## AGENDA

<table>
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<th>Time</th>
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<tr>
<td>8:00 - 8:30</td>
<td><strong>INTRODUCTION</strong></td>
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<td>8:30 - 9:30</td>
<td><strong>USING LOE GRADE SHEETS</strong></td>
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<td>9:30 - 10:30</td>
<td><strong>REPEATING EVENT SETS</strong></td>
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<td>10:30 – 12:30</td>
<td><strong>PRACTICE VIDEOTAPES</strong></td>
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<td>12:30 - 13:00</td>
<td><strong>LUNCH BREAK</strong></td>
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<td>13:30 - 14:00</td>
<td><strong>BEHAVIORAL OBSERVATION TRAINING</strong></td>
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<td>14:00 - 16:30</td>
<td><strong>GOLD STANDARDS TRAINING AND POST-TRAINING EXERCISE</strong></td>
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Course Description and Overview

Course: Introduction

Instructional Objectives: 1.A through 1.C

Time: 8:00 - 8:30

Description

This module provides new pilot instructor/evaluators (I/E) with general background information regarding the role of I/E, the role of performance ratings in the Advanced Qualification Program (AQP), and the objectives of Gold Standard training. Emphasis is placed on the importance of quality ratings so that carrier management can make well-informed decisions regarding crew training and operational safety.

Upon completing this module, trainees will be able to:

→ describe the role of I/E;
→ describe the role of performance ratings in AQP; and
→ describe the objectives of Gold Standards training.
MAJOR POINTS

 López Describe the various tasks that trainees are likely to perform as I/Es. Describe the responsibilities they are expected to provide and the types of evaluations that they are responsible for administering line operational evaluations (LOEs). Emphasize the importance of performance feedback as a mechanism for changing pilots’ attitudes and behavior.

 López Describe AQP, the concept of proficiency-based training, and the use of LOE in AQP. State that data collected during the LOE are analyzed for trends across fleets, within fleets, and across time. Emphasize that the results of these analyses are used to revise AQP training curricula in an iterative fashion.

 López Provide specific examples of how topic grades, event set grades, and overall grades for the LOE can be used to make operational decisions regarding safety and training.

   Example: LOE grades can be used to assess pilot proficiency on different maneuvers. If performance drops below some minimum level, special purpose training can be developed to address the problem.

 López Describe how the Gold Standards represent the judgment of expert I/Es. Describe how Gold Standards will help new I/Es adopt a common frame of reference when evaluating crews in the simulator.

 López Describe the mechanics of Gold Standards training. Emphasize that new I/Es will practice and receive feedback regarding how to complete LOE grade sheets, how to perform repeats, and how to evaluate crew performance. Emphasize that their training will involve verbal instruction, practice exercises, and group discussion.
COURSE: INTRODUCTION

OBJECTIVE 1.A: To enable trainees to describe the role of pilot instructor/evaluators.

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</tr>
</thead>
<tbody>
<tr>
<td>1.A.1) Describe the major tasks required of I/Es (e.g., PIs, SCs) in the LOE process.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Main tasks include: 1. Manipulating the simulator controls. 2. Interacting with crews by role-playing the ATC. 3. Evaluating crew performance. 4. Providing performance-based feedback.</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>
*Presented in order of importance.
## COURSE: INTRODUCTION

### OBJECTIVE 1.B: To enable trainees to describe the uses of performance ratings in AQP.

<table>
<thead>
<tr>
<th>*Enabling Objectives</th>
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<tbody>
<tr>
<td>1.B.1) Describe how performance ratings fit in the AQP model of training and evaluation.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>AQP is a proficiency-based training program. LOE grades are analyzed for trends. This information is used to revise curricula in an iterative fashion. Result: crew performance ratings allow carrier management to make informed decisions about training issues.</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>
| 1.B.2) Describe specific uses of topic grades, event set grades, and overall grades. | Tutorial | Overheads | Oral | Topic grades, event set grades, and LOE overall grades are used to:  
1. Provide assurances of proficiency levels.  
2. Validate training assumptions.  
3. Analyze the effectiveness of AQP training.  
4. Provide performance feedback.  
5. Refine the training and measurement processes. | Knowledge |
*Presented in order of importance.
**COURSE: INTRODUCTION**

**OBJECTIVE 1.C:** To enable trainees to describe the goals of Gold Standards training.

<table>
<thead>
<tr>
<th><em>Enabling Objectives</em></th>
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<tbody>
<tr>
<td>1.C.1) Describe how Gold Standards training will calibrate all new I/Es to a common frame of reference.</td>
<td>Tutorial</td>
<td>Overhead</td>
<td>Oral</td>
<td>Gold Standards are based on the judgments of expert instructor/evaluators. They represent the carrier’s definition of what constitutes acceptable/unacceptable crew performance. The objective of Gold Standards training is to calibrate new I/Es to this common frame of reference.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>1.C.2) Provide an overview of Gold Standards training.</td>
<td>Tutorial</td>
<td>Overhead</td>
<td>Oral</td>
<td>First, trainees will learn how to complete LOE worksheets. Next, they will learn how to repeat event sets (when necessary). Finally, they will make practice ratings of crew performance using videotaped examples. Feedback will be provided regarding discrepancies between their individual ratings and the Gold Standards. The rationale for these discrepancies will be discussed in detail.</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>

* Presented in order of importance.
COURSE DESCRIPTION AND OVERVIEW

Course: Using LOE Grade Sheets

Instructional Objectives: 2.A through 2.E

Time: 8:30 - 9:30

Description

This module provides instruction on how to complete LOE grade sheets. Emphasis is placed on understanding scale definitions and aggregating topic grades to create overall ratings of crew performance.

Upon completing this module, trainees will be able to:

- describe the scales used for CRM and TECH topics, CRM and TECH event set grades, and pilot-in-command (PIC) and second-in-command (SIC) overall grades;
- describe the process by which topic grades are translated into TECH and CRM event set grades;
- describe the process by which TECH and CRM topic and event set grades are translated into PIC and SIC overall grades; and
- describe the general criteria for success and failure in LOE.
MAJOR POINTS

- Describe the differences between CRM and TECH topic grades, CRM and TECH event set grades, and PIC and SIC overall grades. CRM and TECH topic grades refer to broad classes of behavior that can be directly observed. CRM and TECH event set grades refer to ratings of crew performance that are based upon the crewmembers’ performance across topics for an event set. These grades are created using the success criteria that are listed on each grade sheet. PIC and SIC overall grades are ratings of each individual crewmembers’ performance throughout the event set. These grades are based upon the CRM and TECH topic and event set grades plus the I/E’s judgment.

- Describe the scale that is used to grade CRM topics. Emphasize that a “Missed observation” means that the I/E did not see the behavior for a reason unrelated to the crew's performance, such as being distracted while manipulating the simulator controls. This is not to be confused with “Not performed” which refers to specific CRM topics that the crewmembers failed to perform.

- Describe the scale that is used to grade TECH topics. Emphasize that a grade of “1” (Repeat) for a TECH topic does not require a repeat.

- Describe the scales that are used to grade CRM and TECH event set performance. Again, emphasize that a grades of “1” (Repeat) do not require a repeat.

- Describe the scales that are used to grade PIC and SIC overall performance on the event set. Point out that a value of “1” (Repeat) for the PIC or SIC requires a repeat of the event set or parts thereof.
MAJOR POINTS

- Describe how to grade crew performance on CRM and TECH topics. Emphasize that the crews should demonstrate knowledge of relevant SOP and flight manuals. Also note that the aircraft must be operated within standards.

- Point out the success criteria at the bottom of each LOE grade sheet. Emphasize that these criteria provide explicit instructions for determining CRM and TECH event set grades, and that they may vary across event sets.
  
  Example: CRM performance for the event set is graded as “1” if three or more CRM topics are checked as “Not Performed”.
  Example: TECH performance for the event set is graded as “1” if two or more TECH topics are graded as less than “Standard” or any TECH topic is graded as repeat.

- Emphasize that PIC and SIC overall grades are to be based on the crewmembers’ behavior during the event set. This is typically done by considering the crew’s overall CRM and TECH proficiency coupled with the I/E’s judgment.

- Describe the relative importance of CRM and TECH behaviors when determining PIC and SIC overall grades. Note that PIC and SIC grades must be based on proficiency objectives and not solely on CRM performance.

- Describe how supporting comments are always important. However, stress that supporting comments are absolutely required for grades of “repeat” (1), “debriefed” (2), and “excellent” (4). Note that these grades are used by management to better understand performance trends in the AQP.

- Describe the general criteria for LOE success. Emphasize that these guidelines are meant to supplement, not replace, the topic ratings.

- Describe the criteria that lead to automatic ratings of “Unsatisfactory” overall performance on the LOE. Note how these criteria work in conjunction with the general success criteria to assist I/Es in their task.

A-11
## COURSE: USING LOE GRADE SHEETS

**OBJECTIVE 2.A:** To enable trainees to describe the scales used to assign CRM and TECH topic grades, CRM and TECH event set grades, and PIC and SIC overall grades.

<table>
<thead>
<tr>
<th><em>Enabling Objectives</em></th>
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</tr>
</thead>
</table>
| 2.A.1) Identify the three major types of grades for each event set. | Tutorial | Overheads | Oral | Grades are assigned for:  
1. CRM and TECH topics  
2. Overall CRM and TECH for each event set  
3. Overall PIC and SIC performance on the event set | Knowledge |
| 2.A.2) Describe the scale that is used for grading CRM topics. | Tutorial | Overheads | Oral | CRM topics are graded as:  
1. Missed observation  
2. Not performed  
3. Partially performed  
4. Performed | Knowledge |
| 2. A.3) Describe the scale that is used for grading TECH topics. | Tutorial | Overheads | Oral | TECH topics are graded as:  
1. Repeat  
2. Debriefed  
4. Excellent  
Note that a rating of “1” (Repeat) does not require the crew to repeat the event set. | Knowledge |

*Presented in order of importance.*
COURSE: USING LOE GRADE SHEETS

**OBJECTIVE 2.A:** To enable trainees to describe the scales used to assign CRM and TECH topic grades, CRM and TECH event set grades, and PIC and SIC overall grades.

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</thead>
</table>
| 2.A.4) Describe the scales that are used for grading CRM and TECH event set performance. | Tutorial | Overheads | Oral | CRM and TECH event set performance are graded as:  
1. Repeat  
2. Debriefed  
3. Standard  
4. Excellent 
Note that a rating of “1” (Repeat) does not require the crew to repeat the event set. | Knowledge |
| 2.A.5) Describe the scales that are used for grading overall PIC and SIC performance on an event set. | Tutorial | Overheads | Oral | PIC and SIC performance are graded as:  
1. Repeat  
2. Debriefed  
3. Standard  
4. Excellent 
Note that a rating of “1” (Repeat) requires the crew to repeat the event set. | Knowledge |

*Presented in order of importance.*
**COURSE: USING LOE GRADE SHEETS**

**OBJECTIVE 2.B:** To enable trainees to describe the process by which topic grades are translated into TECH and CRM event set grades.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>2.B.1) Describe how to evaluate performance on CRM and TECH topics.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Crew should demonstrate knowledge of carrier SOP and comply with procedures in the FM and FOM. The aircraft should be operated within qualification standards.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>2.B.2) Describe how CRM and TECH event set grades are computed.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>CRM and TECH event set grades are calculated using success criteria listed on the grade sheet. There are separate success criteria for CRM and TECH event set grades. There are also separate success criteria for each event set.</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>

* Presented in order of importance.
COURSE: USING LOE GRADE SHEETS

OBJECTIVE 2.C: To enable trainees to describe the process by which topic and event set grades are translated into PIC and SIC grades.

<table>
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<tr>
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<th>Instructional Content</th>
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</tr>
</thead>
<tbody>
<tr>
<td>2.C.1) Describe how overall PIC and SIC grades are computed.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>PIC and SIC grades are calculated using topic and event set grades coupled with the I/E's judgment.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>2.C.2) Describe the importance of CRM in determining overall PIC and SIC grades.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>The overall PIC and SIC grades must be based on general or specific proficiency objectives. They may not be based solely on CRM performance.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>2.C.3) Describe the role of supporting comments.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Comments are included in an AQP database along with crewmembers’ grades. These comments help management understand the meaning behind the grades assigned. Further, comments suggest areas for improving the training program. Supporting comments are always important, and should be included as often as possible. However, ratings of “repeat” (1), “debriefed” (2) and “excellent” (4) absolutely require supporting comments.</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>
* Presented in order of importance.
**COURSE: USING LOE GRADE SHEETS**

**OBJECTIVE 2.D:** To enable trainees to describe the general LOE criteria for success and failure.

<table>
<thead>
<tr>
<th><em>Enabling Objectives</em></th>
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<th>Evaluation</th>
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<tbody>
<tr>
<td>2.D.1) Identify and describe the general criteria for success.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>The general criteria for success in the LOE are: 1. The aircraft landed safely. 2. The flight flew within legal limits with momentary deviations. 3. The flight remained within SOP or deviations were justified. 4. Appropriate action was taken in a timely manner. 5. All event sets were graded “Excellent”, “Standard” or “Debriefed” by conclusion of LOE.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>2.D.2) Identify and describe factors that are considered unsatisfactory.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>An LOE is considered unsatisfactory if: 1. A repeated event set is not rated as “Debrief” or higher. 2. The crew receives a “Repeat” on three event sets. 3. The crew crashes the simulator. 4. The crew performs a gross deviation in a single event set that compromises the aircraft to the point of an imminent crash.</td>
<td>Knowledge</td>
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*Presented in order of importance.*
COURSE DESCRIPTION AND OVERVIEW

Course: Repeating Event Sets

Instructional Objectives: 3.A through 3.B

Time: 9:30 - 10:30

Description

This module provides instruction on repeating event sets. Emphasis is placed on specific strategies for repeating event sets, “alternative” repeat procedures, and tips for identifying problem scenarios. Group discussions and short exercises provide trainees with hands-on practice.

Upon completing this module, trainees will be able to:

- identify, describe, and apply specific strategies for repeating event sets; and
- select and execute an appropriate strategy for repeating event sets given time, resource, and other constraints.
MAJOR POINTS

❖ Describe when an event set needs to be repeated. Emphasize that only PIC and SIC overall grades of “Repeat” (1) actually need to be repeated. TECH topics and CRM or TECH event set grades of “Repeat” (1) do not need to be repeated.

❖ Describe the rationale behind allowing event sets to “play themselves out” to a logical conclusion. Emphasize that this technique allows crewmembers to observe the effects of their behavior (e.g., “error chains”) in a safe, natural environment. Ask the trainees for examples based on their own experiences.

❖ Describe the rationale behind not debriefing the crew until the LOE is complete. Emphasize that to avoid compromising the learning experience, crewmembers should not be coached regarding their performance, SOP, or situational cues. The I/E should only specify which event set requires repeating.

❖ Describe specific strategies for repeating an event set using examples based on case studies.

❖ Provide the trainees with case studies that may require repeating an event set. Ask trainees to provide possible repeat strategies for each case study.

   Example: Using script-based clues to modify the event set based on the crews’ prior behavior.
   Example: Orally quizzing the crew on specific facts regarding the relevant system, maneuver, or procedure.

ENABLING OBJECTIVES

A.1
A.2
A.3
A.4
A.5
**COURSE: REPEATING EVENT SETS**

**OBJECTIVE 3.A:** To enable trainees to identify, describe, and apply specific strategies for repeating event sets.

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<tbody>
<tr>
<td>3.A.1) Identify when a repeat is required.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Repeats are only required for PIC and SIC overall grades of “Repeat” (1). Technical topics, CRM and TECH event set grades of “Repeat” (1) do not need to be repeated.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>3.A.2) Describe the importance of and rationale behind allowing event sets to play themselves out to a logical conclusion.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Allowing event sets to play themselves out permits crewmembers to observe the effect of their action/inaction on system performance in a safe learning environment.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>3.A.3) Describe the importance of not debriefing the crew until the LOE is complete.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>The learning value of the repeat is compromised if crewmembers receive coaching on the success criteria. The instructor should only specify which phase of flight requires a repeat.</td>
<td>Knowledge</td>
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COURSE: REPEATING EVENT SETS

OBJECTIVE 3.A: To enable trainees to identify, describe, and apply specific strategies for repeating event sets.

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<tr>
<td>3.A.4) Present specific strategies for repeating an event set.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Event sets can be repeated by: 1. Using script-based cues to modify the event set based on the crewmembers’ prior decisions and/or behaviors. 2. Re-positioning the simulator. 3. Selecting a different event set of equal difficulty. 4. Quizzing the crew regarding the relevant system or procedure.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>3.A.5) Apply specific strategies for repeating an event set.</td>
<td>Case studies (Appendix A)</td>
<td>Overheads/Handouts</td>
<td>Oral</td>
<td>Use case studies to elicit group input and discussion for applying these strategies in the simulator. When considering trainees’ suggestions, remember that repeats should be perceived as realistic, and as part of an uninterrupted flight. Also, various constraints, such as time and phase-of-flight may limit the alternatives that are available to the pilot instructor.</td>
<td>Skill</td>
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COURSE DESCRIPTION AND OVERVIEW

Course: LOE Grading Practice

Instructional Objectives: 4.A through 4.B

Time: 10:30 - 12:30

Description

This module provides new I/Es opportunities to practice grading crew performance on LOEs. Emphasis is placed on understanding the behavioral dimensions and grading scale anchors prior to observing examples of crew performance. Practice ratings are made using videotaped scenarios of crews performing in a full-motion simulator.

Upon completing this module, trainees will be able to:

- describe the skills that are being assessed in the LOE; and
- grade crews using the LOE grade sheet.
MAJOR POINTS

- For each videotaped event set, set the stage by describing the tasks that the crews are expected to perform. Next, describe the grade sheet that will be used to evaluate the crewmembers’ performance. Provide specific examples of performance at the various levels on the grade sheet. Provide the rationale behind each performance level, using relevant SOP and FARs to support your position.

- Allow the trainees to practice rating the videotaped event sets. The practice videotape should include crews at varying levels of proficiency performing multiple event sets.

ENABLING OBJECTIVES

A.1

B.1
## COURSE: LOE GRADING PRACTICE

**OBJECTIVE 4.A:** To enable trainees to describe the skills that are being evaluated in the LOE.

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<tbody>
<tr>
<td>4.A.1) Describe the tasks to be performed during the event set and the scales that will be used to assess the crewmembers’ performance.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Define the tasks that are to be performed in each event set. Use concrete examples as necessary. Describe the scales that will be used to assess the crewmembers’ performance. Provide examples of performance at various levels of proficiency for each scale on the LOE grade sheet. This should require between 30 and 45 minutes to complete.</td>
<td>Knowledge</td>
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*Presented in order of importance.*
## COURSE: LOE GRADING PRACTICE

### OBJECTIVE 4.B: To enable trainees to grade crews using the LOE grade sheet.

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<tbody>
<tr>
<td>4.B.1) Practice rating videos of crews flying LOE event sets.</td>
<td>Practice</td>
<td>Videotaped scenarios</td>
<td>Oral</td>
<td>After describing the dimensions and the scale anchors, allow the trainees to practice rating videotaped scenarios of crew performance. The videotape (approximately 60-80 minutes in length) should include crews at varying levels of proficiency performing multiple event sets.</td>
<td>Skill</td>
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*Presented in order of importance.*
Course Description and Overview

Course: Behavioral Observation Training

Instructional Objectives: 5.A through 5.B

Time: 13:30 - 14:00

Description

This module provides instruction on improving new I/Es' observation skills. Emphasis is placed on distinguishing between descriptions of behavior and conclusions regarding the effectiveness of those behaviors. Several strategies are presented for improving the trainees' observational skills. This module is conducted while trained support staff are analyzing the performance ratings from the previous module (LOE Grading Practice).

Upon completing this module, trainees will be able to:

- distinguish between behaviors and conclusions; and
- identify and describe five guidelines for effective observation.
MAJOR POINTS

- Describe the distinction between descriptions of crew behavior and conclusions regarding the effectiveness of those behaviors. Remind the trainees that behavioral descriptions refer to specific, discrete tasks that were or were not performed by the crew. Conclusions, on the other hand, refer to inferences and judgments made by the pilot instructor. As a result, they are more subject to perceptual biases.

- Describe five guidelines for effective behavioral observation. Note how these guidelines should be used when making notes in the “comments” section of the LOE worksheet (Objective 2.C).

ENABLING OBJECTIVES

A.1

B.1
**OBJECTIVE 5.A:** To enable trainees to distinguish between behaviors and conclusions.

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<tr>
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<tr>
<td>5.A.1) Describe the distinction between descriptions of behavior and conclusions regarding the effectiveness of those behaviors.</td>
<td>Tutorial (Appendix B)</td>
<td>Overheads/Handouts</td>
<td>Written</td>
<td>Behavioral descriptions provide crews with feedback regarding actions that were or were not taken by the crew. Conclusions regarding behavior are usually based on and I/E's assumptions of what the crewmembers may or may not have been thinking. As a result, they are subject to bias and misinterpretation.</td>
<td>Knowledge</td>
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*Presented in order of importance.
**COURSE: BEHAVIORAL OBSERVATION TRAINING**

**OBJECTIVE 5.B:** To enable trainees to identify and describe five guidelines for effective observation.

<table>
<thead>
<tr>
<th>*Enabling Objectives</th>
<th>Strategy</th>
<th>Media</th>
<th>Evaluation</th>
<th>Instructional Content</th>
<th>Type of Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.B.1) Identify and describe five guidelines for effective behavioral observation.</td>
<td>Tutorial/ Group exercise (Appendix C)</td>
<td>Overheads</td>
<td>Oral</td>
<td>Guidelines for effective observation include: 1. Use specific examples. 2. Avoid adjective qualifiers. 3. Avoid assumptions about crewmembers’ knowledge. 4. Avoid the use of quantitative values. 5. Provide enough detail to determine the extent of situational effects. Emphasize that these guidelines can be helpful when making comments regarding the crew’s performance (Objective 2.C).</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>
Presented in order of importance.
COURSE DESCRIPTION AND OVERVIEW

Course: Gold Standards Training and Post-Training Videotape


Time: 14:00 - 16:30

Description

This module provides feedback that compares the each new I/E's practice ratings with the Gold Standards. Group discussion is used to explain the rationale behind the Gold Standard ratings, and to solidify the decision rules that were specified in Module 4 “Evaluating Crew Performance with Gold Standards.” I/Es grade a post-training videotape to evaluate the extent to which trainees have improved their skills.

Upon completing this module, trainees will be able to:

→ interpret the degree of similarity between their individual ratings and the Gold Standards; and

→ interpret their level of skill acquisition as a result of training.
MAJOR POINTS

- Describe how Gold Standards will be used to calibrate all new I/Es using a common frame-of-reference. Emphasize that Gold Standards training was developed to ensure that all crewmembers will be evaluated consistently, regardless of which I/E evaluates them.

- Describe how the Gold Standards represent the ratings of a panel of expert I/Es. Emphasize that the Gold Standards are based on carrier SOP and relevant FARs.

- Describe the concept of “deviation scores” as the difference between a given I/E’s rating and the gold standard. Emphasize that because these are “deviations,” lower scores are better, with perfect agreement to the Gold Standard being equal to zero.

- Provide feedback on an item-by-item basis. Identify the rationale for discrepancies between individual ratings and the Gold Standards. Consult relevant FARs and carrier SOP to identify why the discrepancies occurred, so that I/Es leave training with a common frame-of-reference.

- Have I/Es grade post-training videotape. Compare pre- and post-training performance as an indicator of skill improvement. Provide feedback to individual trainees at a later time (e.g., via e-mail) to help them gauge their level of skill acquisition.
COURSE: GOLD STANDARDS TRAINING AND POST-TRAINING VIDEOTAPE

OBJECTIVE 6.A: To enable trainees to interpret the degree of similarity between their individual ratings and the Gold Standards.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>6.A.1) Describe the purpose of rater calibration using Gold Standards.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>The purpose is to ensure that there are no systematic differences among raters.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>6.A.2) Describe the process by which gold standard ratings were developed.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Groups of expert I/Es convened to rate the videotaped examples and discuss the rationale for their ratings. Relevant FARs and SOP were consulted for support. Final ratings represent consensus among these experts.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>6.A.3) Describe the concept of “deviation scores.”</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Oral</td>
<td>Deviation scores reflect the difference between the pilot instructor’s rating and that of the Gold Standard. Higher values indicate greater disagreement. Perfect agreement = 0.0</td>
<td>Knowledge</td>
</tr>
<tr>
<td>6.A.4) Provide feedback to trainees regarding their performance.</td>
<td>Tutorial</td>
<td>Overheads</td>
<td>Written</td>
<td>Feedback is presented on an item-by-item basis, with an emphasis on items that showed low agreement.</td>
<td>Knowledge</td>
</tr>
<tr>
<td>6.A.5) Identify the rationale for the observed discrepancy (if any).</td>
<td>Group Discussion</td>
<td>Overheads</td>
<td>Oral</td>
<td>Gold Standard ratings are based on FARs and carrier SOP. Identify discrepancies between individual ratings and the gold standard, and provide supporting evidence. Solicit group discussion to clarify issues.</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>
*Presented in order of importance.

**COURSE:** GOLD STANDARDS TRAINING AND POST-TRAINING VIDEOTAPE

**OBJECTIVE 6.B:** To enable trainees to interpret their level of skill acquisition as a result of training.

<table>
<thead>
<tr>
<th>*Enabling Objectives</th>
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<th>Instructional Content</th>
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</tr>
</thead>
<tbody>
<tr>
<td>6.B.1) Ascertain trainees’ level of skill acquisition via a post-training exercise.</td>
<td>Practice</td>
<td>Videotaped scenarios</td>
<td>Written</td>
<td>The purpose is to determine the extent to which skills have improved as a result of training. I/E trainees will rate a new videotape in the same manner as before. Comparison of pre- and post-training performance will be used as an indicator of skill improvement. Due to time constraints, feedback will not be provided to the group as a whole. Rather, feedback will be provided to trainees at a later time (e.g., via e-mail) to help them gauge their individual progress.</td>
<td>Skill</td>
</tr>
</tbody>
</table>
Presented in order of importance.