

# SIMLOG

The Standard in Cost-Effective Simulation for Training Heavy Equipment Operators

## Forklift Simulation and Skills Certification for Young Adults at the PEACE Center

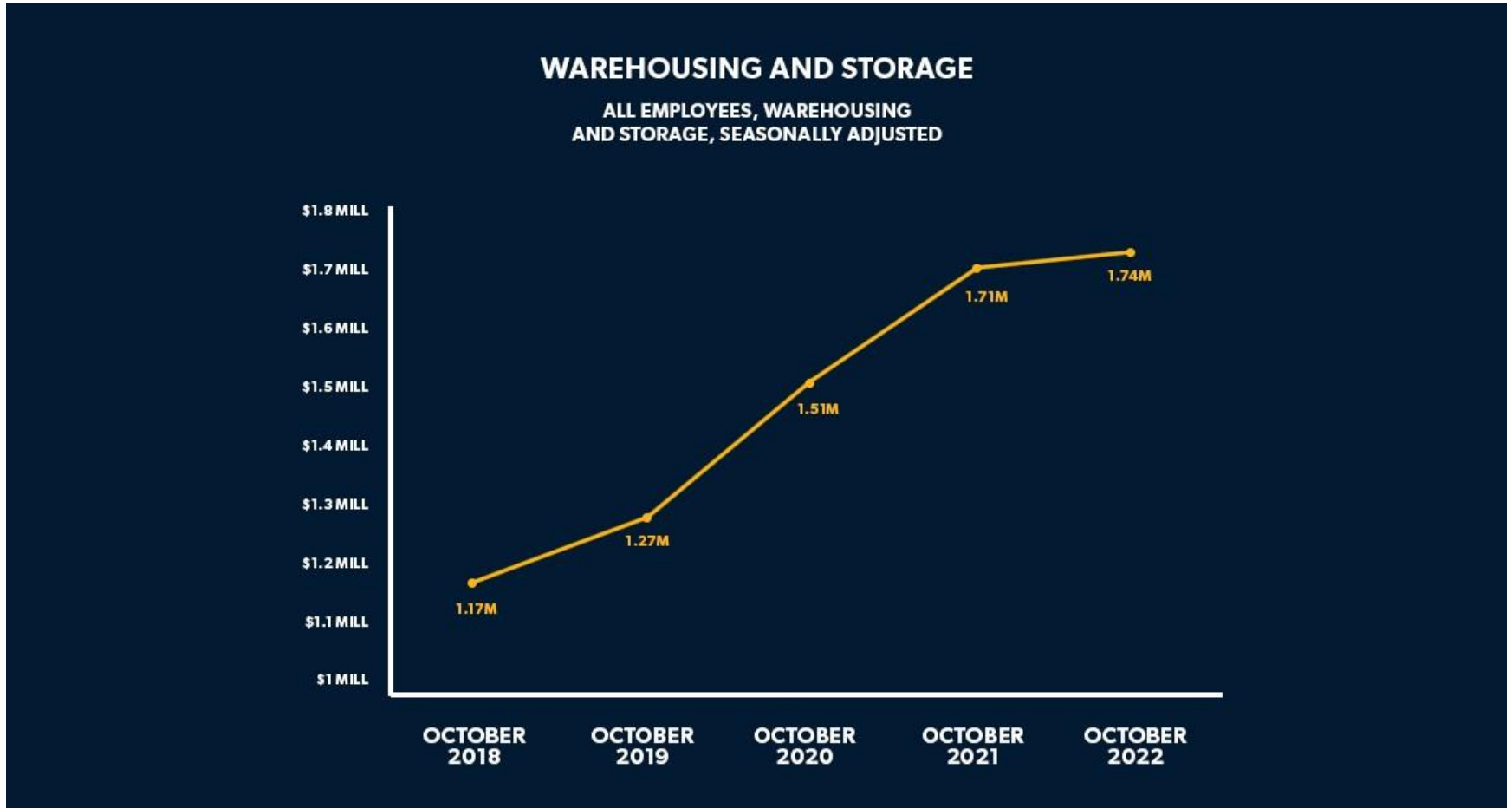
Paul Freedman, President, Simlog  
Justin McGill, Lead Instructor, ATS

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## Overview

- job prospects in logistics
- vocational training and corrections
- Simlog
- *Forklift Personal Simulator*
- customer profile: the PEACE Center (Illinois Department of Juvenile Justice)
- *Adaptive Training Services*, for forklift operator certification

## Employment Statistics



## Help from Corrections

Employers are

- looking to “non traditional” populations
- more “accepting”, and so ready to hire, “qualified” inmates after their release
- of course “qualified” → ready to work → have received training

## Testimonials (1)

“I’ve seen students [inmates] released and then cycle right back into the system within months, weeks or even days. But *learning a skill* positions more students to avoid another run-in with the law.”

Earl Gayle, Instructor

State of New Jersey Juvenile Justice System

*(Simlog Customer)*

## Testimonials (2)

“I have been in this industry for decades and have taught people to operate Heavy Equipment in the field many times, and these simulators will have a very positive impact on that process. Congratulations [to Simlog] for inventing a very useful and realistic product.”

Jarrold Mesloh, CTE Heavy Equipment/CDL Instructor,  
Marion CI, State of Florida DOC (*Simlog Customer*)

## Simlog (1999): CTE Market Leader

- ▶ offices in Montreal (Canada)
- ▶ 25 reselling partners, including *Moss Enterprises - Educational and Industrial Solutions* in Illinois (also IA, IN, NE, SD)
- ▶ “Personal Simulators” for training people to operate 17 different kinds of heavy equipment
- ▶ 700 CTE customers in North America, including more than 50 adult and juvenile correctional vocational programs

## Sample Products



Forklift



Reach Lift Truck



Stand Up  
Counterbalanced  
Lift Truck  
(new!)



Skid Steer Loader



Backhoe Loader



Hydraulic Excavator



Bulldozer



Mobile Crane



Wheel Loader



Off-Highway Truck

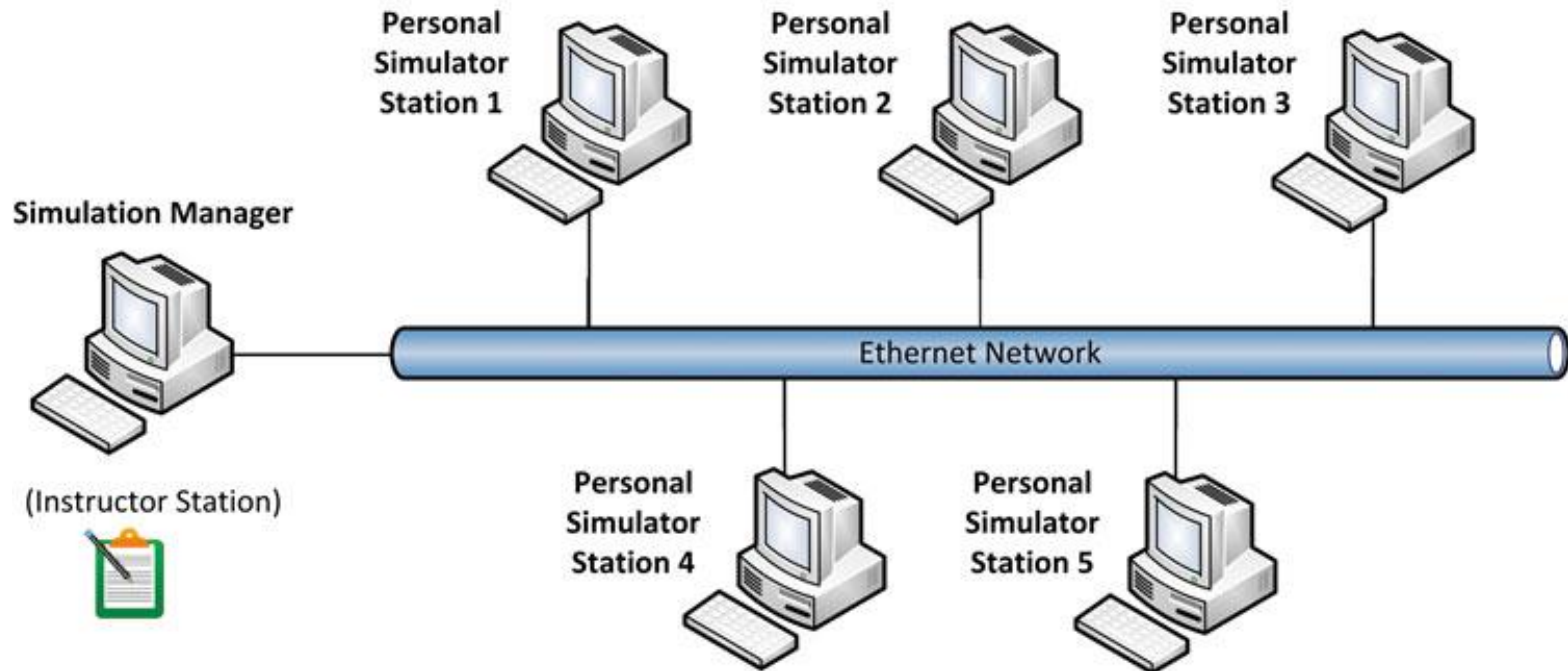


## Simulation Manager (1)

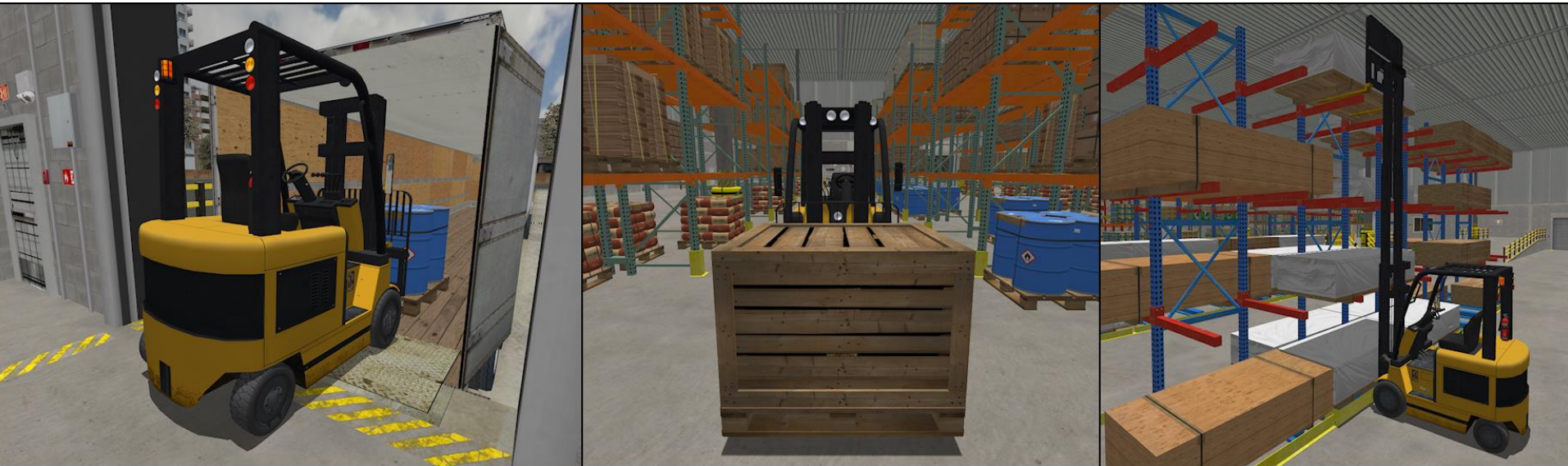
- ▶ separate Simlog software program
- ▶ provides a common database “back end” for *all* our simulation software products
  - assign a login name / password to each “user”
  - group users into “classes”
  - store all the simulation results together

## Simulation Manager (2)

Designed for deployment in a simulator “lab”



## Forklift Personal Simulator



## Simlog Software

- ▶ “generic” 3D modelling
- ▶ no OEM specifics → focus on learning “core skills”
- ▶ multiple language versions
- ▶ *no Internet access required*

## About Security and Privacy

- ▶ simulation results are stored locally, in the Simulation Manager's database → there's *nothing* "in the cloud"
- ▶ Simlog is *not* "keeping track" in any way of what you are doing, the number of people you are training, etc.
  - everything is secure and private

## Setup with Replica Controls and 4 Displays



## Setup with Operator Chair and 4 Displays



## Why Forklift Training?



Compared to other kinds of lift trucks, “Forklift” (for sit-down counterbalanced work), is

- by far the most popular kind of lift truck, and it’s everywhere
- “entry level”, for lift truck operations
- most suitable for “career exploration” and “entry level” simulator-based training



## Alignment with Certification Standards

For material handling equipment, we look to OSHA.

You need to

- *know* enough: Knowledge Exam (theory)
- *do* enough: Practical Exam (demonstrating skills)

## Our Instructional Design

- For each Simulation Module, comprehensive *Performance Indicators* measure how *quickly* and how *carefully* people are working.
- The simulation software automatically tracks the values of these Performance Indicators, to create simulation results.
- People train in a “self-managed” way, and thereby learn at their own pace.

## Training is “Self-Managed”

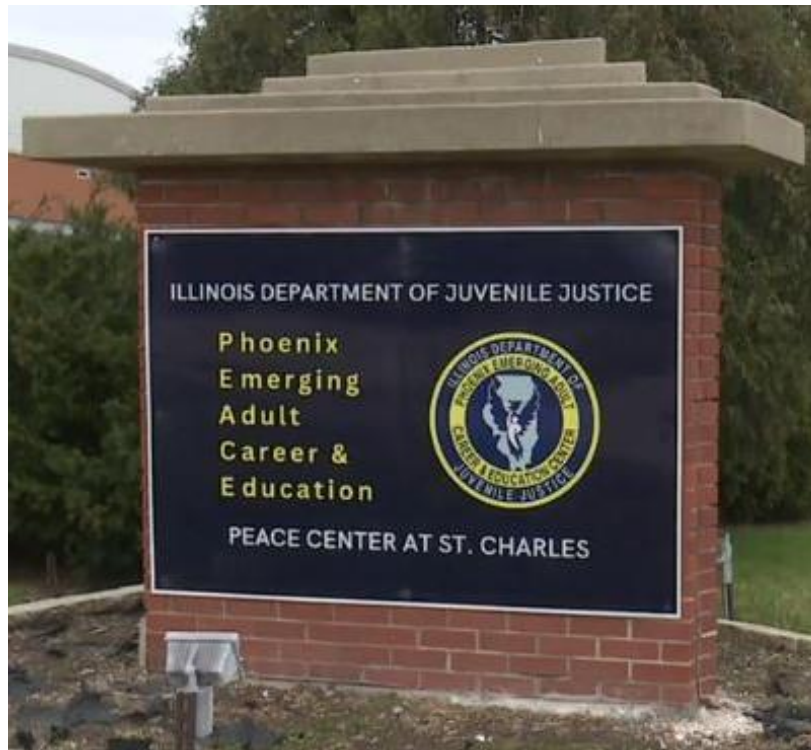
When my simulation results are good enough according to pre-defined target values (“benchmarks”), the Supervisor reviews what I’ve done, and then I move on.

Such supervision (at the simulator) does *not* require domain knowledge → the Supervisor does *not* need to be an equipment *operator*, nor an equipment operator trainer.

## Customer Profile

State of Illinois  
Dept. of Juvenile Justice (IDJJ)

## Phoenix Emerging Adult Career & Education (PEACE)



## Two Identical Setups



Replica Controls, 4 displays (3 + 1)

## About PEACE (1)

- ▶ Mission: to build youth skills and strengthen families to promote community safety and positive youth outcomes
- ▶ IDJJ operates 5 secure facilities: Illinois Youth Center Chicago, Harrisburg, Pere Marquette, Warrenville, and PEACE Center in St. Charles.
- ▶ superintendents plan, develop, organize, control, direct, and manage the programs and operations of each Youth Center

## About PEACE (2)

The programming

- ▶ equips young adults with vocational, career, and life skill development opportunities
- ▶ is individualized to each young adult for the purpose of successful and sustainable re-integration into the community



## About PEACE (3)

- ▶ For youth aged 14-21.
- ▶ High school graduates aged 17-21 can enter a post-secondary or CTE program through an application, interview, and personalized contract agreement.
- ▶ They can remain at the PEACE Center so long as they are enrolled in a post-secondary or CTE program. (Otherwise, they are transferred to an adult DOC facility.)

## Forklift Operator Training Program at the PEACE Center (1)

- ▶ The PEACE Center was launched in January 2024.
- ▶ The forklift operator training program was introduced by IDJJ's Director of CTE, and conducted under the supervision of the Leisure Time Activities Supervisor.
- ▶ Criteria to enroll in the forklift operator training program:
  - Students must either be high school graduates, close to graduation, or have their GED.

## Forklift Operator Training Program at the PEACE Center (2)

- A career readiness platform, *Schoolinks*, is used for personality surveys.
- Once the surveys are completed, each student meets with a CTE counselor to determine possible “fit” for the program.
- *Schoolinks* helps students further their education for forklift operator training.

## Forklift Operator Training Program at the PEACE Center (3)

- ▶ Groups of students attend forklift simulation training on Mondays and Wednesdays, or on Tuesdays and Thursdays.
- ▶ Students are allotted 1 hour of training, twice a week.
- ▶ The average completion time for the program is 5 months, and that includes about 40 hours of forklift simulation training.

## Forklift Operator Training Program at the PEACE Center (4)

- Students are asked to complete at least 5 trials (exercises) for each Simulation Module, with an almost perfect score (no collisions). After that, they can move on to the next Simulation Module. (There are 14 in total.)
- Students are encouraged (but not required) to use CORE (which offers online CTE courses and certification preparation) for their OSHA 20 study.

## Forklift Operator Training Program at the PEACE Center (5)

- ▶ Since the launch of the PEACE center, youth participation has increased, and there's been a decrease in incidents between youths.
- ▶ To date, 8 students have completed the forklift operator training program.

## Forklift Operator Training Program at the PEACE Center (6)

- ▶ IDJJ will contract *Adaptive Training Services (ATS)* to conduct the certification once 10 students have completed their simulated-based training.
- ▶ To do that, ATS is planning to use the PEACE center's 108-acre grounds and their (real) forklift, over two days.

## Forklift Operator Training Program at the PEACE Center (6)

### Future Plans:

- ▶ IDJJ to have multiple Simlog “Forklift Personal Simulators” at four of the youth facilities.
- ▶ Leverage the students who have graduated with a forklift certification, to engage local industry partners.





## Adaptive Training Services (ATS)

- Mission: Empower individuals through hands-on technical training.
- Approach: Real-world expertise combined with proven curricula.
- Technical Skills: Electrical, mechanical, HVAC, fluid power, **forklift and other industrial vehicle training.**
- Leadership Development: Programs to build leadership abilities.
- Customized Programs: Tailored to meet specific goals as defined by the customer.



## **ATS + PEACE Center**

- Mutual connection through Moss Enterprises and SIMLOG
- Define the Need – Craft the Solution.
- OSHA aligned safety certifications

*ATS offers certification for all 7 classes of powered industrial trucks.*



## Why does certification matter?

- Skill Building: Marketable skills that improve employability.
- Reducing Recidivism: Career pathways reduce repeat offenses.
- Community Integration: Vocational readiness supports reintegration.

## What Forklift Certification Entails (2 days)



### 1. Classroom Instruction

Covers the basics of forklift operation including:

1. Equipment types and functions
2. OSHA safety regulations
3. Hazard identification
4. Load handling and stability principles

### 2. Hands-On Training

Practical instruction where students learn to:

1. Start, stop, and steer the forklift
2. Maneuver in tight spaces
3. Safely lift and lower loads
4. Perform pre-operation inspections



## 3. Evaluation & Certification

1. A practical performance test and written exam are required.
2. Certification is typically valid for **3 years**.
3. Employers must ensure operators are evaluated and re-certified as needed -- IN ALMOST ALL INSTANCES EMPLOYERS WILL RETRAIN.



## Questions?

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- [www.simlog.com](http://www.simlog.com)
- [www.adaptivetrainingservices.com](http://www.adaptivetrainingservices.com)