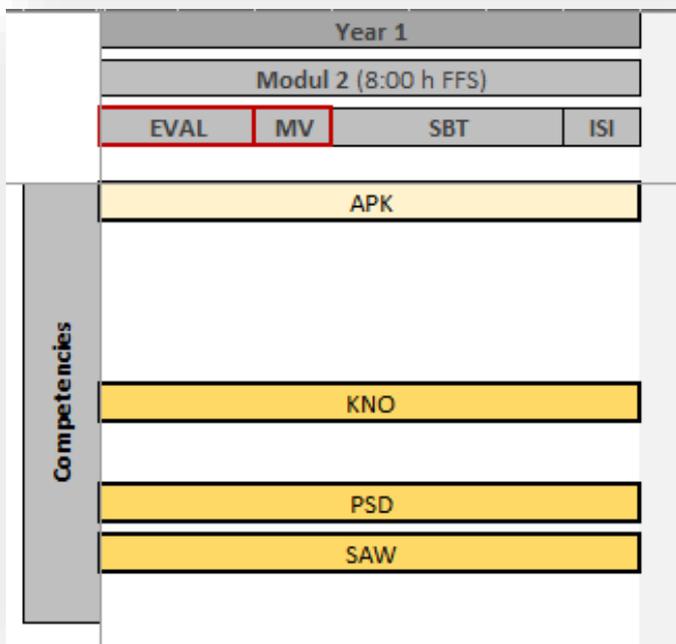


Evidences identified by the operator:

- Crew Training
- Fleet Management
- Flight Safety Department
- Technical Pilot
- Etc.

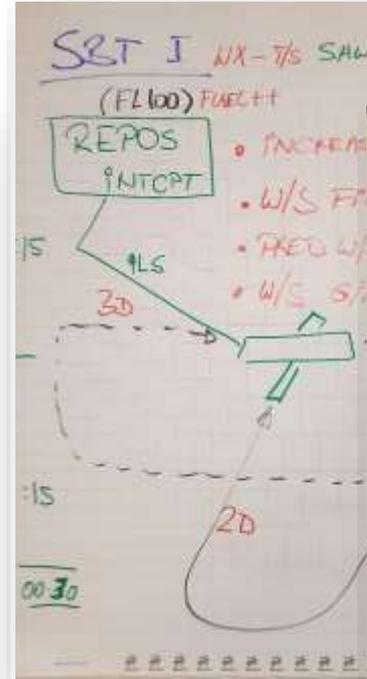
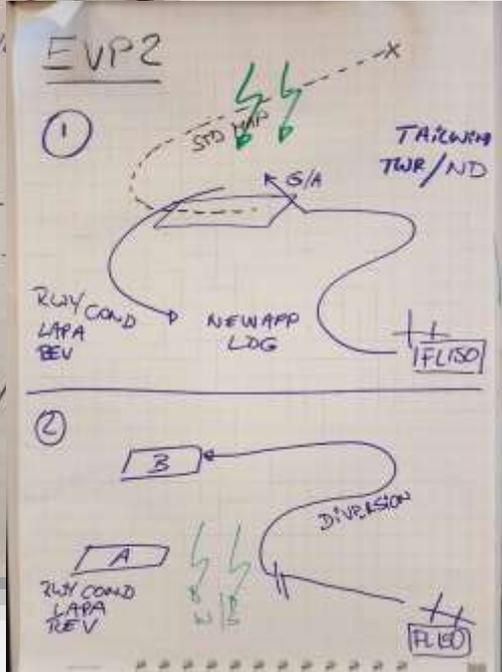
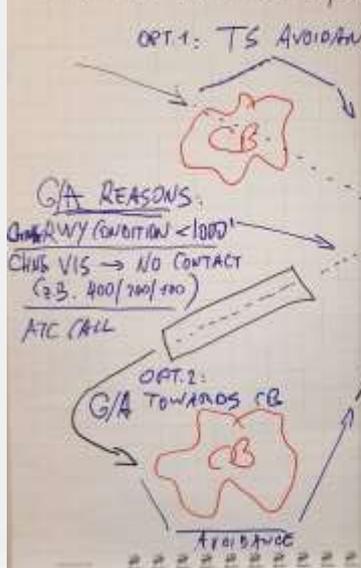


# MATRIX – DESIGN



# SCENARIO - DESIGN

FL 150-200 DES TO DESTINATION  
 - VIS. CA. MIN + 300m / gms. FOB



- SBT 3 FPM
- ①
- T/O, MANUAL FLIGHT 1500' PATTERN
  - VISUAL APPROACH
  - GO AROUND (LOW) 3000', CLEAN, RADAR VECTOR
  - VISUAL APPROACH + LDG (CWC 10KTS)
- ②
- DRAW DATA ILS (REPOS AIR) WITH INTERCEPT
  - ① (CEIL 1000', (CWC 10KTS) VIS PASSED
  - ② (CEIL 400', --) VIS PASSED
  - ③ (CEIL 250', --) VIS PASSED
  - LDG

# EBT MANUAL – DESIGN

Matrix shows relevant competencies for different scenarios

Pilot Training Manual  
EBT Module 2

## Focus Competency Matrix

		EVP		MVP	SBT 1			SBT 2			SBT 3			ISI
		1	2		a	b	c	a	b	c	a	b	c	
1	Flight Path Management, manual (FPM)			X							X			X
2	Flight Path Management, automation (FPA)			X										+
3	Knowledge (KNO)	X	X			+		X	X	X				
4	Application of Procedures (APK)			X		X					+			X
5	Communication (COM)					+	+	+					+	+
6	Leadership and Teamwork (LTW)					+	+					X	+	
7	Problem Solving & Decision Making (PSD)	X	X					X	X	X	X		+	
8	Situation Awareness (SAW)	X	X					X	X	X				X
9	Workload Management (WLM)					X							X	

Note: "X" indicates the primary, "+" the secondary focus competencies.

# EBT MANUAL – DESIGN

## Phase Durations and Options

### DAY 1

#### Evaluation Phase (EVP)

- Focus: 2-3 competencies
- Line oriented evaluation
- First look concept

#### Manoeuvre Validation (MVP)

- Psychomotoric skills
- Several repositions

Scenario 1  
(1:00)

Scenario 2  
(0:50)

CM 1 PF (1:05)  
CM 2 PF (0:45)

Option 1a

Option 2a

Basic Flying

Option 1b

Option 2b

Engine Out Ops

Option 1c

Option 2c

LVO

# EBT MANUAL – DESIGN

## Phase Durations and Options

### DAY 1

#### Evaluation Phase (EVP)

- Focus: 2-3 competencies
- Line oriented evaluation
- First look concept

#### Manoeuvre Validation (MVP)

- Psychomotoric skills
- Several repetitions

Scenario 1  
(1:00)

Scenario 2  
(0:50)

CM 1 PF (1:05)  
CM 2 PF (0:45)

Option 1a

Option 2a

Basic Flying

Option 1b

Option 2b

Engine Out Ops

Option 1c

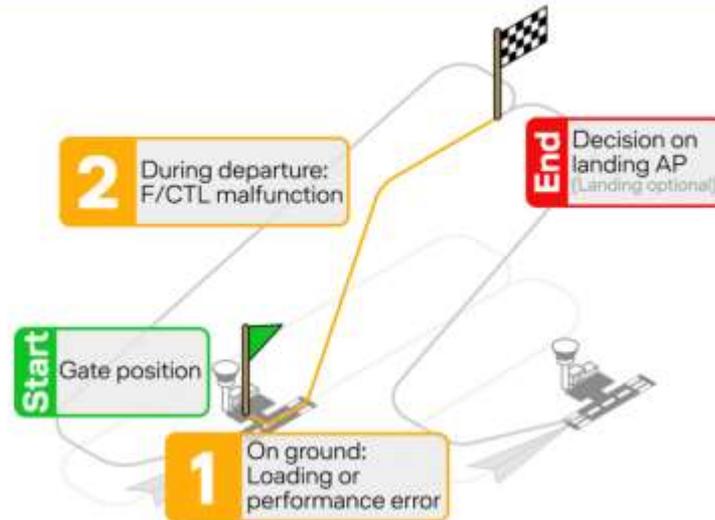
Option 2c

LVO

## Multiple options to choose from

Details EVP1

Focus Competencies: SAW, PSD, KNO



# EBT MANUAL – DESIGN

## Phase Durations and Options

### DAY 1

#### Evaluation Phase (EVP)

- Focus: 2-3 competencies
- Line oriented evaluation
- First look concept

Scenario 1  
(1:00)

Scenario 2  
(0:50)

Option 1a

Option 2a

Option 1b

Option 2b

Option 1c

Option 2c

#### Manoeuvre Validation (MVP)

- Psychomotoric skills
- Several repetitions

CM 1 PF (1:05)  
CM 2 PF (0:45)

Basic Flying

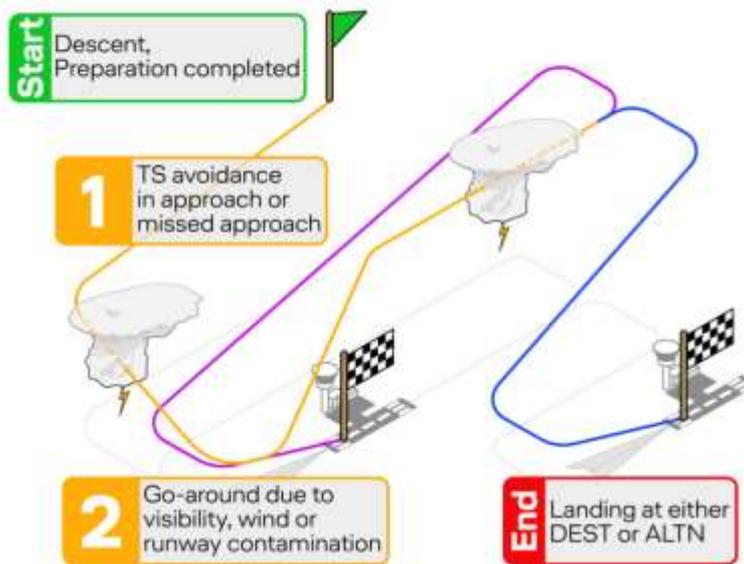
Engine Out Ops

LVO

## Multiple options to choose from

Details EVP 2

Focus Competencies: SAW, PSD, KNO



# EBT MANUAL – DESIGN

## Phase Durations and Options

### DAY 1

#### Evaluation Phase (EVP)

- Focus: 2-3 competencies
- Line oriented evaluation
- First look concept

Scenario 1  
(1:00)

Scenario 2  
(0:50)

Option 1a

Option 2a

Option 1b

Option 2b

Option 1c

Option 2c

#### Manoeuvre Validation (MVP)

- Psychomotoric skills
- Several repetitions

CM 1 PF (1:05)  
CM 2 PF (0:45)

Basic Flying

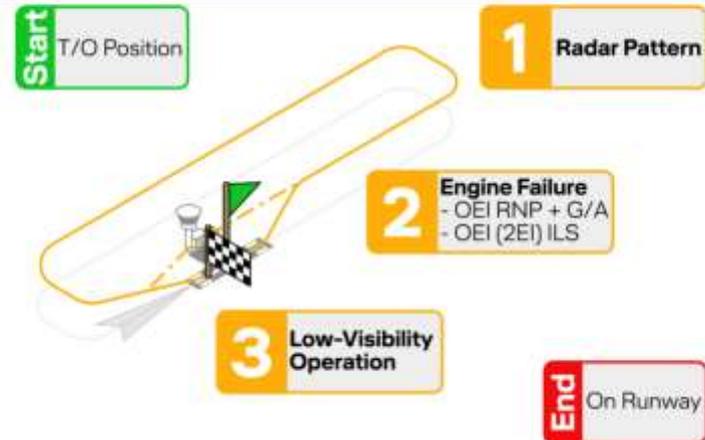
Engine Out Ops

LVO

## MVP design to satisfy FCL requirements

### Details MVP

Focus Competencies: APK, FPM, FPA



# EVALUATION – DAY 1

FPM - Flight Path Management, Manual Control

FPA - Flight Path Management, Automation

KNO - Knowledge

APK - Application of Procedures

COM - Communication

LTW - Leadership and Teamwork

PSD - Problem Solving and Decision Making

SAW - Situation Awareness

WLM - Workload Management

NO 1 2 3 4 5

All nine  
competencies  
must be graded.

Grading scale  
from 1 - 5

# EVALUATION – DAY 1

For more detailed assessment, OB may be marked (+/o/-)

CMT ? APK - Application of Procedures	NO	1	2	3	4	5
a) Adherence to Procedures   Follows SOPs unless a higher degree of safety dictates otherwise	-		o			+
b) Operating Instructions   Identifies and applies all operating instructions in timely manner	-		o			+
c) Use of A/C systems   Correctly uses aircraft systems, controls and instruments	-		o			+
d) Operational Priorities   Safely manages the aircraft to achieve best value for the operation, including fuel, the environment, passenger comfort and punctuality	-		o			+
e) Source of Information   Identifies the source of operating instructions	-		o			+

# DEBRIEFING – DAY 1

- Competency Based

## COMPETENCY FRAMEWORK – DLH



# DEBRIEFING – DAY 1

- Competency Based
- **Facilitated**



# DEBRIEFING – DAY 1

- Competency Based
- Facilitated
  
- **Root Cause analysis**
- **Scenarios DAY 2**



# SCENARIO SELECTION – DAY 2



Matrix shows relevant competencies

Pilot Training Manual  
EBT Module 2

**Focus Competency Matrix**

		EVP		MVP	SBT 1			SBT 2			SBT 3			ISI
		1	2		a	b	c	a	b	c	a	b	c	
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3	Knowledge (KNO)	X	X		+			X	X	X				
4	Application of Procedures (APK)			X	X						+			X
5	Communication (COM)				+	+	+					+	+	
6	Leadership and Teamwork (LTW)				+	+						X	+	
7	Problem Solving & Decision Making (PSD)	X	X					X	X	X	X		+	
8	Situation Awareness (SAW)	X	X					X	X	X				X
9	Workload Management (WLM)				X								X	

*Note: "X" indicates the primary, "+" the secondary focus competencies.*

# SCENARIO SELECTION – DAY 2

Option SBT 1b

Main Focus Competency: APK

Secondary Focus Competencies:

Details SBT 2

Focus Competencies: SAW, PSD, KNO

Start

Cruise F  
L888

Scenario

Pressurisa  
Slow deco

Start

Descent,  
Preparation com

Option SBT 3a

Main Focus Competency: FPM

Secondary Focus Competency: APK

Start

T/O Position

4

**Go around**

- during flare
- Engine out

2

**Climbout / Airwork**

- Instrument Failure
- Steep turns
- Coordinated turns

1

**Takeoff**

- Med/max CWC
- Low Vis
- Engine Out

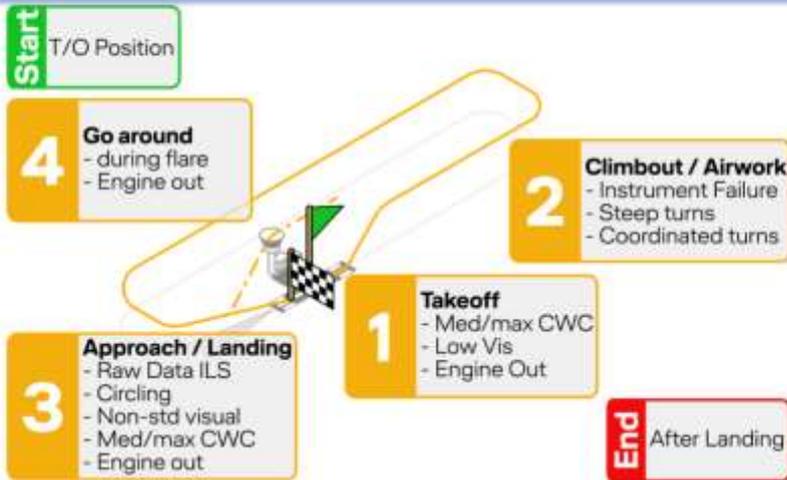
3

**Approach / Landing**

- Raw Data ILS
- Circling
- Non-std visual
- Med/max CWC
- Engine out

End

After Landing



# EVALUATION – DAY 2

FPM - Flight Path Management, Manual Control

FPA - Flight Path Management, Automation

KNO - Knowledge

APK - Application of Procedures

COM - Communication

LTW - Leadership and Teamwork

PSD - Problem Solving and Decision Making

SAW - Situation Awareness

WLM - Workload Management

NO 1 2 3 4 5

All nine  
competencies  
must be graded.

Grading scale  
from 1 - 5

# DEBRIEFING – DAY 2

## COMPETENCY FRAMEWORK – DLH

- Competency Based
- Facilitated
  
- Consequences of grading



# Thank you for your attention!

## Any questions?

