Success Factors for Training Forklift Operators with Simulation at Edna Mahan Correctional Facility for Women

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Detroit, Michigan

Jack Fearing, CPEA
Session Outline

- Edna Mahan Correctional Facility for Women
- “2 Tier” Forklift Operator Training
- Program Results & Future Expectations
- Speaker Profile
Edna Mahan Correctional Facility for Women

- Located in Clinton, New Jersey
- Opened in 1913
- Minimum & Maximum Security Sections
- Approximately 1,000 inmates
- Numerous Educational and Vocational Opportunities
The 2-Tier Training Concept

**Know Enough**
- Knowledge of OSHA Regulations
- Understanding Forklift Systems
- Periodic Evaluations
- Group Discussions
- Theory Examination

**Do Enough**
- Develop Core Skills
- Create Realistic Scenarios
- Provide Consulting
- Conduct Periodic Evaluations
- Set Improvement Metrics
- Demonstrate Continuous Improvement & Proficiency
National Safety Council Concept (1)

OSHA Regulations

- Forklift is a slang term
- OSHA uses Powered Industrial Trucks in regulations
- **Lift Truck** is the term we will use
National Safety Council Concept (2)

Lift Truck Operator Training Regulations

- 18 and older
- Trained and authorized
- Combination of formal and practical training under supervision
- Cover specific characteristics of your lift truck
- Refresher training
- Performance evaluation every 3 years
National Safety Council Concept (3)

This training program includes 7 modules:

1. OSHA Regulations
2. Lift Truck Design and Operating Principles
3. Pre-Shift Safety Inspection and Preventive Maintenance
4. Worksite Inspections
5. Pick Up a Load
6. Deliver a Load
7. Apply Lift Truck Operator Safety Skills
National Safety Council Concept (4)

Program Completion Requirements

- Complete all program modules
- Participate in activities and discussions
- Pass written exam with score of 80% or greater
- Pass performance assessments
What to Assess in the Real World

National Safety Council’s Lift Truck Operator Assessment

Correctly perform the following skills:
1. Drive forward through the slalom
2. Pick up the load
3. Back up with load
4. Deliver the load
Participant Resources
The Simlog Concept (1)

Apply technology and expertise to develop affordable forklift operator training systems
The Simlog Concept (2)

Creates a fully interactive environment for training Forklift operators

Allows operators to train and improve skills at their own pace

Provides both positive and remedial reinforcement
What to Assess Using Simulation

- Startup Procedures
- Picking Up a Load
- Speed Control
- Driving on a Ramp
- Loading/Unloading Trailers
- Stocking Low/High Racks
- Dropping off a Load
- Equipment Shutdown
15 Simulation Software Modules

- Control Familiarization
- Slalom (3)
- Ramp Driving
- Loading Docks (6)
- Selective Pallet Racks (2)
- Drive-in/Drive-Through Racks (3)
- Cantilever Racks and Flat Bed Trucks
Simulator Lab Environment (1)

- five Simulator Stations
  - Simlog simulator controls
  - Simlog’s Forklift simulation software
  - PC, speakers/headphones
- one Instructor Station
  - Simlog’s “Simulation Manager”
Simulator Lab Environment (2)
Simulator Lab Environment (3)
# 30-Hour Combined Training Schedule

(30 hours = 12 sessions @ 2½ hours each)

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<td><strong>Day 1</strong></td>
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<td><strong>Day 3</strong>*</td>
<td><strong>Day 4</strong></td>
<td><strong>Day 5</strong></td>
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<td>Introduction PPT NSC 1-2</td>
<td>SL C/Fam</td>
<td>NSC Module 3 SL CFam/Slalom</td>
<td>SL Ramps</td>
<td>NSC Module 4 SL Load Dock</td>
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<td><strong>Day 6</strong></td>
<td><strong>Day 7</strong>*</td>
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<td>NSC Module 5 SL Load Dock/PR</td>
<td>SL Pallet Racks</td>
<td>NSC Module 6 SL Drive-in/Thro</td>
<td>SL Drive-in/Thro</td>
<td>Can / Flat Bed</td>
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<td><strong>Day 11</strong></td>
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<td>Module 7 SL Evaluations</td>
<td>NSC Final Exam</td>
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**Notes:**
- *NSC/OSHA Knowledge Check*
- **SL** = Simlog simulator-based training
- **NSC** = National Safety Council Module (Lecture & Video)
Program Results & Future Expectations

Program Results to Date

- Three classes of 10 inmates each, since December 2018
- 21 course completions
- Standardized operator performance metrics
- Consistent integration of classroom and “hands-on” instruction

Future Expectations

- Continuation of training as a ‘value-added’ core subject
- Integration of newly purchased (real) Lift Truck for ‘hands on’ training & evaluations
- Identification of legitimate career opportunities
- Introduction of Simlog’s new stand-up Reach Lift Truck Personal Simulator
Reach Lift Truck Personal Simulator
About the Speaker

Jack Fearing is a Certified Professional Environmental Auditor (CPEA) and the Managing Partner for Fearing International Group LLC, a Veteran-owned Small Business (VOSB) global occupational and aviation safety consulting firm headquartered in Flemington, NJ.

He has more than 30 years of experience in occupational safety and health management and transportation simulation. He is a certified National Safety Council Forklift operator instructor, an OSHA-authorized 10/30 course instructor and professional member of the New Jersey chapter of the American Society of Safety Professionals (ASSP). He was the CoPS Safety Professional of the Year (SPY) in 2008.

Jack has extensive hands-on experience in developing OSHA compliance programs, employee and management training and coordinating with state and Federal regulatory agencies in both union and non-union environments. Jack is a graduate of the University of Massachusetts (BS in Biology) and Boston University (M.Ed in Environmental Science). He is a retired US Army Lt Colonel and served as a utility helicopter pilot and Aviation Safety Officer in a Combat Aviation Brigade on active duty.
External References

• American Society of Safety Professionals: https://www.assp.org/
• Fearing International Group: https://fearing-international.com/
• National Safety Council: https://www.nsc.org/
• OSHA: https://www.osha.gov/
• OSHA10 & 30 Certification: https://www.osha.gov/dte/outreach/