

LOS

Line Operational Simulation

Development Summary

For: AQP Curriculum Developers and Program Management

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Development

“What is this training module trying to accomplish?”

In developing or modifying qualification standards or any component of curriculum content for training or checking, the training objectives must be used to determine the content.

As a result, strict consideration of the training objectives, which are determined through the Analysis process, must also be applied throughout the lifespan of every training component.

Line Operational Simulation LOS

LOS – Line Operational Scenarios

AC 120-35D – Primary reference for LOS

In developing content of LOS scenarios (Line Operational Simulation) (i.e., SPOT, LOE, EME, LOFT, LIFT), it is critical to understand and consider the distinction between training and evaluation.

Reminder:

➤ **Training LOS**

- ✓ Training include CBTs and Instructor-Led, which may be classroom or device training
- ✓ LOFT, LIFT, and SPOT are *training* LOS events

➤ **Evaluation LOS:**

- ✓ Only the LOE and EME are *evaluation* LOS events

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LOS – Line Operational Scenarios

Components of LOS Development:

1. **LOS Philosophy** – Overall understanding of LOS
2. **LOS Objectives** – Understanding the LOS objective(s)
3. **LOS Difficulty** – Appropriate level of difficulty to meet the objective(s)
4. **LOS Content** – Content appropriate to the level of difficulty

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LOS – Line Operational Scenario Components:

- 1. LOS Philosophy:** The use of LOS improves and evaluates flight crew performance through operational scenario events designed to integrate CRM behaviors and technical skills.
- 2. LOS Objectives:** The primary objective of LOS is to present realistic line operations situations that will bring about real-world problems for the crew to solve. LOS events take place in a line operations environment. During an LOS, each crewmember performs both as an individual and as a member of a team, as in a normal line flight.

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3. LOS Difficulty: the elements contained within each scenario event should be equal to the objectives, particularly regarding the level of difficulty intended to ‘trigger’ performance behaviors. This is often referred to as a ‘Difficulty Index’.

4. LOS Content: LOS events are developed and conducted based on a combination of learning objectives, behavioral observation, and assessment of performance progress from instructor/evaluator debriefing or critique (feedback). The training objectives under AQP are proficiency objectives that include both technical and CRM issues identified by a task analysis.

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LOE/EME Focus: the primary focus of the LOE/EME will be either CRM - or *integration* of CRM, and other competency behaviors. Pure technical performance is trained and validated elsewhere in the curriculum using other instructional strategies.

Note:

Because the primary focus of LOE/EME is the integration of competency behaviors, it is important to note that the objectives or themes of the event sets or the overall LOE/EME itself may not always require the application of irregular, abnormal, or emergency situations.

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A word about DIFFICULTY...

It is important to control the level of difficulty for all LOS scenarios – and is imperative for the evaluations (LOE/EME). Students should not have to struggle because their evaluation is more difficult than another student's evaluation.

Careful consideration of difficulty should be applied in LOS development that is appropriate to each objective. This is determined by two things:

- **Selection of Operational/Environmental Variance**
- **Severity of Operational Deviance**

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Selection of Operational/Environmental Variance

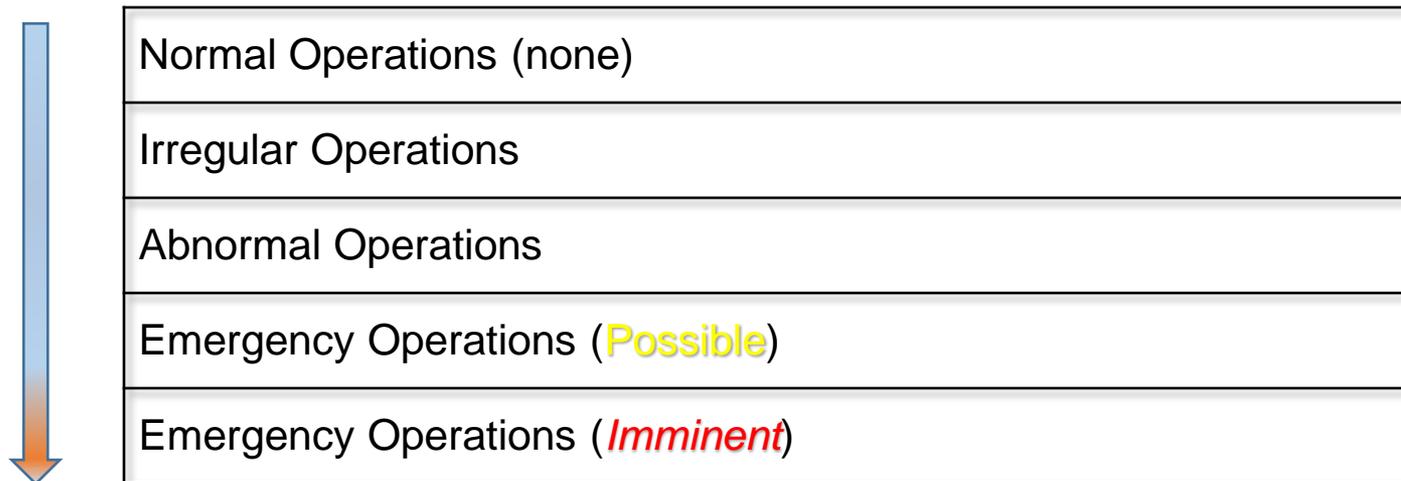
- ❖ WX Weather
- ❖ MX Maintenance
- ❖ PAX Composition/Behaviors
- ❖ Crew Composition/Behaviors
- ❖ Fatigue/Duration
- ❖ Terrain/Location/Airports
- ❖ Operation Type – Normal; Reposition; Service Level; etc.

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Severity of Operational Deviance



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Selection of Scenario ‘cues’ (‘triggers’)

In general, the scenario should provide all students the same cues and distractions they would encounter in a line environment. Other than SPOT – no cueing should come from the LOS facilitator (I/E) other than what has been built into the script.

During LOS many students are ‘hypervigilant’ in their search for cues, fully expecting the sort of event that would surprise them on the line, but which is expected during training and evaluation.

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Selection of Scenario ‘cues’ (‘triggers’)

The selection of LOS cues should be designed to trigger demonstrated behaviors and skills that lead to scenario pathways equal to and directly relevant to the intended objective(s). Nothing more.

One misconception that should be avoided is an LOS that continuously increases the crew workload until the crew becomes overloaded. This is not the purpose or intent of LOS and can actually defeat its effectiveness.

LOS scenarios are most effective if they are straightforward.

- LOS Focus Group on LOS Design, 1994

Questions?

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