Grading systematic at Lufthansa Airlines

2nd EASA EBT Webinar - 29th September 2021

Frank Steiner
Lufthansa Airlines

Grading method at Lufthansa Airlines

Grading metrics acc. AMC1 ORO.FC.231(c)	Implementation at Lufthansa Airlines
Level 0 (“competent”/”not competent”)	Result of a complete module
Level 1 (numeric grade of the competencies)	5-point grading scale
Level 2 (observable behaviour metrics)	Marking of OBs with +/o/- ⇒ “how well” & “how often”

	HOW WELL	HOW OFTEN	HOW MANY	OUTCOME
5	exemplary	always	all	**Enhanced Safety, Effectiveness and Efficiency**
4	effectively	regularly	all	**Enhanced safety**
3	adequately	regularly	most	**Safe Operation**
2	Minimum acceptable	occasionally	some	**Reduction in safety margin** or effectiveness
1	Not effectively	rarely	few	**Unsafe Situation** = Unacceptable reduction in safety margin

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A320 EBT Modul 5 DAY 1 Incomplete Cancel Save

Overview | Task Monitoring | Overall Grading | Finalise *CM1, A320 (A320_CM1)* | Finalise *CM2, A320 (A320_CM2)*

Overall Competency Assessment

CM1, A320 (A320_CM1) - CM2, A320 (A320_CM2)

	CM1, A320 (A320_CM1)	CM2, A320 (A320_CM2)
CMT ? FPM - Flight Path Management, Manual Control	NO 1 2 3 4 5	NO 1 2 3 4 5
CMT ? FPA - Flight Path Management, Automation	NO 1 2 3 4 5	NO 1 2 3 4 5
CMT ? KNO - Knowledge	NO 1 2 3 4 5	NO 1 2 3 4 5
CMT ? APK - Application of Procedures	NO 1 2 3 4 5	NO 1 2 3 4 5
CMT ? COM - Communication	NO 1 2 3 4 5	NO 1 2 3 4 5
CMT ? LTW - Leadership and Teamwork	NO 1 2 3 4 5	NO 1 2 3 4 5
CMT ? WLM - Workload Management	NO 1 2 3 4 5	NO 1 2 3 4 5

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	CM1, A320 (A320_CM1)						CM2, A320 (A320_CM2)					
CMT ? FPM - Flight Path Management, Manual Control	NO	1	2	3	4	5	NO	1	2	3	4	5
CMT ? FPA - Flight Path Management, Automation	NO	1	2	3	4	5	NO	1	2	3	4	5
a) A/C Handling Automatic | Controls the aircraft using automation with accuracy and smoothness as appropriate to the situation	-		o		+		-		o		+	
b) Instrument Scan & Correction | Detects deviations from the desired aircraft trajectory and takes appropriate action	-		o		+		-		o		+	
c) Flight Envelope | Contains the aircraft within the normal flight envelope	-		o		+		-		o		+	
d) Operational Performance | Manages the flight path to achieve optimum operational performance	-		o		+		-		o		+	
e) Maintaining Flightpath | Maintains the desired flight path during flight using automation whilst managing other tasks and distractions	-		o		+		-		o		+	
f) Level/Mode AF System | Selects appropriate level and mode of automation in a timely manner considering phase of flight and workload	-		o		+		-		o		+	
g) AF System Monitoring | Effectively monitors automation, including engagement and												

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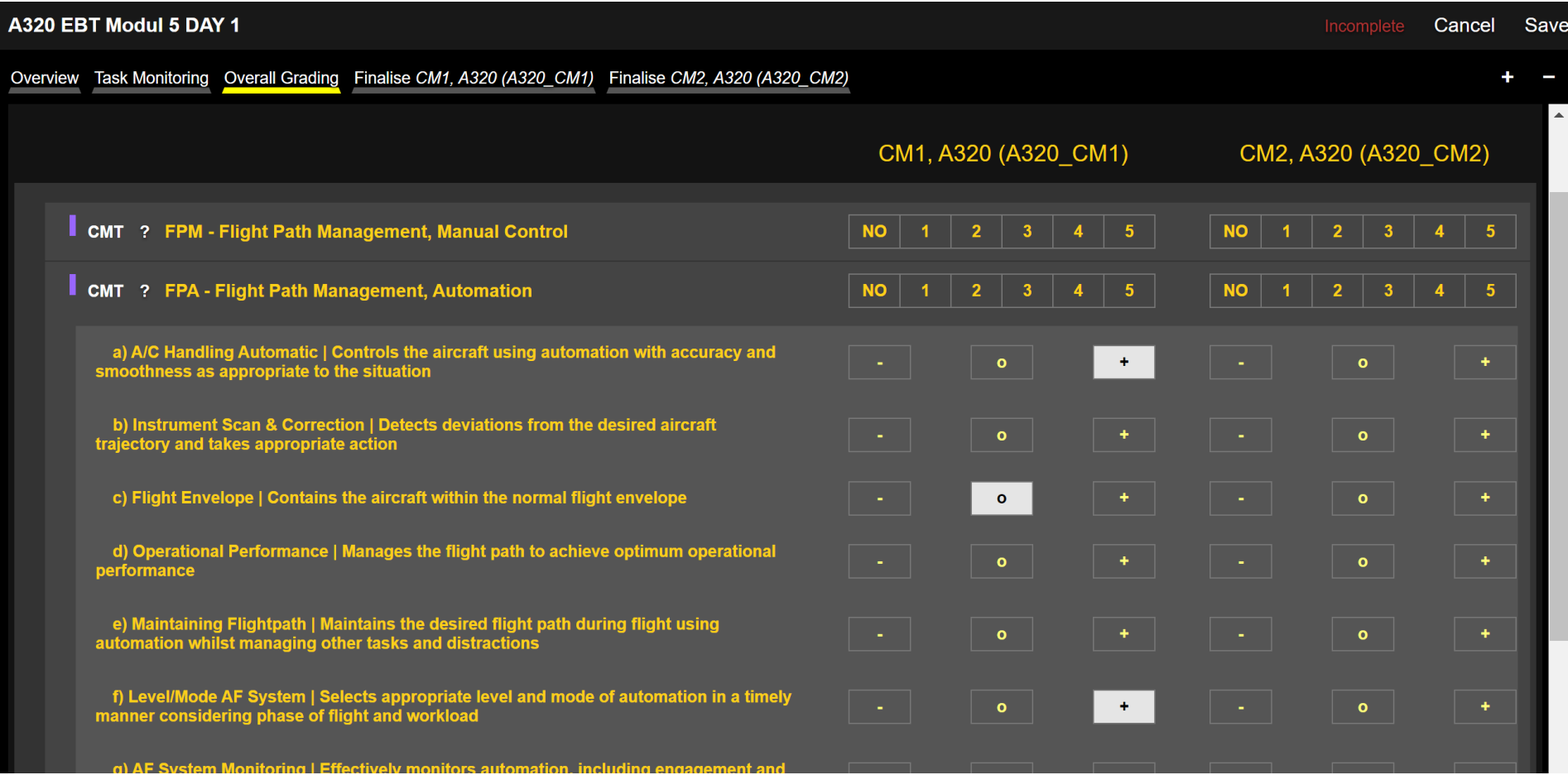
A320 EBT Modul 5 DAY 1
Incomplete
Cancel
Save
Overview
Task Monitoring
Overall Grading
Finalise CM1, A320 (A320_CM1)
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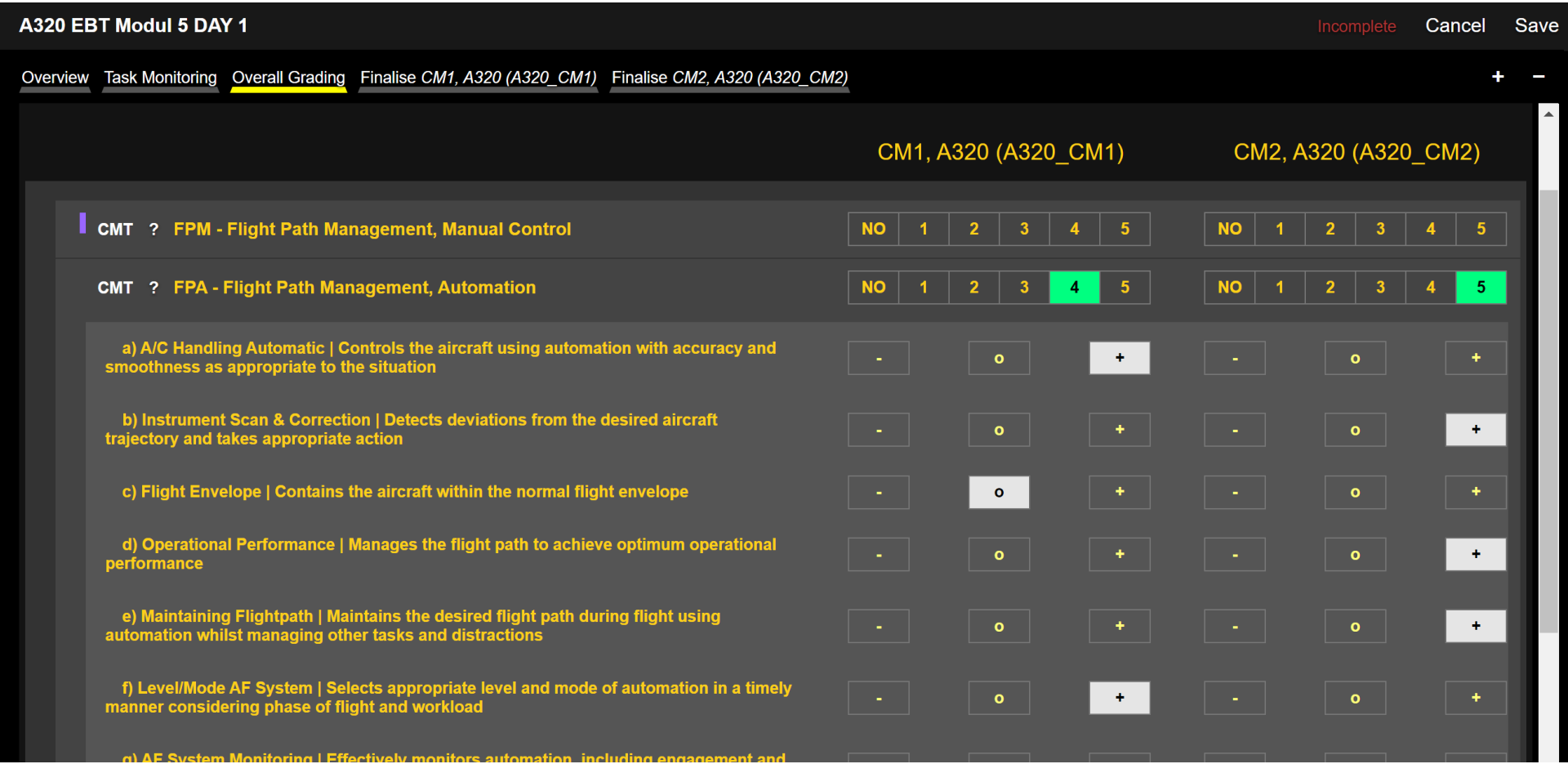
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a) A/C Handling Automatic | Controls the aircraft using automation with accuracy and smoothness as appropriate to the situation
- o +
- o +
b) Instrument Scan & Correction | Detects deviations from the desired aircraft trajectory and takes appropriate action
- o +
- o +
c) Flight Envelope | Contains the aircraft within the normal flight envelope
- o +
- o +
d) Operational Performance | Manages the flight path to achieve optimum operational performance
- o +
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e) Maintaining Flightpath | Maintains the desired flight path during flight using automation whilst managing other tasks and distractions
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- o +
- o +

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CMT ? LTW - Leadership and Teamwork	NO 1 2 3 **4** 5	NO 1 2 **3** 4 5
CMT ? WLM - Workload Management	NO 1 2 3 4 **5**	NO 1 2 3 **4** 5
CMT ? SAW - Situation Awareness	NO 1 **2** 3 4 5	NO 1 2 3 **4** 5
CMT ? PSD - Problem Solving and Decision Making	NO **1** 2 3 4 5	NO 1 2 3 4 **5**

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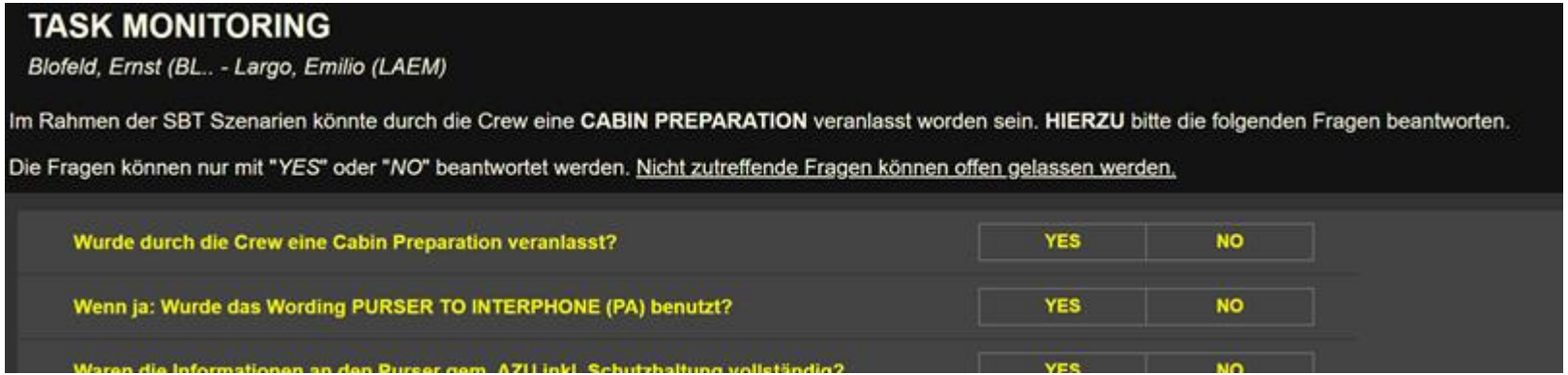
Level 3 (other metrics)	Task monitoring



TASK MONITORING

Blofeld, Ernst (BL.. - Largo, Emilio (LAEM)

Im Rahmen der SBT Szenarien könnte durch die Crew eine **CABIN PREPARATION** veranlasst worden sein. **HIERZU** bitte die folgenden Fragen beantworten.

Die Fragen können nur mit "*YES*" oder "*NO*" beantwortet werden. Nicht zutreffende Fragen können offen gelassen werden.

Wurde durch die Crew eine Cabin Preparation veranlasst?	YES	NO
Wenn ja: Wurde das Wording PURSER TO INTERPHONE (PA) benutzt?	YES	NO
Waren die Informationen an den Purser gem. AZU inkl. Schutzhaltung vollständig?	YES	NO

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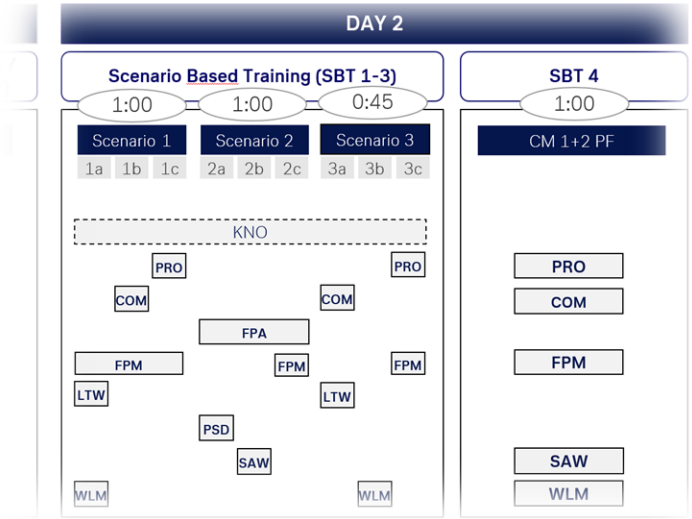
How grading drives better training

Debriefing of first EBT day

Facilitation

- Reflection performed by crew
- Root cause analysis

Competencies to be trained to improve performance or to strengthen resilience



Preparation of second EBT day

- Instructor announces:
  - Focus competency
  - Training topics and highlights
  - Preparation tips

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How grading drives better training

Analysis of gradings

Group analysis (Level 1)
Identification of global trends

→ Competencies to be trained to improve all pilots' or a group's performance

OB Analysis (Level 2)
Analysis of OBs marked with "-"

→ Observable behaviour that might be considered/helpful in scenario design

Task Monitoring (Level 3)
Analysis of statements/answers

→ Training items for:
- scenario design
- human factors training
- ground training
- flight ops department (→ manuals)

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Data usage and protection

De-Identified Data

- Functional groups can be evaluated
- Trends only available for groups
- Pilot can compare his performance with his group

- Program design
- Management reports (incl. safety department)

Personalised Data

- Personal history
- Early recognition of individual performance drops
- *Interrater-reliability*

- Individual coaching
- *“System-validation”*

Fruitful discussions with union’s representatives coping with German und EU data protection laws

- **Data only used for individual (tailored) training and general training development**
- **No access to any data by disciplinary superiors**

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