

Research & Education

by John Barnhard Director of Research & Education

Foreman Training Moves to the Northwest



Roofers Local 54 and the Seattle Area Roofers Apprentice Program hosted a two-day foreman training program on June 4 and June 5. The 18 participants also included foremen and instructors from Local 190, Anchorage, AK.

The instructors for the class were Pat Gilliland of Seattle Local 54; Clint Mapes, Coordinator for the Oregon & Southwest Washington Roofers and Waterproofers JATC; Joel Gonzales, Oregon & Southwest Washington Roofers and Waterproofers Curriculum Coordinator; and Lupe Corral, Coordinator for the Southern California Roofers & Waterproofers JATC.

Including the training in Seattle, the International Union has delivered 14 two-day programs around the country since its initial rollout in February 2009, reaching almost 300 foremen and instructors. Eleven instructors can now deliver this training, and more instructors will continue to be integrated as this program moves forward.

The highly interactive program now comprises seven modules: *Communication Skills, Problem Solving Skills, Safety Skills, Teaching Skills, Reporting Information Skills,* Math and Measurement Skills and Managing the Project and Workforce Skills. The last module—Managing the Project and Workforce Skills—has recently been completed and will be ready for delivery in upcoming foreman training programs.

The training program continues to rate highly among the foremen attendees, leaving many attendees eager for more. All have regarded the training as valuable, and many have learned skills that will make them more effective leaders:

"A wonderful experience. I learned a lot about myself." "It was perfect. It taught us how to be better foremen and how to communicate better with our co-workers."

"I think this is a nice opportunity to get participation from all the foremen. I learned a lot and am going to put all of these skills into practice."

"The instructors kept our attention without boring us."

During the courses conducted over the past year and a half, participants learned the roles and responsibilities of foremen, as well as how to communicate more effectively, apply problem-solving skills, sharpen their teaching skills, understand their critical role in job safety, refresh their math skills, and document and maintain records.

With the integration of the new module—Managing the Project and Workforce Skills—foremen will improve their skills in these areas: Reading Plans and Specifications; Planning and Starting the Project; Motivating and Reinforcing Workers; Leadership; and Dealing with Conflict.

SEATTLE, WA (06/04 - 06/05/2010)

David Ames Bernardo Ibarra Ted Puetz Alberto Baez Jeremy J. Joy (#190) Susan Roach Jose Baez Tony Kimbrough

Bernie Rudsit Anthony Bergeson Loren Marchand James Russo (#190) Richard Brandenburg (#190) Isaiah Piquette Ryan Tait Steve Hurley Robert Pounds Anthony Toro



Participants in the Seattle Local 54 Foreman Training included two business managers who completed the class. Front row from left: Instructor Clint Mapes, Jose Baez, Alberto Baez, Bernardo Ibarra, Local 54 Business Manager Steve Hurley (kneeling), Susan Roach, Tony Kimbrough, Isaiah Piquette, Anthony Toro, Instructor Lupe Corral and Instructor Joel Gonzales. Back row from left: Local 54 Apprenticeship Coordinator Gregg Gibeau, Robert Pounds, Loren Marchand, Ryan Tait, David Ames, James Russo, Jeremy Joy, Ted Puetz, Bernie Rudsit, Anthony Bergeson, Local 190 Business Manager Richard Brandenburg and Instructor Pat Gilliland.





International Representative Paul Blaski (left) chats with instructors prior to the start of the foreman training program in Seattle. In his opening remarks, he welcomed the foreman attendees, emphasized the support of the International Union and the national labor and management committee and reiterated the importance of this training to our industry.



Instructors Gregg Gibeau and Clint Mapes team up to deliver the module on Math and Measurement Skills.



Instructor Joel Gonzalez covers difficult but important topics on diversity and sexual harassment in the workplace. It's important that foremen recognize our changing workforce and understand diversity and discrimination laws.



Foremen pair up to work through an exercise in listening skills introduced by Instructor Clint Mapes.



In the safety exercises on fall protection, attendees were grouped in teams of four to work up the fall protection methods for specific job scenarios and then present their solutions to the entire class. This group was obviously very demonstrative about their work.



Instructor Lupe Corral leads foremen through the module on problem solving. To be a good problem solver and decision maker, foremen must combine intelligence, creative thinking and communication skills.



Instructor Pat Gilliland opens the foreman training program with the Communication Skills module and the role of foremen and their responsibilities.



RAPTOR Program Provides Training for Native Americans

Building trades across the nation have been reaching out to Native American communities in order to establish training and job opportunities on tribal land, but Roofers have taken it one step further. Roofing apprenticeship leaders in the Oregon area have set a new standard with a recently developed program, known as RAPTOR, geared towards Native American citizens interested in a roofing career.

RAPTOR stands for Roofing Apprenticeship Preparation, Training, and Occupational Readiness. It's a full-time, three-week course that covers all the fundamentals of the roofing industry, and it's only available to men and women who have federal tribal registration. Applicants are also required to have a valid Social Security card and driver's license; pass a hair follicle drug test and background check; be able to relocate; have personal transportation; and have earned a GED or high school diploma. Program attendees are then chosen from a pool, interviewed and selected based upon all the data.

The competition may be stiff, but the rewards are great. Students receive boots, Carhart pants, and safety gear such as hard hats, safety glasses, ear protection and gloves. Each student is also provided with all standard hand tools a roofer needs: hammer, tape, chalk box, single-ply probe, tool pouch, etc. This package is worth about \$600.



Each morning of the RAPTOR program begins with physical activity.



Torching down a modified.

The program itself is somewhat demanding. Each morning, class starts off with a two-mile run. The curriculum includes an OSHA 10-hour class, an 8-hour economics class for preparing for the winter, first aid/CPR, exposure to the four disciplines of roofing (BUR, single-ply, steep and safety) and lecture on the culture of roofing and waterproofing and the Roofers Code of Conduct.

For hands-on experience, students partake in time trials where they move cap sheet rolls or nail base in a specified time period. Mock-roof simulations are also provided to identify common hidden roof hazards. Contractors regularly stop in to monitor progress

Clint Mapes, Director of the Oregon & SW Washington Roofers & Waterproofers JATC, was proud to unroll the first RAPTOR program over the summer. Five men and one woman, ranging in age from 21 to late 30s, successfully finished the course. At the end of the program, all graduates were sent out to contractors for work. Today, with the exception of one student, says Clint, "all RAPTOR graduates are still working happily in the industry."

Brother Mapes was especially impressed with the female student. A second RAPTOR program takes place in August—and this time, two females have been chosen to participate. "If these two are anything like the last one, the boys better watch out," says Mapes.



Graduates of the first RAPTOR program display their certificates of completion.



A RAPTOR student shingles on a mock-up.



Northern California Hosts



On the new training center rooftop, Bay Area Counties Roofing and Waterproofing Training Director Dan Smith (sixth from left) leads conference participants in a mock Job Hazard Analysis with Dr. J. Nigel Ellis (second from left). At left is John Barnhard, International Director of Research and Education.

The Roofers & Waterproofers Research and Education Joint Trust Fund sponsored seven 'Roofing Industry Fall Protection Conferences & Exhibits' in 2010 with funding from the OSHA Susan Harwood Grant Program.

In June, the Bay Area Counties Roofing and Waterproofing Apprentice Program hosted the last two conferences of the year at its new training facility in Livermore, CA. "It was a great way to kick off the opening of our new facility," said Training Director Dan Smith.

The conferences are designed for owners, supervisors, foremen, and competent persons. The aim is 100% fall protection in roofing. At all conferences, participants came with skepticism and left with the positive belief that 100% fall protection in roofing can be achieved.

Each 'Conference & Exhibit' is a mix of interactive team exercises, panels moderated by experts and hands-on exhibits of the latest fall-protection equipment for the roofing industry.

A total of 14 'Roofing Industry Fall Protection Conferences & Exhibits' have been held since 2006 with funding from the U.S. DOL Occupational Safety & Health Administration. Panelists were internationally recognized fall protection expert Dr. J. Nigel Ellis, Ph.D. CSP, P.E., CPE; CAL/OSHA safety engineers Steve Fenton and Patrick Bell; State Insurance Fund representatives Ray Alba and Malcom Desai; and Steve Johnson, Safety Director for the Associated Roofing Contractors of the Bay Area Counties.

Lead presenter was Brock Hamre, MS, Twin Cities Roofing Contractors Association Safety Director.



A team of Bay Area participants works together to find 100% fallprotection solutions in group problem-solving exercises with the aid of the internationally recognized fall-protection expert, Dr. J. Nigel Ellis (top right).



CAL/OSHA Senior Safety Engineer Steve Fenton talks about the human tragedy he feels when he investigates fall fatalities. Steve also provided detail about inspections and technical assistance services.

Participants were recruited by Training Director Dan Smith and José Padilla, Director of Apprentice Training for the Bay Area Counties Roofing and Waterproofing Apprentice Program.



Two Fall Conferences

Equipment exhibitors included Capital Safety/ DBI/SALA for PFAS and Drop Test; AES Raptor for Mobile Fall Protection, Skynet, and RaptorRail; and Nor-Cal Scaffold of San Leandro, CA, for stair towers.

A conference highlight is team exercises. Participants break into small groups for problemsolving. As each group's fall-protection solutions are presented, the expert panel members point out flaws and recommend additional solutions.



Above, Chris Coyle of Capital Safety demonstrates personal fall-arrest equipment for conference participants. Below, Vice President Jeff Vannatta (left) of AES Raptor gives a hands-on demonstration of the mobile fall-protection cart. Up to three roofers can tie off personal fall arrest systems to the cart, providing a safe anchorage option on roofs where no anchors exist.

OSHA funds all the national conferences through a grant to the Roofers & Waterproofers Research and Education Joint Trust. The Trust designed and organized the conferences with local JATCs and with help from FOF Communications.





Dr. J. Nigel Ellis explains the difference that anchor height makes in personal fall restraint during his analysis of solutions to problem-solving exercises. At right is lead presenter Brock Hamre.

Ladder or Stair Tower?

Ladders accounted for 17% of all fatal falls in 2008. The Fall Conferences encourage safe alternatives such as stair towers. There is no record of anyone taking a fatal fall from a stair tower.

Given a choice of a ladder or a stair tower at the Livermore conferences, 100% of participants chose the stairs. All 17 participants in the group below climbed the stair tower in a total of 150 seconds. The ladder would take 26 minutes.

Going up and down ladders can waste a lot of crew time. One Northeast contractor finds a stair tower pays for itself on jobs of just one week or longer.

If stairs were always used, 17% of fatal falls would be prevented. In the long run, lower rates of deaths and injuries will translate into lower insurance rates, an important benefit on top of saving lives and preventing disabling injuries.



Stair tower by Nor-Cal of San Leandro, CA.