COMPETENCY BASED COURSE DESIGN

EASA WORKSHOP CBTA – COLOGNE 22.05.2019

CPT Richard Lenz

COMPETENCY BASED COURSE DESIGN - LUFTHANSA

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1

2

A320 A340 MD 11 B747 B767 A380

3

DATA COLLECTION

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MATRIX-DESIGN

FCL/ORO Items during Mixed Implementation only (to be included in EVAL/MV phases)

			Year 1				Year 2				Year 3			
			Modul 1 (8:00 h FFS)				Modul 2 (8:00 h FFS)				Modul 3 (8:00 h FFS)			
			EVAL	MV	SBT	ISI	EVAL	MV	SBT	ISI	EVAL	MV	SBT	ISI
Competencies			COM				APK				APK			
											FPA			
							KNO				FPM			
			LTW											
			PSD				PSD				PSD			
			SAW				SAW							
			WLM											
Approach Types	6.2 LVO (LS APPR (min 2 APPR)		Type I				Type I				Type I			
	3.9.3.1 PA manually without FD (Skilltest)		Type II				Type II				Type II			
	3.9.4 NPA / APV (to applicable DH/MDH)		Type III								Type III			
	3.9.4 NPA / APV (to applicable DH/MDH)	C (A)	Type IV				Type IV				Type IV			
											Type V			
Training Topics	MTP	2.6 Rejected TO before V1 6.1 RTO at min authorized RVR	A	Rejected T/O			Rejected T/O				Rejected T/O			
	MTP	2.5.2 E/F between V1 and V2	A	covered by item below			Failure of critical engine between V1 & V2 *(until AP ON)*				covered by item below			
	MTP	2.5.2 E/F between V1 and V2	B	Failure of critical engine between V1 & V2 *(until clean)*							Failure of critical engine between V1 & V2 *(until clean)*			
	MTP	3.6.6 Simulated cabin pressure failure / emergency	C											Emergency Descent
	MTP	3.9.3.4 PA manually with 1/2 eng. INOP 4.3 Manual GA with OEI after an instr. APPR on reaching DH, MDH or	A	Engine-out approach & goaround			Engine-out approach & goaround				Engine-out approach & goaround			
	MTP	6.3 LVO GA out of DH (auto or man)	A	Go-around, all engines operative *(high energy)*			Go-around, all engines operative *(high energy)*				Go-around, all engines operative *(high energy)*			
		6.4 LVO LDG		LVO Landing			LVO Landing				LVO Landing			
	MTP	5.5 LDG with simulated crit. ENG INOP 5.6 LDG with 2 ENG INOP (Skilltest 4eng)	A	With a critical engine failed, normal landing			With a critical engine failed, normal landing				With a critical engine failed, normal landing			
		2.5.2 Take off with E/F btewn. V1 and V2		RHS Requal			RHS Requal				RHS Requal			
	EP	1.4 Checklist prior engine start 1.6 Before TO checks	A	Before Engine Start / Before T/O Checks			Before Engine Start / Before T/O Checks				Before Engine Start / Before T/O Checks			
	EP & SBT		A	Adverse Weather			Adverse Weather				Adverse Weather			
	EP & SBT		A	covered by Competency FPA			covered by Competency FPA				Automation management			
	EP & SBT		A	Competencies non-technical (CRM)			Competencies non-technical (CRM)				covered by Competencies COM, LTW, PSD, SAW, WLM			
	EP & SBT		A	covered by Competency APK			covered by Competency APK				covered by Competency APK			
	EP & SBT		A	Go around management			Go around management				Go around management			
	EP & SBT		A	covered by Competency FPM			covered by Competency FPM				covered by Competency FPM			

			Year 1				Year 2				Year 3			
			Modul 4 (8:00 h FFS)				Modul 5 (8:00 h FFS)				Modul 6 (8:00 h FFS)			
			EVAL	MV	SBT	ISI	EVAL	MV	SBT	ISI	EVAL	MV	SBT	ISI
Competencies			APK				COM				APK			
			FPM								FPM			
			PSD				LTW							
							WLM							
Approach Types	6.2 LVO (LS APPR (min 2 APPR)		Type I				Type I				Type I			
	3.9.3.1 PA manually without FD (Skilltest)		Type II				Type II				Type II			
	3.9.4 NPA / APV (to applicable DH/MDH)													
	3.9.4 NPA / APV (to applicable DH/MDH)	C (A)	Type IV				Type IV				Type IV			
Training Topics	MTP	2.6 Rejected TO before V1 6.1 RTO at min authorized RVR	A	Rejected T/O			Rejected T/O				Rejected T/O			
	MTP	2.5.2 E/F between V1 and V2	A	Failure of critical engine between V1 & V2 *(until AP ON)*			covered by item below				Failure of critical engine between V1 & V2 *(until AP ON)*			
	MTP	2.5.2 E/F between V1 and V2	B				Failure of critical engine between V1 & V2 *(until clean)*							
	MTP	3.6.6 Simulated cabin pressure failure / emergency	C											
	MTP	3.9.3.4 PA manually with 1/2 eng. INOP 4.3 Manual GA with OEI after an instr. APPR on reaching DH, MDH or	A	Engine-out approach & goaround			Engine-out approach & goaround				Engine-out approach & goaround			
	MTP	6.3 LVO GA out of DH (auto or man)	A	Go-around, all engines operative *(high energy)*			Go-around, all engines operative *(high energy)*				Go-around, all engines operative *(high energy)*			
		6.4 LVO LDG		LVO Landing			LVO Landing				LVO Landing			
	MTP	5.5 LDG with simulated crit. ENG INOP 5.6 LDG with 2 ENG INOP (Skilltest 4eng)	A	With a critical engine failed, normal landing			With a critical engine failed, normal landing				With a critical engine failed, normal landing			
		2.5.2 Take off with E/F btewn. V1 and V2		RHS Requal			RHS Requal				RHS Requal			
	EP	1.4 Checklist prior engine start 1.6 Before TO checks	A	Before Engine Start / Before T/O Checks			Before Engine Start / Before T/O Checks				Before Engine Start / Before T/O Checks			
	EP & SBT		A	Adverse Weather			Adverse Weather				Adverse Weather			
	EP & SBT		A	covered by Competency FPA			covered by Competency FPA				covered by Competency FPA			
	EP & SBT		A	Competencies non-technical (CRM)			covered by Competencies COM, LTW, PSD, SAW, WLM				covered by Competencies COM, LTW, PSD, SAW, WLM			
	EP & SBT		A	covered by Competency APK			covered by Competency APK				Compliance			
	EP & SBT		A	Go around management			Go around management				Go around management			
	EP & SBT		A	Manual airplane control			covered by Competency FPM				covered by Competency FPM			

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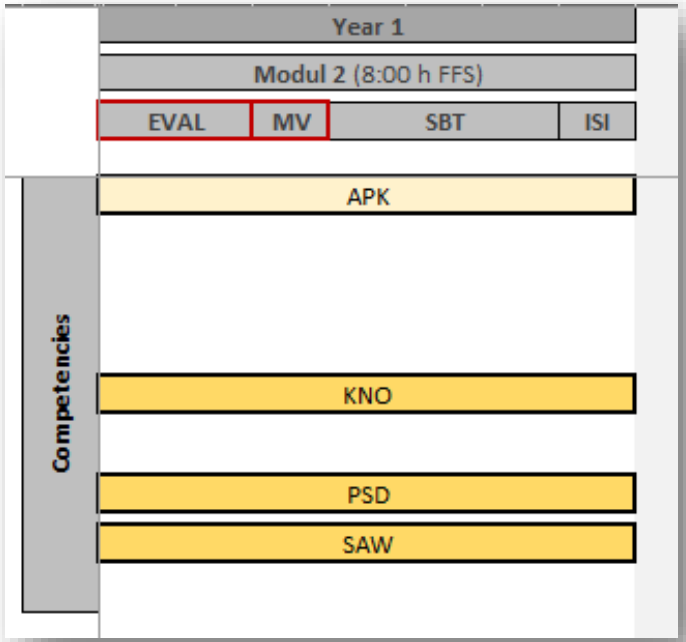
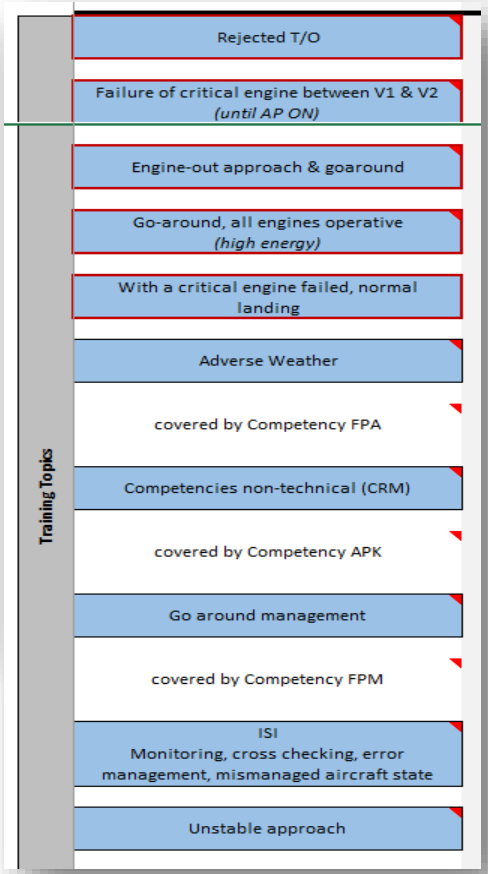
MATRIX-DESIGN





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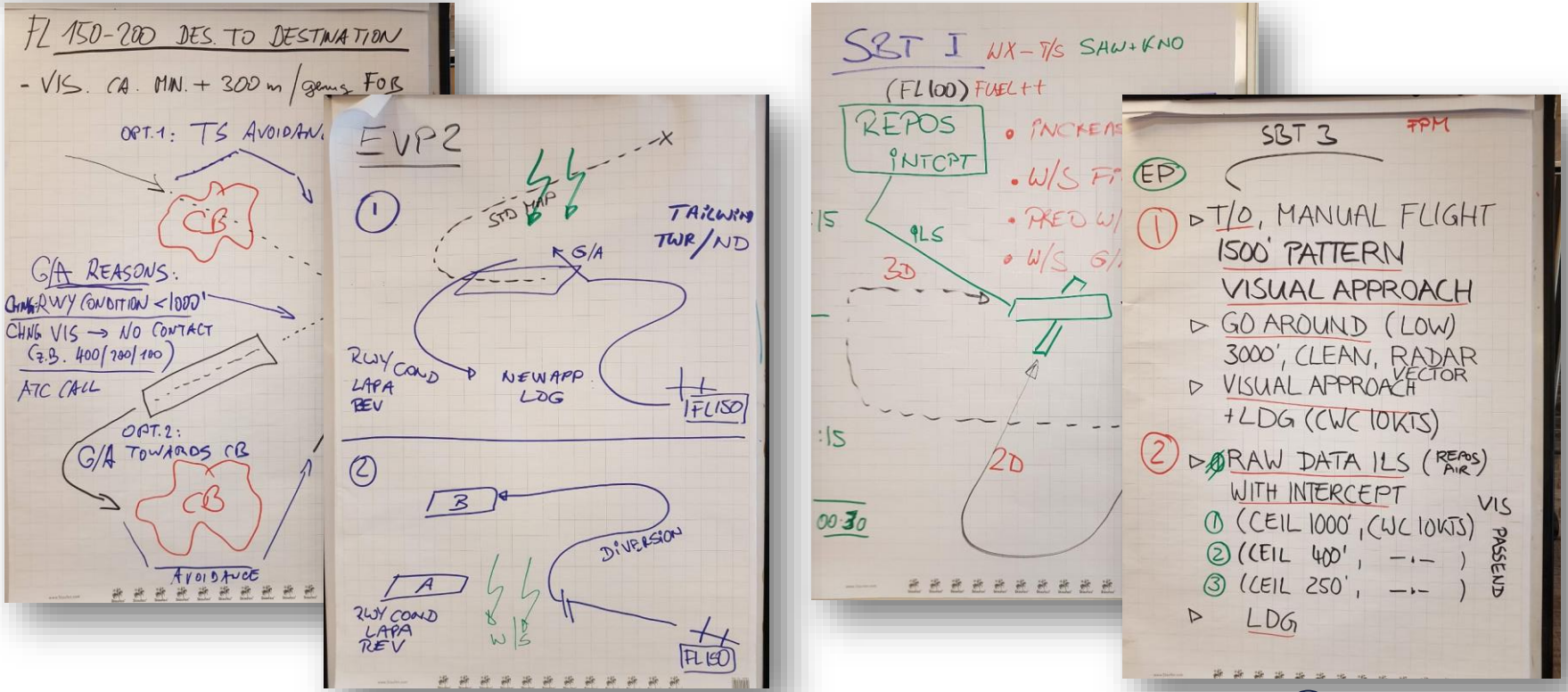
SCENARIO-DESIGN



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DESIGN MANUAL

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Pilot Training Manual

EBT Module 2 Design Manual

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.

DESIGN MANUAL

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Pilot Training Manual

EBT Module 2 Design Manual

1.2 EVP 2

1.2.1 Scenario

The scenario commences during descent towards destination YYY. PF is initially the PM of EVP 1. As the flight is performed under line operations criteria, CM1 should take the role of PF, if deemed necessary according OM-A (very demanding approach or landing).

No major system malfunctions are present, except when required in order to facilitate the scenario. Due to the actual destination weather, thunderstorms must be circumnavigated, a go-around is not unlikely.

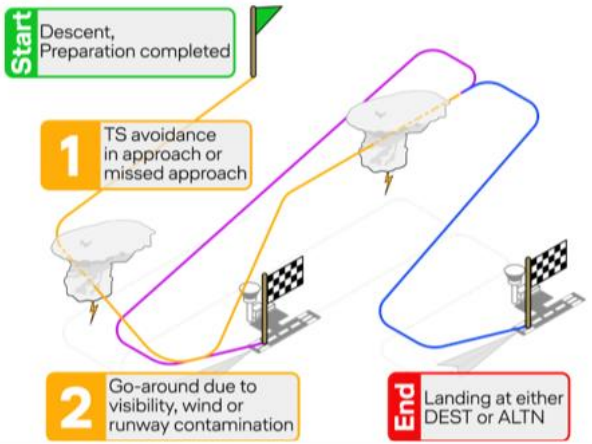
The scenario ends after landing at either destination or alternate.

1.2.2 Training Focus

Competencies	• Knowledge (KNO) • Situational Awareness (SAW) • Problem Solving & Decision Making (PSD)
Assessment and Training Topics	• Adverse weather (thunderstorm avoidance) • Runway or taxiway condition (contaminated RWY) • Go-around management • Approach, visibility close to minimum
Approach Types	• 3D OPS no Autoland (PA)
Aircraft type specific items	-

3.2.3 Details EVP 2

Focus Competencies: SAW, PSD, KNO



Focus Competencies: SAW, PSD, KNO

For short-range flights, EVP 1 may be the continuation of the previous flight (EVP 1) without a reposition. In case of reposition, the Instructor will calculate the remaining fuel from EVP 1.