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MINUTES FROM DAY 2 OF THE ADVISORY COMMITTEE FOR GENERAL INDUSTRY SAFETY ORDERS, SECTION 3657 AND NEW SECTION 3458.2, DATE PALM OPERATIONS

April 14, 2021
Virtual Meeting Using Zoom

1. Call to Order.

The virtual meeting was called to order by the Advisory Committee Chair (AC Chair), David Kernazitskas, Senior Safety Engineer, Occupational Safety and Health Standards Board (Board), at 9:00 am on Wednesday, April 14, 2021, via Zoom. The AC Chair was assisted by Bernie Osburn, Associate Governmental Program Analyst, OSHSB, also appearing by Zoom.

2. Opening remarks.

The AC Chair welcomed the attendees and started the introductions of those who intended to speak during the committee meeting. He then reviewed the Standards Board policy regarding the use of advisory committees, explaining that the Board has found advisory committees to be an effective way to develop a proposal because of the expertise of the attendees. He also provided general information about the rulemaking process.

3. Discussion of the proposed rulemaking.

Background

The AC Chair explained that the advisory committee was convened as a follow up of Day 1 of the committee meeting, which took place on March 12, 2020, in Palm Desert, CA. He said that although the video conference was being hosted on Zoom, only a voice recording would be taken as a record of the meeting. Any video or comments using the chat function would not be part of the minutes resulting from the meeting. He then reviewed the progress from the first meeting, including some of the major points of disagreement.

3458.2(c)(2) Operator leaving the operator's position

During the recap, the AC Chair stated that everybody agreed during Day 1 that the lift truck operator should be able to leave the operating position as long as they remain within 25 feet of the lift truck.

Ralph Shirley (Professional Engineer, Test, Inc.) clarified that although nobody in the committee feels that the lift truck operator should be allowed to leave the operating position and travel less than 25 feet from the truck, several committee members feel that the operator should be allowed to travel much further than 25 feet from the truck.

Dave Mansheim (Bard Date Company) stated that his company's variance was reviewed by three senior safety engineers and they agreed that 150 feet was a safe and reasonable distance to allow the operator to move to while outside the driver's seat of the lift truck. He said that his company has over 13 million man-hours working under this variance with zero incidents. He requested that the committee view the training videos shown to the workers so we could see for ourselves the safety of the process. He warned that limiting the operator to be within 25 feet of the lift truck would kill the industry.

The AC Chair said that federal OSHA only allows the operator to be as far as 25 feet from the operating position when the forks are lowered. He said that federal OSHA may have concerns with allowing the operator to leave the lift truck and remain within 25 feet while the forks are still elevated. He opined that it would be more difficult to justify going beyond 25 feet.

James DuFour (Dufour Law) said he was concerned that we were locking ourselves into a certain perspective by using consensus and federal standards to apply to this unique industry. He said we were not looking at the context of the federal standard. He pointed out that 29 CFR section 1910.178, which addresses powered industrial trucks, says that farm vehicles are excluded from the regulation. He said he was not sure if that would exclude the lift trucks or not, but that we should consider the possibility. He also said that the national consensus standards may not be directly applicable to the date palm industry because they are written with manufacturers in mind.

Albert Keck (California Date Commission / Hadley Date Gardens) said that there has been a lack of direct observation of the process and suggested we visit the area to view the date palm operations in person. He said that the California legislature has officially declared the date industry to be a very important industry to the state's economy.

Lorena Martinez (California Rural Legal Assistance, Inc.) said that the purpose of having an operator nearby was to help protect the employees. She said that she has heard stories of workers injured because the hydraulics on the lift truck failed and the operator was not nearby.

Mr. Mansheim said that he was concerned with any injuries in the fields, but that in his experience of over 13 million man-hours of work at Bard Date Company he has not had any injuries from using the platforms to harvest dates. He said that the present method of harvesting the dates was the safest process worldwide.

Marti Chavez (Anthony Vineyards, Inc.) suggested that we move forward. The AC Chair said that we would revisit the discussion in the future.

Proposed subsection 3458.2(b)(1) Platform inspection

The AC Chair read the proposed changes to the draft text resulting from the Day 1 discussion. He explained that the amended text is similar to language used in section 3328(a)(2) regarding machinery and equipment. He said that the text would help to ensure that the platforms were inspected, maintained and operated as recommended by the manufacturer, or where such recommendations do not exist, the engineered design. No objections were expressed.

Proposed subsection 3458.2(b)(2) Evaluation of lift truck / platform pairings

Mr. Mansheim expressed concerns with having a qualified professional engineer (QPE) inspect each lift truck and platform combination. He said that the language should indicate that the program developed by Ralph Shirley, or something similar, would be sufficient to determine the safety of the work platform and lift truck in use.

Mr. Shirley said he was concerned that each lift truck and platform would need to be evaluated in person by a professional engineer. He said that the language should clearly state that qualified employees should be able to use a process designed by a QPE to perform the inspections.

The AC Chair asked the Division representatives for their thoughts on the evaluation. **Yancy Yap** (Division of Occupational Safety and Health) said that the evaluation should take place before the lift truck and platform are placed into service. He said that he intended the regulation to require that a specific work platform be evaluated for use with a specific lift truck and that the load analysis calculations be performed by a QPE.

Jason Denning (Cal/OSHA) said that an employee qualified to perform the load analysis would need to be a professional engineer. He said that we should state that an engineer is required to avoid confusion in complying with the regulation and in performing the proper analysis.

The AC Chair asked if everybody agreed that a QPE should perform the initial load analysis for determining if a lift truck could safely operate with a specific work platform. **Mr. Shirley** said that he disagreed. He explained that there are several standards available to evaluate materials and processes that are written by engineers, but not necessarily used by engineers. He said that they are written for use in a process to allow non-engineers to perform the analysis. He said that the analysis did not need to be repeated annually for each piece of equipment because the process is already established.

Mr. Denning said that annual analysis would not be necessary. **Mr. Shirley** said that the machines are used only for a few months each year and that each year new lift trucks are rented and paired with the platforms.

Mr. Denning said that was his concern. He wanted to ensure that each lift truck was evaluated with a specific platform before being placed into service. If the lift truck were changed, he said that the load analysis would need to be performed again to ensure the lift truck could safely handle the intended load.

Mr. Mansheim said that Mr. Shirley's program was used to perform such an analysis, but that it could be used by non-engineers who are trained in its use. He said that it would be very helpful for us to come and see the process in person. He said that would explain the process and we could verify the process.

The AC Chair suggested changing the language to require that the process be overseen by a QPE. **Mr. Shirley** suggested that the process be established by a QPE.

The AC Chair asked Mr. Shirley to describe the program he developed for use in evaluating lift truck and platform pairings.

Mr. Shirley said there were 10 pieces of information that need to go into the program. He said five pieces of information came from the lift truck and five from the basket. He said the program output told the employer how and where to mount a proof load. He said the proof load was equivalent to the weight of the basket and the anticipated personnel that would use the basket. He said that the procedure was more than an evaluation, but rather a test which verified that the basket would not yield under the proof load.

He then said a second load test is performed beyond the end of the basket to account for employees that are working beyond the center of gravity. He said it was not a simple test to run and requiring an engineer to go out into the field to run all of the evaluations is time consuming and unnecessary. He said that the process is clear and that using qualified technicians to perform the test is sufficient. He said that the program produces a label that is placed on the lift truck indicating the number of people that can be on the platform.

He said the program uses a process that does not need to be developed a dozen times. He said that the process could be codified into the standard with enough detail that it could be repeated as necessary to safely allow the use of the platforms.

Mr. Mansheim said that he has a PowerPoint Presentation, which is used to provide training on using the program to evaluate the baskets and lift trucks. He said the presentation shows how lasers are used to confirm that the metal of the baskets does not yield during the proof load test. He said that he could demonstrate the process during an onsite visit.

Mr. Yap said that the process described by Mr. Shirley was what he hoped the language in subsection (b)(2) would require. He said that when Mr. Shirley retired, he was concerned that new equipment would need to be re-evaluated in a similar manner. **Mr. Shirley** said he disagreed with the text requiring the evaluation be performed by a QPE registered in the state of California. He said the process should be evaluated by the QPE, but that it was not necessary for the lift trucks themselves to be evaluated by a QPE. He said that with the proper training, the evaluation could be performed by non-engineers.

The AC Chair suggested discussing what the committee wanted the requirements to be and then finding language that would meet that objective. He said that the growers would use different forklifts each season and that the evaluation would require a high degree of expertise to establish. **Mr. Shirley** said that he agreed that the process should be established by a QPE. **Mr. Denning** said that he thought we were all saying the same thing, but that we have not found the correct language to describe it. **Mr. Yap** said that he was okay with the process being established by a QPE.

Mr. Yap said that he wanted a QPE to determine that every particular work platform was safe to use with a particular lift truck. He said that once a QPE has made the determination, anyone in the industry could rely upon the determination. The AC Chair asked if the QPE had to input the data into the program or if someone else could. **Mr. Yap** said that the QPE would be responsible for the results of the test, no matter who input the data.

Mr. Shirley said that Mr. Yap's assertion was incorrect. He said that it would help to sit down together and discuss the program. He explained that the program was first developed in 2008 and is now part of a spreadsheet. He said that due to technological advances in computers and software that the spreadsheet would someday be obsolete. He said that it was necessary to capture the requirements of the spreadsheet in the regulation, but not the spreadsheet itself.

Mr. Yap suggested language requiring that the evaluation of the lift truck and platform pairing be overseen by a QPE. **Mr. Shirley** responded that the proposed requirement would not be acceptable. **Mr. Shirley** said that having an engineer present to take physical measurements and perform the proof load test is not necessary. **Mr. Yap** said that the procedures could be performed by technicians as long as the QPE developed the procedures. **Mr. Shirley** said that the process should be mandated by regulation so that it would not need to be developed by a QPE.

Mr. Denning suggested the text require a QPE to determine the safe loading of the lift truck with attached platform in accordance with good engineering practice before the equipment is placed into service. He asked Mr. Yap's opinion on the suggestion. **Mr. Yap** responded that he agreed with the suggestion.

Mr. Mansheim said that the committee was not understanding the concerns of the California Date Commission. He compared the process to a pilot doing preflight checks. He said that the pilot inputs several pieces of data before flying to ensure that the plane is able to take off and fly safely. He said that the pilot is trained to know which conditions are required for a safe flight even if the pilot is not an engineer. He said that in the same way the lift truck operators can be trained to know how to safely operate the lift trucks with their platforms. He said the math behind the calculations does not change. He said that the regulation should spell out the conditions that must be met to operate the lift truck and platform pair safely.

The AC Chair asked if Mr. Denning's proposed language met the requirements that Mr. Mansheim was describing. **Mr. Mansheim** responded that he wanted the requirements to be spelled out so that there was no confusion on what was required. He said that the language should require that the process be designed and controlled by a QPE, while allowing a qualified person to input the data. He then said that we could place requirements on what makes one qualified in the text as well.

Mr. Shirley said that during the variance process the focus was on good engineering practice and that it has worked well for about 15 years. He said that the language should be similar to the variance requirements. He said that if Cal/OSHA had anything to add, that could be done as well.

Mr. Denning said that the intent of his proposed language was not to have the QPE come onsite to perform the evaluation each time it was required. He said that he agreed with Mr. Shirley's intent. **Mr. Yap** said that having a QPE oversee the process may be too vague. He said that a QPE should view every pairing of a lift truck and platform so that anyone in the industry who uses the same pairing would already know that they will work well together.

The AC Chair asked Mr. Yap if he wanted a QPE to evaluate every lift truck and every work platform. **Mr. Yap** said that he did. He said that it would be required to ensure the safety of the platform occupants.

Mr. Mansheim explained that every single forklift and platform pair had been evaluated by the manufacturer. He said that the manufacturer provided the measurements and that the engineer's program took those measurements into account. Again, he compared the date palm situation to an airline pilot who uses similar information provided by the aircraft manufacturer to determine the conditions necessary for a safe flight. He said that the lift truck operators can be trained to know how many occupants can safely work from the personnel platform and why. He said that the math has been done by an engineer already, but the calculations are used by trained personnel to ensure that the lift truck can safely operate with the loaded platform.

Mr. Yap responded that the pilot is comparable to the lift truck operator in the aviation example. He said that if the airplane had the engine changed out, the engineers would do the calculations to determine the safe operating parameters for the modified aircraft. He said that he would not want the pilots performing such work.

Mr. Mansheim said that he agreed with Mr. Yap. **Mr. Mansheim** said that if there is any major modification to the aircraft or the personnel platform, the platform should be re-evaluated for safety. He said that the baskets are re-tested for strength and stability using the engineer's prescribed process.

Mr. Yap said that a new platform and lift pairing should be evaluated by an engineer. **Mr. Mansheim** said that the trained technicians can use the parameters of the lift truck and platform to ensure the safety of the pair, but the engineer developed the program to calculate and test the pairing.

The AC Chair said that the committee could look at the word "safe" in the proposed text to explain more precisely what would be considered "safe". He suggested clarifying the language to state what is expected to consider a pairing "safe". He said that having an engineer inspect and validate every pairing individually would not be feasible or necessary. He said that as long

as the engineer has developed the process, the engineer should not be expected to perform the tests personally.

Mr. Yap said that he disagreed with the wording of the proposed text. He said he did not like the engineer being involved in only developing the procedure to evaluate the pairs. He said that he wanted the engineer or a qualified person working under the direction of the engineer performing the evaluations personally.

Mr. Shirley said that Mr. Yap's request was problematic. He said that it could lead to engineers taking shortcuts. **Mr. Yap** said that the engineers would be in violation of the code of ethics of a professional engineer if they took shortcuts. **Mr. Shirley** said that we should specify the process necessary to evaluate the pairings instead of the qualifications of the engineer to help protect against unqualified people performing the evaluations.

Mr. Denning said that as long as the engineer has considered the specific pairing of the lift and platform to be used he would consider that acceptable. **Mr. Mansheim** said that the engineer should develop the program to evaluate the pairing and lock down the process so that it cannot be modified, except by the engineer. **Mr. Denning** said that he would not want the operators to determine the center of gravity of a pairing. **Mr. Mansheim** said that an onsite visit to view the procedure would help alleviate Mr. Denning's concerns.

The AC Chair asked the industry for specific text to address their concerns since the text as proposed was not acceptable to them. **Mr. Shirley** said that the industry may need some time to develop the language and that it may be best to propose language after the onsite visit. **Mr. Yap** said that he was open to an onsite visit.

Proposed subsections 3458.2(b)(3) through (b)(5)

The AC Chair moved on to discuss proposed section 3458.2(b)(3) requiring paired lift trucks and personnel platforms to be evaluated before use. The committee had no concerns.

The AC Chair asked if there were any concerns with sections 3458.2(b)(4) or (5), which proposed editorial changes to the requirements for posting the maximum occupancy in the lift truck and on the personnel platform. **Edgar Galaviz** (Bard Valley Date Growers Association) said that the requirement was already part of their procedure. The committee agreed that the requirements were acceptable.

Proposed subsection 3458.2(b)(7) Tools on the platform

The AC Chair asked the committee if there was ever a need to have tools or equipment on the platform that were not related to date palm operations. He reminded them of the discussion on Day 1 where some committee members wanted to ensure that the prohibition would not prevent water or first aid supplies from being provided. He explained that a note was added to inform stakeholders that the proposed requirement would not prevent water or first aid supplies from being supplied and that other regulations may require their presence. Nobody expressed any concern with the text as proposed.

Proposed subsection 3458.2(b)(8) Available working area per platform occupant

The AC Chair asked if the proposed text would benefit from changing the requirement from "minimum working area" to "available working area". **Mr. Denning** and **Mr. Yap** said that "available" was better.

Mr. Mansheim said that he has concerns with the proposed eight square feet per platform occupant requirement. He said that the 20 inches by 20 inches that he proposed was from an American National Standards Institute (ANSI) standard. The AC Chair confirmed, explaining that ANSI B56.6 (2016 and later) recommended 500 millimeters by 500 millimeters, which converts to just under 20 inches by 20 inches.

Anne Katten (California Rural Legal Assistance Foundation) said that more space was necessary to prevent heat stress and for "basic humane conditions up in the basket."

Mr. Shirley said that eight square feet was unreasonable and exceeded any other standard that he was aware of.

Ms. Martinez said that workers were over crowded in the baskets and sometimes boxes were needed on the platforms that further crowded the workers. She said that having an overcrowded basket was not safe. **Mr. Mansheim** asked if the crowded baskets were used by employers using the existing variances. **Ms. Martinez** said that some of the complaints she has received have come from employees working for employers who participated in the Day 1 meeting. She also said that the weight of the harvested dates added to the weight of the platform. She explained that the added weight and the crowding of the platforms led to unsafe working conditions.

Rosemary Bautista (California Rural Legal Assistance, Inc.) said that she supported the requirement for eight square feet per occupant because of the safety concerns she has heard from workers.

The AC Chair asked if the industry knew how many people would fit on their larger baskets if they were required to have eight square feet per person. **Mr. Mansheim** said that he would have to get back to the committee with that information. He said that nobody wanted to go back to using ladders to harvest the dates. He said that the inner rails were about 20 inches apart and that he did not think that elbow room was a concern for his baskets.

The AC Chair asked Mr. Shirley if he designed the platforms using the 20 inches by 20 inches measurement from the ANSI standard. **Mr. Shirley** said that everybody designed their own baskets so he only evaluated the baskets from an engineering perspective to ensure they would withstand their loads as used. He said that he did not know if the baskets had eight square feet per person when filled to their maximum occupancy. He estimated that the baskets currently have about five square feet per person, but said we should come up with a workable number that fits what people are doing today.

Mr. Mansheim said that eight people was the maximum that should be allowed to work in a basket. He said that 12 was too many and should be prohibited.

Ms. Katten said that 20 inches by 20 inches per person is way too crowded, regardless of the number of people in the basket.

Mr. Yap asked if the industry had a number that they felt was adequate for the space between the workers. **Mr. Galaviz** said that the thinning process is the only process where the baskets are filled to capacity. He said that the baskets have more than 20 inches by 20 inches of space per occupant, although it is not required.

The AC Chair said that the discussion could be postponed until after a site visit.

Mr. Yap asked again if the industry had a specific number that would suffice for spacing between the workers. **Mr. Mansheim** said that he estimated that in all cases the workers are at least an arm's length apart. The AC Chair asked if the workers were spaced similarly even when performing thinning. **Mr. Mansheim** confirmed that even during thinning operations, he suspected that the workers had about an arm's length of distance between them.

Mr. Yap asked if it was one arm or two arm's length separation. **Mr. Mansheim** said that it was only one arm's length, but said he would discuss with other growers to come up with a number. **Mr. Shirley** said that on a 10 feet by 10 feet basket with a 20-inch wide separation between railings, employees would have about three feet of separation between them. He said that three feet between employees would equate to about five square feet of space per person.

Ms. Martinez said that boxes on the platform took up additional space and should be accounted for when determining the work space for employees. **Mr. Galaviz** said that during harvest, the boxes are necessary to hold the fruit. He said that only four to six employees were present on the basket for harvest operations.

Ms. Martinez said that not all date palms are thinned. Medjools are harvested differently than Douglas or Barhi, which do not require thinning.

The AC Chair asked where the eight square feet of space came from. **Ms. Katten** explained that the value was based on having a working area of 4 feet laterally and 2 feet front to back for the individual. She said that if the platforms were only 20 inches wide from front to back, that 20 inches could be used instead of two feet. She said that an arm's length of space was a step in the right direction. She said that an area of about four feet by two feet was acceptable to prevent heat stress or injuries from the use of sharp tools in a cramped space.

The Chair said that he would add the discussion to the list of follow up items for the committee.

Proposed subsection 3458.2(c)(1) Requirements for operator to leave the operating position

The AC Chair read the proposed text requiring the lift truck travel controls to be in neutral before exiting. **Mr. Shirley** said that lift trucks used to have manual transmissions and parking brakes, but that they are much more complicated today. He said that setting the brakes and putting the controls in neutral was an obsolete concept. He also said that chocking the wheels was even more antiquated than setting the parking brake. He suggested removing the references. He suggested the text say that the truck must be placed in its park position with the engine off.

Mr. Yap said that the requirements were taken from the current ANSI standards for lift trucks. **Mr. Shirley** said the language was archaic and a holdover from previous versions, but that it did not fit equipment in use today.

Mr. Mansheim said that the aircraft industry used generic language like "secure the vehicle according to the make and model." He said that the equipment should be parked in accordance with manufacturer recommendations.

The AC Chair suggested requiring the vehicle be secured according to manufacturer recommendations. **Mr. Yap** said that the term "secured" was too vague. **Mr. Shirley** said that requiring a manual transmission to be placed in neutral with the engine off would be contrary to manufacturer recommendations. He said that he agreed with Mr. Mansheim's suggestion to park the vehicle in accordance with manufacturer recommendations.

Mr. Yap said that he was concerned that if a vehicle was started while not in neutral that the truck would lurch forward, endangering the platform occupants. **Mr. Shirley** said that all equipment that he was aware of had a neutral start switch to prevent such occurrences. He said that in order to chock the wheels as proposed, the operator would need to leave the vehicle, which would be a violation of the proposed text to chock the wheels before exiting.

Mr. Denning suggested adding an exception to the requirement that trucks should not be placed in neutral when exiting. He said that some trucks may automatically apply a parking brake when the truck is turned off. **Mr. Yap** said that the language needed to take into account both old and modern equipment.

Mr. Galaviz said that the language should state that when exiting the lift truck the controls should be placed in a position that prevents movement in accordance with the manufacturer's recommendations. He said that the purpose of the requirement was to prevent movement of the lift truck while employees are elevated on the lift. **Mr. Yap** agreed with Mr. Galaviz's statement.

Mr. Shirley explained that the platforms are typically the same size across the industry because they need to fit around the same trees. He said that lift trucks are what vary and they determine how many people can be on the platform. He said that growers will rent different size lift trucks, depending on how many people they need to lift into the tree.

Mr. Galaviz said that platform sizes can change for different growers. He showed the committee a newer design of a horseshoe-shaped platform, which was developed for use in his orchards.

Mr. Shirley pointed out that the platform diagram shows about 20 inches of space between workers.

Mr. Mansheim said that he could measure various platforms to help determine the available working space.

The Chair asked for any thoughts on Mr. Galaviz's proposed text regarding exiting the lift truck.

Ms. Katten said that she would be more comfortable with having the engine shut off before the operator left the driver's seat.

Mr. Shirley said that John Deere Tractor Company started putting neutral start switches in their equipment in the 1960s and that he has not seen equipment that would jump when started for

many years. **Mr. Yap** said that using wheel chocks was removed from the ANSI standards after the 2005 version.

The AC Chair said that the committee did not need to expressly require the forklifts to be parked in accordance with manufacturer recommendations in this subsection because the requirements for training in the safe operation of the equipment are addressed by other Cal/OSHA regulations.

Mr. Mansheim suggested prohibiting older equipment from being used in this section to avoid using equipment that could lurch forward upon starting.

The AC Chair suggested that the language did not need to be very prescriptive because other regulations exist that require training and safe operation of the lift truck. He suggested proposing a performance standard to require the operator to take such measures as necessary to prevent the movement of the lift truck while the operator was out of the seat.

Mr. Shirley said that he agreed with using the performance-oriented text. **Mr. Yap** said that he was ok with the proposed language. **Mr. Denning** agreed.

Mr. Shirley pointed out that a consensus standard from the American Society of Agricultural Engineers (ASAE) from 1988 required a neutral start switch. He said that the standard first came about in 1964 and that neutral start switches have been included on agricultural equipment since. He opined that equipment that could start while in gear would be difficult to find.

Mr. Mansheim said that he was ok with the proposed text.

Proposed subsection 3458.2(d)(3) Fall protection on the platform

Mr. Shirley said that older versions of the standards allowed employees to leave the platform and tie off to the tree in order to cut branches that could not be reached from within the basket. He said that employees could tie off to the tree and then release their lanyard from the basket.

Mr. Yap said that other standards prohibit employees from disconnecting from the work platform to connect to another tie off point. **Mr. Shirley** asked if the concern was that someone would tie off into the tree and still be connected to the work platform when the operator tried to back out of the tree. **Mr. Yap** said that he was not sure of the reasoning behind the requirement.

Mr. Denning said that regulations in tree work allow employees to leave the work platforms and tie off to trees. He said that section 3424(b)(1)(A) had requirements for leaving the work platform and tying off to the tree.

Mr. Mansheim said that employees are required to both stand on the platform guard rail and enter the trees to perform work. **Mr. Denning** pointed out that standing on the railing of the basket was prohibited.

Ms. Katten said that a date palm is different than a tree with branches when it comes to tying off to the tree from the platform.

The AC Chair suggested tabling the discussion until an onsite visit could be arranged.

Proposed subsection 3458.2(e) Operation of lift trucks on unimproved soil

The AC Chair read proposed subsection (e), stating that lift trucks shall only be operated on surfaces in accordance with manufacturer recommendations.

Mr. Yap said that lift trucks should only be able to use forklifts designed for use on rough terrain. **Mr. Shirley** said that forklifts for use on rough terrain should comply with ANSI B56.6 "Safety Standard for Rough Terrain Forklift Trucks" because that standard applies to lift trucks used on unimproved, natural terrain.

Mr. Yap said that he was okay with removing the proposed subsection as long as it was clear that the lift trucks used in the industry were covered under ANSI B56.6. The text was removed from the proposal.

Proposed subsection 3458.2(f) Design of work platform

Mr. Shirley said that a lot of equipment is fabricated on farms that is not designed by professional engineers. He said that it was more important to ensure that the platform could pass the stress tests designed by an engineer than to be designed by the engineer.

Mr. Denning said that the proposed text was to prevent the failure of the platform. **Mr. Shirley** said that the tests would indicate whether or not the platform was safe to use.

Mr. Denning asked Mr. Shirley who he felt should design the platform to ensure the integrity of the railings and similar parts of the platform. **Mr. Shirley** said that the standards tell you what the railing requirements are. He said that when tested, the baskets should not yield. He said

that the first baskets he tested were designed in weld shops and not necessarily by professional engineers.

The AC Chair asked if the stress tests were based on ANSI standards. **Mr. Shirley** said that he used safety factors and good engineering practice to develop the load testing. He explained that ANSI B56.6 limited platforms to four feet wide. He said that the four feet distance was not practical for surrounding a tree, but that some of the information in the standard could still be applied to date palms. For example, he said that ANSI B56.6 recommended a safety factor of two when building a platform.

Mr. Mansheim suggested that a live demonstration of the test, performed by a third party, would help demonstrate the safety of the process. He said that retesting the equipment every five years could be helpful to ensure the safety of the platforms.

Mr. Yap said that if the platforms were built in a shop under the direction of a professional engineer then those platforms would meet the intent of the proposed subsection. He said that the engineer should design the platform in accordance with ANSI B56.6-2016 section 8.24 "Personnel Work Platforms for Elevating Personnel."

Mr. Mansheim said that they contacted several engineers in the beginning of this process, but were unable to find someone who would do the work at an affordable price due to the relatively small size of the industry.

The AC Chair asked for more information on the testing of the platforms. **Mr. Shirley** said that he applied a safety factor of two and applied the loads at critical points including the railings, center of gravity, and the far end of the basket to simulate the worst-case loading of the platform.

Mr. Shirley said that ANSI B56.6-2016 section 8.24 required a toeboard to be installed, which he said was unworkable because the fronds would build up in the bottom of the basket.

Mr. Mansheim said that the fronds would become tripping hazards if they were trapped by a toeboard. He said that thinned fruits would also gum-up the floor, creating potential hazards.

The AC Chair suggested tabling the discussion until an onsite visit could be arranged.

Proposed subsection 3458.2(g) The distance between the floor of the work platform and lift truck forks

The Chair asked if Mr. Yap was aware of any standards supporting the proposed distance. **Mr. Yap** said that the requirement was intended to prevent the use of a powered platform that would elevate the platform above the lift truck.

Mr. Galaviz said that elevating towers were no longer used. **Mr. Denning** said that he wanted to ensure that they were not brought back into use.

Mr. Denning explained that eight inches seemed reasonable to allow for different designs of the base of work platforms.

Mr. Galaviz said that a piece of equipment is used to reach the crown of some of the taller palms, which sometimes could elevate the platform to be more than eight inches off of the platform.

Mr. Shirley said that the ANSI B56.6 allowed the platform to be above the forks. He said that, according to the standard, if the platform exceeds 400 millimeters above the forks that a ladder must be installed, but that it does not prohibit the platform from being elevated above the forks.

The AC Chair suggested revisiting the discussion during the live visit and demonstration.

The AC Chair reviewed the proposal to determine which sections would be revisited. He identified the following areas as needing follow up:

3458.2(b)(2) Evaluation of lift truck / platform pairings

3458.2(b)(8) Working area per occupant / diagram of working area

3458.2(c)(2) Distance from work truck operator can travel

3458.2(d)(3) Tying off in the trees, standing on platform railing

3458.2(e) Design of work platform

3458.2(f) Distance from floor of platform to top of forks

The AC Chair asked if anyone had anything else to discuss. Receiving no response, he said that he would work with the individual parties to develop the rest of the proposal. He said that he

did not plan to convene another advisory committee meeting to discuss the proposal further, but would be in touch with the parties to apprise them of the progress of the proposal. The AC Chair said that he did not expect to go onsite for a live demonstration until after the summer.

Mr. Mansheim said that he would accommodate the visit whenever it could be arranged. He said that he would demonstrate the training provided to the different employees involved in the process. He said that he would send a training presentation to the AC Chair to distribute to the committee.

4. Economic Impact.

The Chair explained to the committee that an important and required part of the rulemaking process is the identification of the cost impact of the proposed rulemaking. The committee agreed that using the platforms would add an option to the list of available options for performing date palm operations and not mandate their use. Any cost impacts would be optionally incurred by an employer who saw the investment as a benefit to the operation.

5. Conclusion.

The AC Chair reviewed the rulemaking process with the committee. He explained that he would reach out to the committee to review the remainder of the proposal, as well as some of the specific issues raised during the discussion that needed further resolution.

The AC Chair stated that committee members will receive a copy of the meeting minutes, along with a copy of the final consensus proposal within two to three months. They will have an opportunity to comment on the minutes before the AC Chair moves forward with preparation of a formal rulemaking proposal. The AC Chair noted that there will be additional opportunities for public comment on any forthcoming proposal. A formal rulemaking proposal will be noticed but is expected to be several months away. The notice will be emailed to the committee members, so the AC Chair urged them to be sure they have provided accurate contact information if they want to receive a copy. The notice will also be on the Board website for viewing.

There will be a 45-day public comment period, concluding with a public hearing. Anyone may attend the public hearing and provide oral comments. Comments may also be submitted by mail or email during the comment period. Changes may result from public comment and/or during the review process. If any substantive changes are made, there will be one or more additional comment period(s) for public review. After that, it will go to the Board for adoption at a Business Meeting. After adoption by the Board, the proposal will go to the Office of

Administrative Law (OAL), which will have 30 working days to review it for compliance with the Administrative Procedures Act. Finally, the proposal will be filed with the Secretary of State and, unless otherwise specified, will become effective (enforceable) the first day of a subsequent quarter.

The Chair estimated that the rulemaking process will take up to a year from when the formal notice is published for public comment.

The Chair thanked the committee members for their attendance and participation and adjourned the meeting at 3:15 p.m.