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**Title:** Associate Laboratory Directorate for Weapons Production New Employee Training (NET) Academy Overview

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# Associate Laboratory Directorate for Weapons Production New Employee Training (NET) Academy Overview

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3/23/2023

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# Presentation Overview

- What is NET Academy?
- History of the ALDWP Training Programs
- Identification of Need
- Initial project effort
- Subsequent enhancements
- Current state
- Future state

# What is NET Academy?

NET Academy Logo



# NET Academy Purpose – Then and Now

The New Employee Training (NET) Academy was founded in 2020 to provide new employees to the Associate Laboratory Directorate for Weapons Production (ALDWP) with a comprehensive onboarding and training experience. The Academy offers multiple training tracks, specializing in Glovebox Operator (GBO) Qualification, Fissionable Material Handler (FMH) Certification (Operator/Supervisor), and Waste Operation Qualifications for workers who will fulfill mission-specific job assignments within the plutonium facility. NET Academy contributes significantly to the retention of hires by providing excellent support and training from Day 1 through the finish line of their respective training qualification/certification program(s).

# New Employee Training (NET) Mission Statement

Providing new employees with a foundation of excellence, ensuring workers are prepared to contribute to the mission with a thorough understanding of manufacturing and nuclear facility fundamentals.



The NET Academy team receiving the  
DOE Award of Excellence, 2020

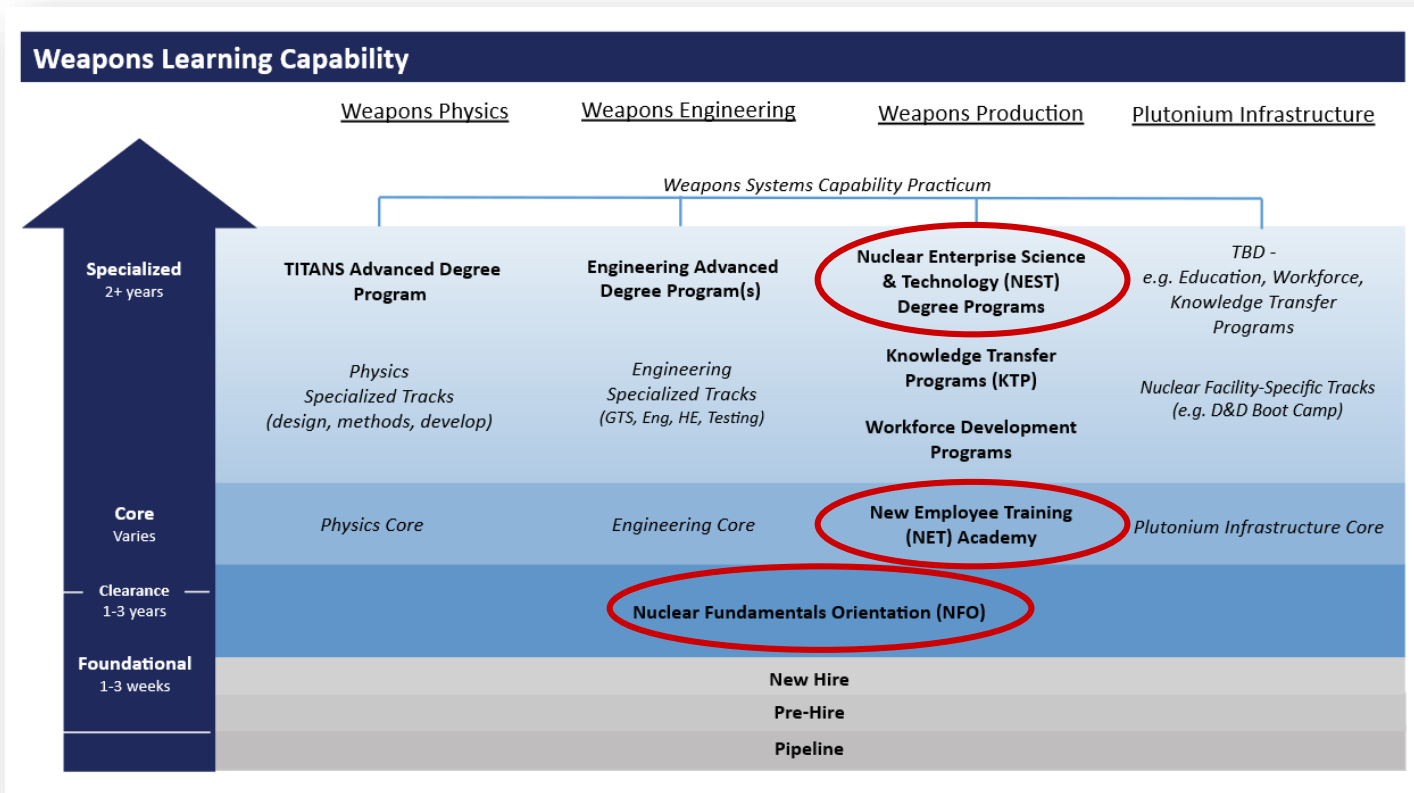
# History of the ALDWP Training Programs



Workers in the Plutonium Facility at TA55



# Learning Capability – NET Academy

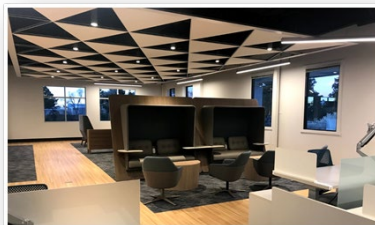


# NET Academy Purpose

- Why: Reduce initial training cycle times while improving the overall **quality** of the onboarding/orientation and initial training experience.
- Who:
  - Incoming new hires to nuclear facility operational groups requiring completion of **Glovebox Operator** and **Fissionable Material Handler (FMH)** training programs.
  - Expansion programs are currently being piloted based on directorate needs.
- When: Recurring **quarterly** cycle of cohorts made up of **30+** new hires at a time, evolving into more frequent, smaller sized cohorts over time.



# Locations



JAN2020

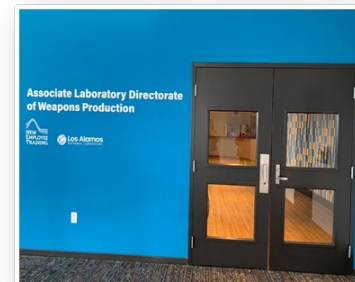
MAY2021

FY22

**NET – Bottom Floor**  
*TA-00 Bldg.1355*

**NET – Top Floor**  
*TA-00 Bldg.1355*

**TRIDENT**  
*TA-35 Bldg.0189*



Pre-Existing

**PF-39 Cold Lab**  
*TA-55*



Pre-Existing

**PF-4**  
*TA-55*



# Identification of Need



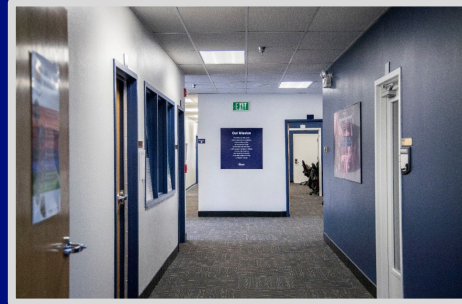
Glovebox (Training Photo)

# Pre-NET Insights

- FMH and GBO candidates were assigned training, provided a binder, and expected to rely on their home organization for guidance.
  - This guidance from the home organization was difficult to obtain because the employee was uncleared with limited opportunities to train in their work area (varied by group).
- New employees set up in “fishbowl” rooms with escorts and inconsistent home organization interaction.
- 18-24 months (on average) to complete FMH/GBO programs.
- Candidates struggled with the exam phase due to lack of guidance and mentorship.

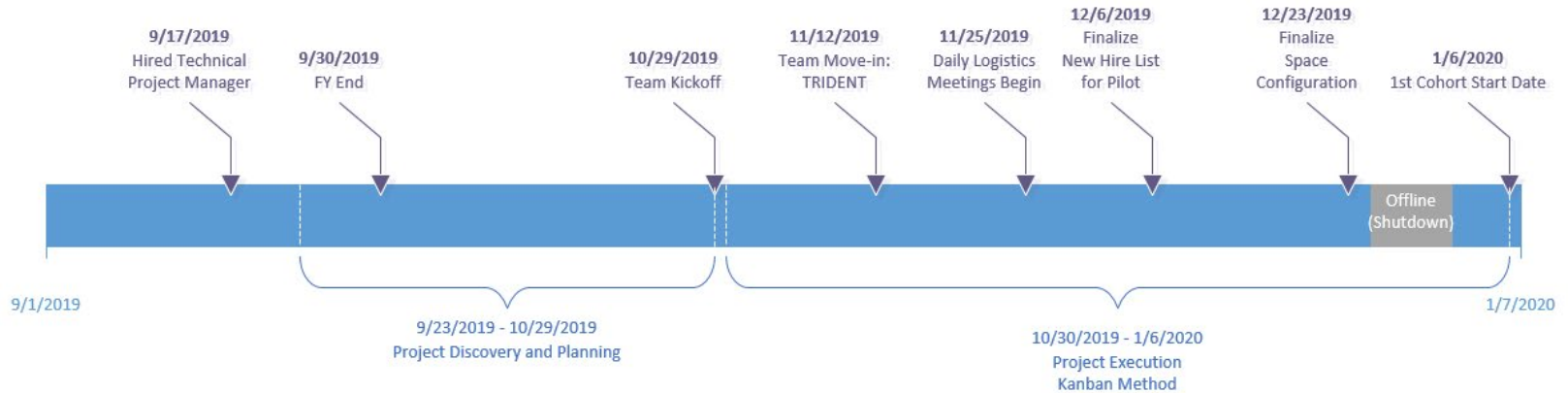
**Summary of Challenges:** Obtaining clearance, tracking progress, staff support, lack of quality in training.

# Initial Project Effort



Top: TRIDENT Building Remodel  
Bottom: The first NET Academy  
Cohort, January 2020

# Initial Project



# The NET “How”

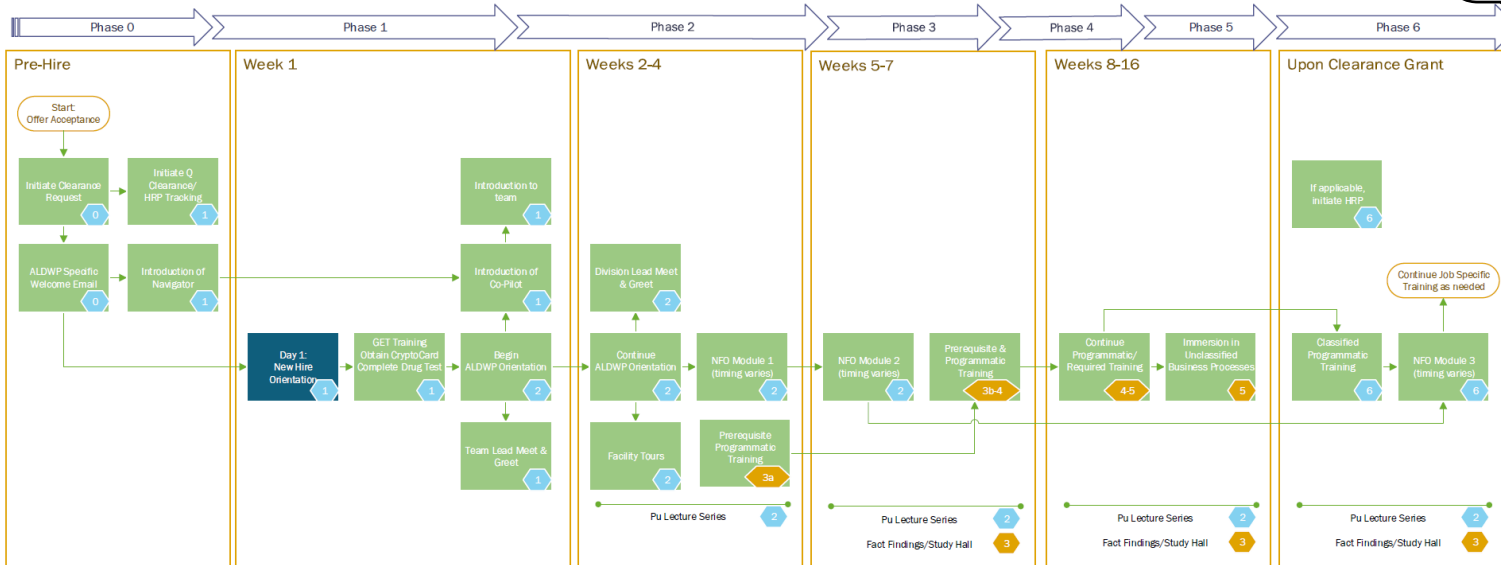
- Temporary Transfer (Form B Agreement)
  - 30 cohort members, starting on a quarterly basis
- Intake Agreement
  - Sets expectations for Academy model participation
- Individual Training Plan (ITP)
  - Identifies individual training needs
- Progress Reports
  - Sent to home organization regularly



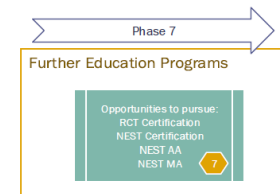
# How – Phased Approach

*“The NET schedule was coordinated quite effectively and organized well, especially considering COVID.”*

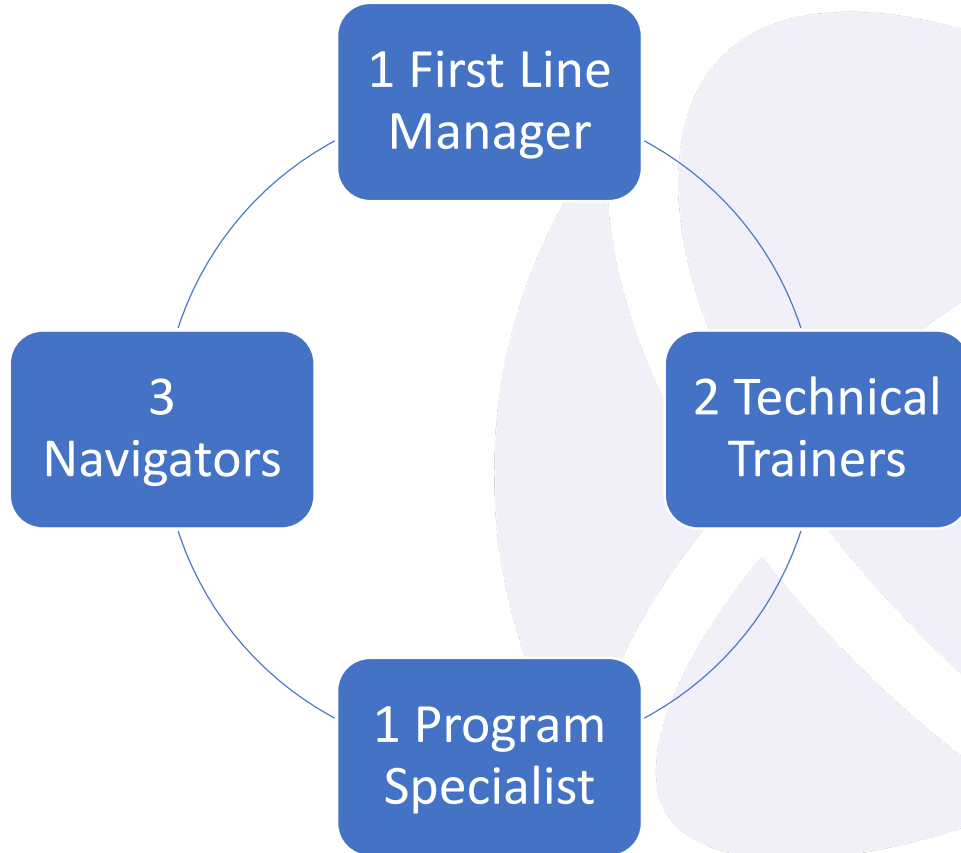
-NET Academy participant



- References specific phases throughout NET – All Employees
- References specific phases throughout NET – FMH/GB Workers Only



# The Original Team



# TRIDENT



## Uncleared Seating

The TRIDENT facility offered individual desk spaces for cohort members in an uncleared area.



## Classroom Facilities

The NET Classroom accommodated the full initial cohort for classes.



## Hands-On Practice

The TRIDENT Facility offered spaces for hands-on training and skill practice.

Note: Gloveboxes added after initial cohort

# Subsequent Enhancements



Top: New Facility opened May 2021  
Bottom: Cohort members at the new  
NET facility

# NET Academy Phases



- (Everyone: First 2 weeks) encompasses initial onboarding for ALDWP new hires. That includes: HR Orientation, e-QIP, ALDWP Orientation, Institutional Training pre-requisites, NET Core Foundation courses, completion of new hire paperwork, etc.

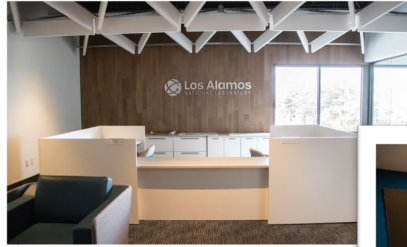
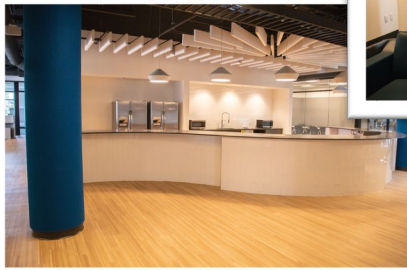
- (NET Academy: 0-3 months) This phase entails the initial instruction on qualification and certification programs for nuclear facility workers supporting programmatic operations within ALDWP. This includes initial and pre-requisite required reads, on-the-job (OJT) training, attending instructor-led courses for their respective tracks, and completing foundational courses on a variety of topics.

- (NET Academy: 4 - 6 months) During subsequent phases, cohort members will complete supervised mentorship, comprehensive and oral exams, and OJT training as they transition to their permanent home organization. The goal of Phases 2+ is that each cohort member “graduates” successfully by completing their required qualification and/or certification programs.

# NET Tracks

- FMH/GBO Operators
  - Complete Glovebox Operator Level 1 Qualification
  - Complete Fissionable Material Handler Certification
- Non-Destructive Assay (NDA) Operator
  - Complete Fissionable Material Handler Certification
- Waste Operator Track
  - Complete Fissionable Material Handler Certification (if required)
  - Tracks aligned to Waste Qualification Standards as applicable
- Process Engineer Track
  - Complete Glovebox Operator Level 1 Qualification (if required)
  - Complete Fissionable Material Handler Certification
  - Conduct of Engineering Process Engineer Training
- FMH Supervisor/Manager
  - Complete Glovebox Operator Level 1 Qualification (if required)
  - Complete Fissionable Material Handler Supervisor Certification

# NET Building



## Collaborative Spaces

Collaborative spaces allow opportunities for study groups to meet in a variety of areas, with tools such as whiteboards on wheels available for use.

## Break Areas

Break areas accommodate the large number of people seated in the facility for storing their lunches.

## Classrooms

The large NET Classroom doubles the capacity of the classroom used previously at TRIDENT, and can be split into two rooms for simultaneous classes.

## Meeting and Study Rooms

Meeting rooms and Study Rooms, including a Reading Room, provide plenty of space for small class sessions, study groups, or independent quiet study time.

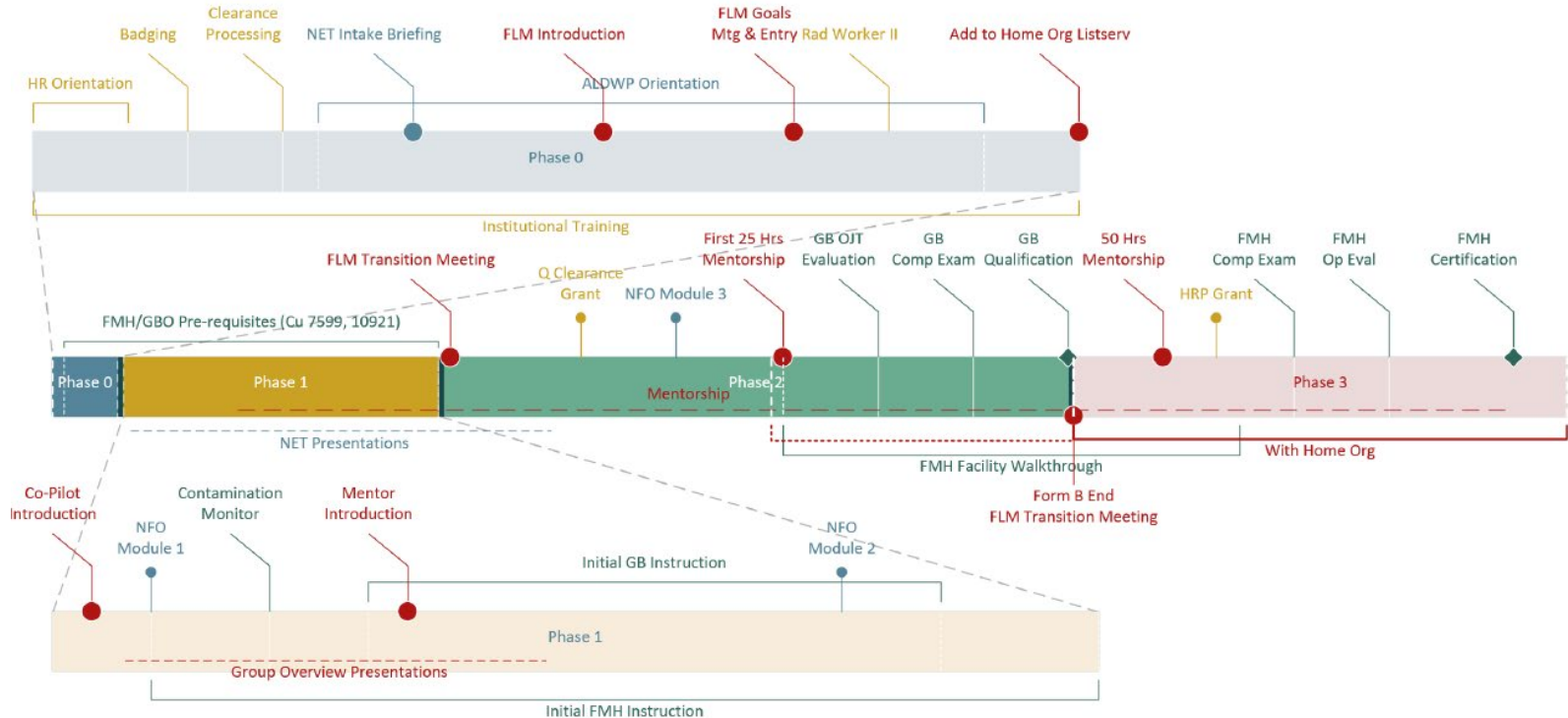
# Maturity of the Programs and Current State



Staff and a Cohort member at the new NET facility



# NET Timeline (Example: FMH/GBO Operator Track)



# NET Graduation Timeline Improvements

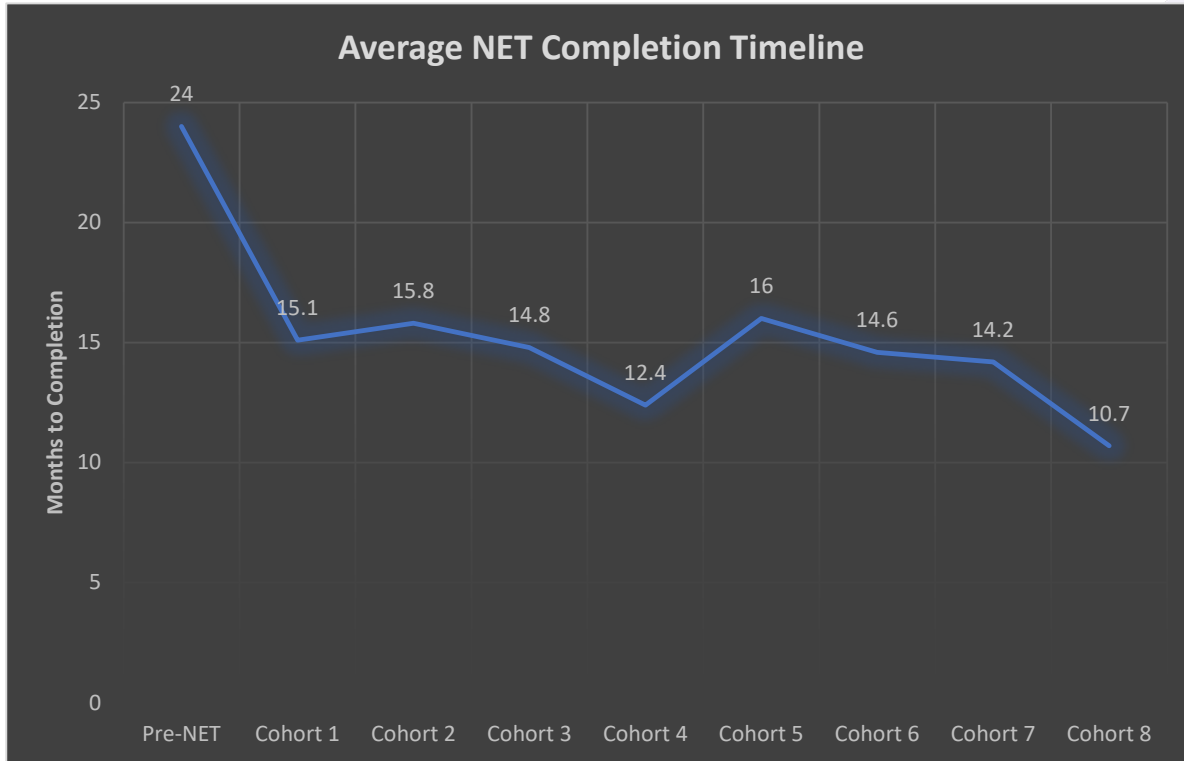
"I am excited to be here and the NET staff were unwavering in ensuring we felt welcome and wanted during these unprecedented times."

-NET Academy participant

## NET Academy Average Cycle Times

Milestones	Pre-NET Academy	NET Academy <i>Data as of 8/23/2022</i>	Target
Q-Clearance Grant	6-12+ months	3.76 months	3-4 months
HRP Certification	~3-6 months <i>post-Q-Clearance Grant</i>	7.3 months <i>from start date</i>	4-5 months
Glovebox Operator (GBO) Qualification	9-18 months	9.2 months	6 months
Fissionable Material Handler (FMH) Certification	12-24 months	13.8 months	9 months
<b>New!</b> Process Engineer (PrE)	18-24+ months	N/A	12 months

# NET Cycle Time



- Prior to NET, the average time to complete FMH/GBO was 18-24 months
- Average timelines for NET cohorts have declined significantly and continue to approach the goal of 9 months.

# NET by Numbers

- NET Academy has admitted 452 full Academy participants!
  - 347 FMH/GBO Operators
  - 16 FMH Supervisors
  - 54 Process Engineers
  - 35 Waste Operators
- NET Academy has produced (full Academy participants):
  - 154 Certified Fissionable Material Handlers
  - 239 Qualified Glovebox Operators
  - 4 Certified FMH Supervisors
  - 8 Qualified Waste Operators

# NET Academy Components

## Form B Agreement

Enables NET to manage initial trainees, providing extensive support. Employees encouraged to spend time with home org. Exceptions considered on a case-by-case basis.

## ALDWP Orientation Curricula

ALDWP Orientation  
Immersive Conduct of Operations  
Nuclear Safety Culture  
TA-55 Waste Management  
Pu Infrastructure at LANL  
NET Special Presentations (choose 6)

## ALDWP Group Overviews

Group Leaders or delegates are invited to present on their scope of work and team capabilities to build awareness of ALDWP functions/capabilities.

## NET Core Curricula

NET Core Classes  
First Aid/CPR  
Required Readings  
(Safety/Compliance-based)

## Pre-requisite curricula Initial Instruction

For applicable training program(s)

## NET Supplemental Instruction for applicable training program(s)

Required Readings  
Topical Study Halls  
OJT Instruction  
Oral Board Practices

## Mentorship Requirement

Mentors with >2 years qualified/certified  
  
25 hours/50 hours

## Evaluations

For applicable training program(s)

# Onboarding Experience Comments

- “This is a great thing that has been started, and I hope the Lab as a whole recognizes the importance of getting people started out on the right foot.”
- “You guys did terrific! I am excited to be here and the NET staff were unwavering in ensuring we felt welcome and wanted during these unprecedented times. Thank you all!”
- “Great introduction to the Lab and ALDWP. Staff is friendly and willing to help or find help.”
- “Guidance through ALDWP program was well done. Also did a great job with the transitions into LANL as a whole.”
- “I learned how to search for the answers I need, I learned to focus on safety, process and procedure, and to deal with paperwork.”
- “The NET staff is a highly skilled team that is articulate and objective. They have coordinated and delivered an extremely effective learning structure to support and develop teams that will advance the course of nuclear science. I have witnessed how the NET staff shares a strong position on communication and counseling towards the NET cohort participants. This promotes trust, cooperation and respect. These are strong values from a strong team and it was an honor to engage and learn from them.”

# ALDWP New Employee Onboarding

## Day 1: HR (Virtual)

- Institutional Orientation

## Day 2: HR (Virtual)

- Institutional Orientation

## Day 3: Badging → NET

- Badging
- NET Onsite Arrival
- Temporary Work Station Assignment
- Temporary Computer Assignment
- Cache credentials
- Overview of int.lanl.gov and how to access Utrain
- Receive checklists of institutional training assignments
- Clearance Processing Presentation LIVE

## Day 4: NET

- ALDWP Orientation Session 1 & 2 LIVE at NET
- Break/Lunch/Home Org Interaction/Copilot/Mentor
- Clearance Processing 1:1 assistance

## Day 5: NET

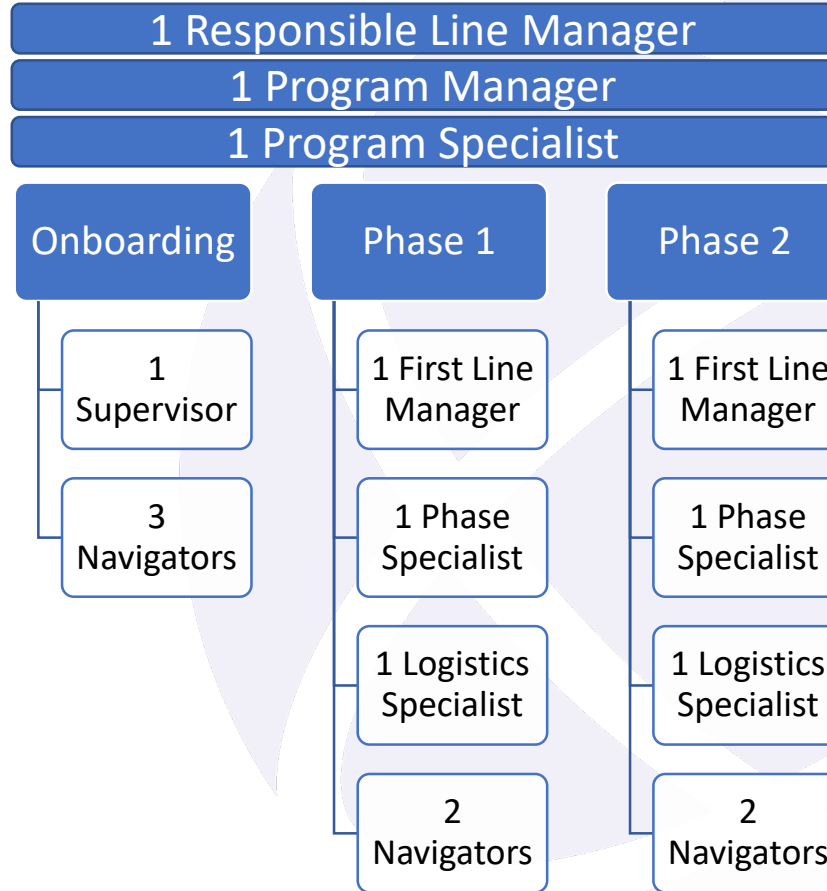
- Continue initial training assignments (GET)
- Demonstration Session Overview LIVE
- Fidelity
- Relocation
- Continue and complete any outstanding HR, Benefits and Payroll paperwork
- Windshield TOUR
- eQIP
- UTrain Web-Based Training for Users

## Day 6: Return to Home Organization

- Assigned workstation and computer
- Meet with copilot/mentor
- Additional training assignments assigned

# The Current Team

4  
Technical  
Trainers





# Future State



Cohort members at the new NET facility

# Future Developments

- Obtain new software for tracking training needs and completion
- Continue to Reduce Cycle Time
  - Goal GBO Qualification: 6 months
  - Goal FMH Certification: 9 months
- Expand Training Program Offerings
  - Glovebox Level 2 OJTs
  - Functional Programmatic Operator (FPO) Certification
- Training Facility Enhancements
  - Additional hands-on training space

**Thank you.**

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