

IPAF

ELEVATING SAFETY

Fall 2017

8 » THE BIG DEBATE
**RISK: IDENTIFY
AND ELIMINATE**

What the new ANSI standard requirement for jobsite risk assessment means to you

22 » INDUSTRY
EXPERTS
EXPLAIN KEY
ELEMENTS
TO NEW ANSI
STANDARD

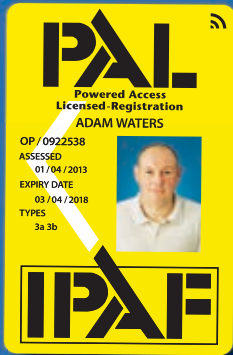
6 WAYS TO AVOID ELECTROCUTION

WHY IT'S THE LEADING
CAUSE OF DEATH TO
MEWP OPERATORS «16

18 » A FRESH PERSPECTIVE ON
IPAF'S 'NEW GENERATION'
ELEARNING MODULE



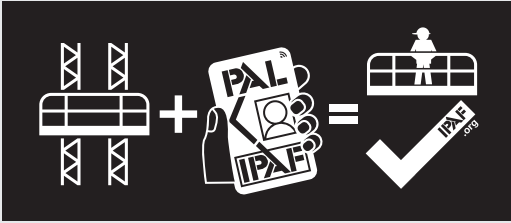
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TIME TO CHANGE

It's time for a change! New standards governing the design and safe use of AWP's, now called MEWPs, are just around the corner. The standards will have a dramatic effect on how MEWPs are used. Operators and supervisors will be required to have appropriate training and will notice significant differences in the way machines operate; just one example of this is the fact that new machines will be fitted with safety cut-out devices that will prevent overloading.

As IPAF research into MEWPs demonstrates (see news section) MEWPs are a very safe way to do temporary work at height. Falls from height are the single largest cause of workplace fatalities, and MEWPs are a part of the solution to this problem. These new standards have been created to ensure the machines and the way that they are used is even safer.

This issue of *Elevating Safety* is dedicated to bringing you advance notice of how to prepare for the new standards and ensure that you get the best out of your MEWPs (by the way that stands for Mobile Elevating Work Platform!).

Many thanks for your attention.

Best regards,

Tim Whiteman, CEO
International Powered Access Federation
www.ipaf.org

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4 IN THE NEWS

Summaries of important reports as well as information about upcoming events and more.

8 THE BIG DEBATE

Industry stakeholders discuss new requirements for jobsite risk assessment.

12 RESOURCES

Find out how to receive free safety materials from IPAF.

14 MESSAGE FROM JLG

16 ON THE JOB

Six ways to avoid electrocution when working at height.

18 FOCUS ON TRAINING

A fresh look at IPAF's eLearning module.

21 EQUIPMENT FOCUS

How to ensure optimal safety with mast-climbing work platforms (MCWPs).

22 CLOSEUP ON ANSI A92

Industry experts explain key points in the soon-to-be published new ANSI standards.

26 SPREAD THE WORD

Let Andy Access help you get the word out on the safe use of MEWPs.

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IPAF TO DRAFT MEWP SERVICE TECHNICIAN GUIDANCE

Who is qualified to maintain Mobile Elevating Work Platforms (MEWPs) is one of the questions that has been vexing the powered access industry for some time. Now IPAF has taken the first steps toward developing internationally recognized qualifications for MEWP technicians.

IPAF has taken a leadership role with partnering industry associations in the development of new guidelines outlining three different levels of MEWP service technician, setting out expected skill sets and competencies for those employed to inspect and service MEWPs, previously known in North America as Aerial Work Platforms (AWPs). The first draft is now ready to be shared with the wider access industry, with a view to consulting on and reviewing the new framework and the terminology employed.

The draft guidance, set to be issued as a voluntary best practice guide to operators and rental companies, proposes three distinct levels of service technician: Technician – being a mechanic with mechanical training or experience but not necessarily aerial-specific; an MEWP/Aerial Technician, who is trained in the safety aspects of maintaining aerials;

and MEWP/Aerial Master Technician, denoting specific qualifications for the appropriate machine and system, and authorized to perform all aerial maintenance including non-standard procedures (with manufacturer consultation). The new framework also recognizes that some organizations might have an entry-level Apprentice Technician for those with no experience.

Tony Groat, IPAF's North America Manager, says of the new guidelines: "IPAF has been working on the development of industry guidance to address the requirements to become a qualified MEWP service technician. We initiated this more than a year ago as a byproduct of discussion around standards development, when it was suggested that the training standard should address training for service technicians.

"We hope once the new framework is finalized it will help companies outline to their employees the expected competencies for each type of technician and ensure that inspection and maintenance tasks are being carried out by



individuals with the appropriate level of knowledge and experience. We also hope it will allow the industry to identify skills and knowledge gaps, identify and develop new training courses, and ultimately to assist technicians to skill up and to attain the next level of competency in the framework."

Tim Whiteman, CEO and managing director of IPAF, adds: "The industry has long struggled to define appropriate language that may be adopted within industry standards to address service technician training, and the industry presently relies quite heavily on "on-the-job training." It was felt that there is a need for greater industry guidance towards standardization, which prompted this project."

New Canadian CSA MEWP standards published

The new Canadian CSA B354 Mobile Elevating Work Platform (MEWP) standards have been published as of May 19, 2017 and are available for purchase. Commonly referred to as the design, safe-use and training standards, the new suite of standards replaces existing guidance and provides significant changes that industry stakeholders must and implement.

These new Canadian standards lead the North American market, as the ANSI A92 standards will be publishing similar standards later this year. Unfortunately, while the Canadian and US standards are similar, they are not identical and requirements in one may not be equal to the other, so IPAF urges North American members to familiarize themselves with both standards in full and will be offering support to members to help them become compliant with the new standards as they are published.

Published last month, the first edition of CAN/CSA-B354.6, Mobile Elevating Work Platforms – design, calculations, safety

requirements and test methods is an adoption, with Canadian deviations, of the identically titled International Organization for Standardization (ISO) Standard 16368 (second edition, 2010-05-15). It replaces the design, calculations, safety requirements and test methods sections of CAN/CSA-B354.1-04, Portable elevating work platforms; CAN/CSA-B354.2-01, Self-propelled elevating work platforms; and CAN/CSA-B354.4-02, Self-propelled boom-supported elevating work platforms.

This standard specifies safety requirements and preventive measures and the means for their verification for all types and sizes of MEWPs intended for moving persons to working positions. It gives the structural design calculations and stability criteria, construction, safety examinations and security tests to be applied before a MEWP is first put into service, identifies the hazards arising from the use of MEWPs and describes methods for the elimination or reduction of those hazards.

FREE WEBINARS

IPAF is furthering its series of free webinars for the industry. The next one will be:

- ♦ **Benefits and Barriers to Telematics Adoption in Powered Access**
- ♦ **Wednesday, September 13, 2017. 11:00 am CT / Noon ET**
- ♦ **Presenter: David Swan, product manager – Technology & Innovation at Skyjack**

In this presentation, we will go over some of the reasons there hasn't been widespread adoption of telematics in the OHV (off-highway-vehicle) industry, and specifically with MEWP machinery. David Swan has recently taken on the role of product manager at Skyjack where he is responsible for driving innovation and technological inclusion across machine categories.

Details at www.ipaf.org/events or from stacey.woldt@ipaf.org



IPAF issues white paper on new North American MEWP standards

The new ANSI A92 Mobile Elevating Work Platform (MEWP) Design, Safe-use and Training suite of standards is set for publication later this year. The CSA standards have now been approved and will be issued imminently. In both cases the industry will have a 12-month grace period to become compliant. IPAF has now issued an advisory white paper highlighting some of the key changes in the standards and advising owners and operators on how to become compliant. You can view and download the IPAF white paper for free at www.ipaf.com/publications/technical-guidance-notes

IPAF SUMMIT AND IAPAS

The next IPAF Summit and International Awards for Powered Access (IAPAs) will be held on March 8, 2018 at the Hilton Miami Downtown, 1601 Biscayne Boulevard, Miami, FL 33132. Event details are at www.iapa-summit.info



SAVE THE DATE!

US MEWP Market Exceeds Expectations; European Outlook Improves

The global Mobile Elevating Work Platform (MEWP) fleet grew strongly in the past year, with the US market exceeding expectations and steady growth throughout Europe for the first time since the economic downturn, driven mainly by a resurgent construction industry and falling unemployment, according to IPAF's Powered Access Rental Global Market Report 2017, conducted by Ducker Worldwide.

In the US the MEWP, previously known as aerial work platform (AWP), rental market grew by 8% in 2015 to stand at a value of around \$8.9 billion.

The size of the US rental fleet grew by 6% to around 561,000 units and demand was driven mainly (73%) by the booming US construction sector. The US market was characterized by a significant amount of merger and acquisition activity, while the wider North American market had to factor in the Trump presidency and looming ANSI and CSA Standards into the outlook for 2017.

The picture for the European MEWP rental market as a whole was also largely positive, growing in value by 4% across 2016 to stand at approximately €2.5 billion. Fleet size also grew in line with increased demand by around 3%, again mostly driven by a resurgent construction sector and improved economic outlook in many European countries, particularly Spain, which saw its rental fleet increase in size by around 7%.

The IPAF Powered Access Global Rental Market Report 2017 is compiled by Ducker Worldwide and is available in English only. **The full report is available to purchase via www.ipaf.com/reports**



MEWP FATALITIES DECLINE AS GLOBAL RENTAL MARKET GROWS

The fatal injury rate (FIR) for mobile elevating work platforms (MEWPs) declined in 2016, despite the fact that the total MEWP rental fleet and the number of rental days worldwide increased significantly over the same period.

The data, exclusively collated and interpreted by the International Powered Access Federation (IPAF), indicate that in 2016 there were 66 reported fatalities involving MEWPs worldwide, compared to 68 deaths reported in 2015. During the same period, the size of the global MEWP rental fleet rose from an estimated 1.17 million units at the end of 2015 to 1.25m estimated at the end of 2016.

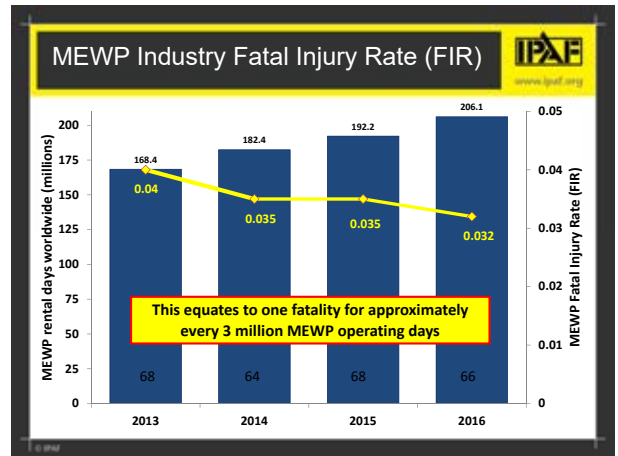
In 2015, the number of on-hire rental days was 192.2 million and the number of reported fatalities was 68, giving a FIR of 0.035 per 100,000 operating days. In 2016, the number on-hire rental days rose to 206.1m and the number of reported deaths was 66, giving an effective fatal injury rate of 0.032 per 100,000 operating days. This is equivalent to one fatal incident every 3.2 million operating days.

Of the 66 reported MEWP fatalities in 2016, the main causes were falls from height, electrocution, entrapment and overturn of machinery. Chris Wraith, IPAF's Safety & Technical Executive, who compiles the global accident and fatal injuries data, comments: "While it is heartening to see the effective fatal injury rate fall at the same time as the size of the rental market and number of machine operating days have increased significantly, we must not be complacent.

"It is disappointing to see the same main causes of fatalities being repeated year on year, which suggests that the industry as a whole is not learning the lessons from previous incidents – in 2016 falls from height accounted for 38% of the reported fatalities and electrocution 23%. There were fewer fatal overturns (12% of total fatal incidents, as opposed to 27% in 2015), but entrapments accounted for a higher proportion of the reported deaths (18%) than the year before. In 2015 electrocution and entrapment both accounted for around 15% of the total reported fatalities.

"Investigations show that accidents are most often due to management failings or operator error, which can in almost all cases be anticipated and avoided, or at least mitigated. This is why in 2017 IPAF is pursuing its 'back to basics' safety agenda, reminding operators and managers of the need for good risk assessment, choosing the right equipment for the job, proper training for users and supervisors, sound technical and safety guidance and a robust incident reporting regime under which lessons are learned and shared across the business and the wider industry."

Tim Whiteman, CEO of IPAF, adds: "It is worth pointing out that MEWPs are still by far the safest way to work at height, and overall it is encouraging that the fatal injury rate declined last year even as the global MEWP rental market



increased in terms of size and total operating hours. "

The MEWP fatal injury rate as calculated by IPAF takes into account the following factors:

- ➔ Estimated rental fleet size, based on the IPAF Powered Access Rental Market Reports (www.ipaf.org/reports);
- ➔ Estimated average utilisation rates per country and worldwide (utilisation rate is defined as the share of the fleet out on rent at any time over a year);
- ➔ Average days worked per year (five days a week for 50 weeks a year);
- ➔ The number of fatalities involving MEWPs in a given year, based on the IPAF accident reporting project;
- ➔ The FIR or any part of the report is subject to change if new data or reported fatalities for the period in question are received.

All manufacturers, rental companies, contractors and users are encouraged to report any known accidents (not just fatal and serious accidents) involving MEWPs and MCWPs (mast climbing work platforms) worldwide at www.ipaf.org/accident. This information is used to make the powered access industry even safer than it is today.



IPAF AT ALH CONFERENCE & AWARDS

IPAF will be supporting the ALH Conference Awards held at the Marriot Biscayne Bay Hotel, Miami on Oct. 12, 2017. IPAF will hold its IPAF North America Annual Meeting on the afternoon of Oct. 11, 2017, which will involve participants in debate and discussion. Short educational sessions will include Skyjack presenting safety statistics and long-term

improvements within the company, using their own data and research. Following this will be IPAF's networking event held at the conference venue from 6 to 8 p.m. on Oct. 11. At the ALH Conference on Oct. 12, IPAF's director of operations will present on "Virtual reality technology and its impact on operator training."

Further details at www.ipaf.org/events

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Jenny Lescohier is the editor of *IPAF Elevating Safety*.



Tony Groat is the manager of IPAF in North America.



Tom Retano is construction consultation coordinator at CT State Dept of Labor - OSHA.



Brian Downham is product safety trainer and IPAF senior instructor for Skyjack Inc.



Marko Kaar, CHST is director of safety operations at Bartlett Brainerd Eacott.

New ANSI standard requires jobsite risk assessment, aims to promote safety through disciplined practice

Few would argue that a jobsite risk assessment is a good idea before performing work in a mobile elevated work platform (MEWP).

Working at height comes with its share of inherent risks, so it's vitally important to be aware of the potential hazards that exist on every job and take appropriate action to eliminate or mitigate them. But how many are actually performing this important process? What does it even entail? One thing's for sure, the new ANSI standard expected to be released this fall requires a risk assessment on every use of an MEWP, beginning with operator training. We asked a panel of industry experts about what this will mean to construction professionals. Following is an excerpt from that discussion.

Jenny Lescohier, editor, *Elevating Safety*: What exactly is a risk assessment?

Tony Groat, manager, IPAF North America: A safety risk assessment is a systematic procedure for identifying and managing hazards. It requires a thorough examination of the entire work environment, processes and equipment to determine if there is any potential for harm to the health of the employees in the short or long term, and if there is, how can the situation be remedied. It focuses on the relationship between the worker, the task, the tools and the work environment. Ideally, after you identify uncontrolled hazards, you will take steps to eliminate or reduce them to an acceptable risk level.

Lescohier: What are some of the known potential hazards that should be addressed during a risk assessment?

Tom Retano, construction safety consultation coordinator, CT Department of Labor - OSHA Division: The FOCUS Four (Falls, Struck by, Caught in/between, and Electrical) hazards at a minimum. The ANSI and CSA industry standards provide a detailed

list of issues that must be considered prior to and during MEWP operations that contribute to risk associated with the FOCUS four.

Lescohier: Even without the new ANSI standard, shouldn't a risk assessment be performed prior to all work anyway?

Brian Downham, product safety trainer, Skyjack: OSHA requires it in its General Duty Clause, which states that each employer shall furnish employees with a work place free from recognized hazards that can be likely to cause physical harm or death.

Retano: I'm not aware of a better general tool than a Job Hazard Analysis (JHA); an administrative control for evaluating and reducing hazards that cannot be eliminated through engineering controls.

Marko Kaar, director of safety operations at Bartlett Brainerd Eacott: There are many regulations that can be interpreted to mean you have to do a risk assessment, but this verbiage as its written is much more specific in its expectations and almost creates a checklist. There are different working environments, different equipment being used and different hazard exposures in every case, but the more you can boil this down to a checklist-type format, the more easily communicated it will be, and the more effective it will be.

Lescohier: Is there, in fact, a checklist or anything people can glance at to make the risk assessment process simpler?

Groat: There is the list of issues that the safe-use standards define and guidance in the industry to consider, but it's important to note that you really need to have a qualified person to perform a risk assessment. You can find sample forms for risk assessments from industry associations like IPAF or web searches, but job-specific hazards must always be part of the analysis.

Lescohier: Who's qualified to do a risk assessment?



A safety risk assessment will identify potential risks, including incorrect use of MEWPs by operators. ⚠️

Retano: It's always been my opinion that a supervisor is responsible and accountable for the safety and health of his or her employees. They should be able to do any task assigned to those employees. They should also be better educated in the tasks their employees are trained to do. OSHA's definition of a "Competent Person" comes close to saying that a "Competent Person" (anyone designated by the employer to stop work to remove employees from hazards, implement controls for those hazards, be knowledgeable of the hazards related to the work) should be qualified to perform a risk assessment. Sadly, that is not the norm.

Lescohier: How difficult is it to perform a risk assessment?

Groat: A risk assessment can be a very simple and routine process that can occur in a short amount of time based on the complexity of work. Changing a light bulb vs. building a high rise will require a different amount of time. But the fundamental processes are the same.

Lescohier: How will MEWP operators benefit from risk assessment?

Downham: When hazards have been identified, controls can be put in place to help prevent incidents or accidents. It improves the safety of the working environment as a start.

Groat: A MEWP operator is a tradesman who is trained to operate a MEWP to access their work. They generally do not select the MEWP being used, and simply show up to perform a

task. Obtaining knowledge from a risk assessment developed prior to work by a qualified person provides the operator with clear understanding of the potential hazards on site and the means to avoid the risk from the hazard. They are prepared to work safely and efficiently.

Kaar: There's also an intangible peace of mind component to risk assessment that's important for the operator. That peace of mind comes when the operator knows that someone is actively looking out for them, and has done everything they can to reduce risk.

Lescohier: What's the danger of a risk assessment not being completed?

Downham: If a risk assessment is not completed, there's always going to be a greater likelihood that hazards are not identified and the risks are not controlled through the job planning.

Groat: All work at height involves the potential hazard of a fall. While workers might be fortunate when a task can be completed without issue, if a risk assessment is not done, the chance that a hazard will be encountered and result

in serious injury or death is dramatically increased. And the wide range of working sites and conditions this equipment can be working in further increases the probability that without proper due diligence, the likelihood of an accident is much greater.

Kaar: Liability is another factor that should be considered. We're often thinking about physical hazards but not about things

While we're talking about risk assessment under the umbrella for MEWPs, the concept really applies to all equipment and all types of work on an ongoing basis.

-Tony Groat

like public notoriety (you have an accident and your company's name is in the paper) and law suits that can go on for years. If you've done a risk assessment that says you've identified physical hazards, it could protect not only the operator but the company from liability as well.

Lescohier: How does risk assessment adapt to changes on the jobsite?

Downham: Worksite inspections should be always ongoing, and the operator is in the best position to identify something that's changed. At that point, he or she should go to their supervisor or competent person who can then determine if there's any potential hazard and put any necessary control measures in place.

Kaar: That's where the planning process often fails. Too often we don't circle back on changing conditions and different applications. It ought to be done every day before we use the MEWP.

Retano: Specific to hazards, the risk assessment should be a part of any change analysis. Risk assessment is incorporated into many programs and standards addressing safety and health, including but not limited to ISO 14001, the new ISO 45001, "Safety by Design," and many others.

Lescohier: How often are risk assessments really being done right now?

Kaar: Many larger contractors with ample resources are doing it, and in many cases, it's the project owners who are driving the process. But we've got a million MEWPs in the workforce now, and I'm convinced that the vast majority do not have a daily plan. There's attention paid to it, but it's not happening nearly as frequently as it should. Having a standard mandate the process can help increase the frequency of use of this effective risk management process.

Retano: There is great disagreement in the world of subcontractors on what it means to survive or thrive as a company. Many don't embrace a safe and healthful culture as a means to increase profits. That's why OSHA and ANSI standards have been developed and continue to be developed. Depending on insurance to control safety and health is reactionary and the cost of that dependence is human lives. Risk assessment is a proactive process not recognized by typical subcontractors as critical to the bottom line.

Lescohier: Why is there such resistance?

Downham: It could depend on a lack of site controls or the time needed to complete the task, but it could also be a lack of awareness of the need for a risk assessment and the benefits it can offer.

Kaar: There's always an internal cost/benefit analysis being

done by individuals on a daily basis. Some believe it's a waste of time to plan because they know what they're doing. That being said, there are general contractors and construction managers who figure they've transferred their risk contractually, so they don't need to babysit workers. They think, "If something happens, I'm covered through my contract language; they've agreed to follow all rules and regulations. I don't need to implement another time-consuming process."

Groat: Owner/operators working 15-hour days are most likely not taking the time. As always, our strength is our weakness: We find a way to get things done, but... do we find a way to get things done safely? And the more they get away with doing things the wrong way, the more it becomes an acceptable practice.

Lescohier: The new standard requires a rescue plan. What's the value?

Groat: During an emergency is no time to be trying to figure out the most effective way to get an individual down from a MEWP at height. The rescue plan puts planning in place so when a situation arises, you have adequate guidance and instructions to take care of the emergency safely and effectively.

Lescohier: Can calling 911 suffice as a rescue plan?

Groat: No. Are emergency services qualified to rescue at height? Can they reach at the heights that some MEWPs can travel? Do they know how to operate a MEWP to lower it? Emergency services might be a component, but it is not the entire plan.

Retano: As has been said in the preamble for Confined Space Rescue, depending on 911 as a rescue will probably be no more than "body retrieval." The best rescue is a self rescue. In the absence of that, trained workers on site that can effect a rescue of an MEWP occupant will probably be the most effective rescue.

Lescohier: What's the big picture goal for the risk assessment requirement in the new ANSI standard?

Groat: There's great value in performing a risk assessment. Supervisors can use the findings of a job hazard analysis to eliminate and prevent hazards in their workplaces. This is likely to result in fewer worker injuries and illnesses; safer, more effective work methods; reduced workers' compensation costs; and increased worker productivity. The analysis also can be a valuable tool for training new employees in the steps required to perform their jobs safely.

While we're talking about risk assessment under the umbrella for MEWPs, the concept really applies to all equipment and all types of work on an ongoing basis. We're mandating the discipline so it will become a more consistent practice that occurs every day on every job, with the goal of improving overall work safety. ▲





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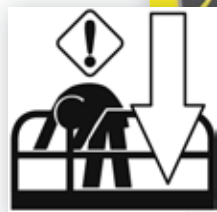
IPAF Offers RESOURCES

Free safety materials include posters, key rings, decals, videos and more

As the global not-for-profit organization promoting the safe use of aerial and access equipment, the International Powered Access Federation (IPAF) offers a full palette of safety materials that are available free to readers. These range from posters, key rings and

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Technical guidance is available at the Publications section of www.ipaf.com:

- Statement of Best Practices of General Training and Familiarization for Aerial Work Platform Equipment
- Statement of Best Practices of Personal Fall Protection Systems for Aerial Work Platform Equipment
- Statement of Best Practices for Workplace Risk Assessment and Aerial Work Platform Equipment Selection
- Best Practice Guidance for AWP: Avoiding Trapping/ Crushing Injuries to People in the Platform

• Guidance on Selection of Anti-Entrapment Devices for AWP's
 Many IPAF safety videos are online at the Publications & Films section of www.ipaf.com or on our YouTube channel: www.youtube.com/user/IPAForg/videos:

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At JLG, we continually strive to make our operations and the equipment we manufacture safe. This supports our core belief that everyone deserves to leave work each day in the same condition in which they arrive. When it comes to JLG products, the emphasis on safety begins at the design engineering phase and transcends through our manufacturing and test facilities to ensure the highest of safety standards are maintained.

Self-governance is critical throughout our organization; however, we also adhere to the Aerial Work Platform (AWP) regulations for North, South, and Central America, developed and published by the American National Standards Institute (ANSI). These standards are expected to change within the next year and have been the catalyst of much discussion within the equipment industry. JLG anticipates A92.20 changes to be published in Q3 2017. Once published, equipment manufacturers will have one year to incorporate the required changes into their aerial products and training materials.

As the industry leader, JLG was first to market with a number of product safety enhancements that we anticipate will be incorporated into the new standard.

A92.20 changes are expected to include:

- Load sensing – Machines will actively monitor loads. They will stop operating with normal functionality and sound an alarm when overloaded.
- Sustained involuntary operation protection – Hand-operated controls on the platform shall be protected against sustained involuntary operation. This protection will prevent further movement of the machine in the direction of trapping or allow the operator to reverse or stop the trapping movement.
- More stringent wind force requirements – Outdoor machines will have increased weight and reduced capacities. Coupled with new stability testing requirements, we expect to see foam-filled or solid tires become necessary on the vast majority of booms and rough-terrain scissor lifts.
- Scissor rail height will increase, necessitating folding rails on compact models to ensure they fit through standard doors.



We are proud that JLG MEWPs, or Mobile Elevating Working Platforms (MEWPs) as they will be called under the new standards include: SkyGuard®, JLG's enhanced control panel protection system as standard equipment on all booms, foam-filled or solid tires on all MEWPs, and scissors equipped with self-closing gates and toe boards, many with fold down rails.

Our focus on safety doesn't stop when a machine ships. A strong emphasis on operator training is supported through a full range of training opportunities at our Training Center and Proving Grounds in McConnellsburg, PA or on location.

In addition to product changes, JLG expects familiarization and training requirements to be updated as part of the new ANSI standard. The Manual of Responsibilities, which currently has multiple versions, may become a single

document covering responsibilities for all MEWPs. Training requirements on the machines are expected to expand to cover not only operators, but also occupants. Supervisors will likely be required to obtain training on MEWP selection, applicable rules and regulations, potential product hazards, and knowledge of the operator's manual.

Safety and safe machine operation must always be a priority. While the new ANSI standards will bring a number of changes to the way aerial equipment business is conducted, it's important to keep in mind their intent—improved safety. And when it comes to safety improvements, everyone wins. JLG will continue to be the MEWP industry leader through continuous product improvement, innovating new technologies and enhanced training programs that keep workers out of harm's way. ▲

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6 Tips to Avoid Electrocution When Working at Height

Proper planning, risk assessment and solid management are key to MEWP safety when working among live wires

There is no safer way to work at height than with a mobile elevating work platform (MEWP). That being said, working at height comes with its share of potential hazards, and electrocution is chief among them.

"The majority of all MEWPs are prohibited from use when working on or near equipment or circuits which might be energized," explains Tony Groat, manager of IPAF North America. "Only MEWPs designed specifically as insulated aerial devices are allowed for use in live work on electrical installations. New safe use standards make it clear that operators must stay at least 10 feet away from power lines with any part of their body, conductive object or any part of the MEWP."

Prevent disaster

Fortunately, electrocutions can be prevented through proper planning, risk assessment and management of work at height, including thorough operator training and familiarization. Here are six tips to help you avoid this potential jobsite hazard:

- 1 Where possible, the overhead cables should be de-energized and tagged before working close to them.
- 2 If 'de-energizing' is not an option, protect operators in the platform by 'shielding' the cables and using special insulated aerial devices (IAD), which are specifically designed for work near electrical hazards.
- 3 Consider the use of overhead cable proximity indicators when the risk of working near overhead cables is identified. [AG1]
- 4 Do not go nearer than the minimum approach distance (MAD), which is the safest distance a person (anyone who has not had specific training in avoiding electrical hazards) is permitted to approach 'live' overhead cables.
- 5 IPAF recommends two specific safe distances through its training programs:
 - > 50 ft. (15m) + fully extended boom from electrical pylon
 - > 30 ft. (9m) + fully extended boom from cables on wooden poles

Note: These safe distances meet and exceed those specified in ANSI standards and OSHA requirements. Should the operator need to work any closer to power lines, seek expert advice

(contact the power supplier) and implement extra safety precautions to ensure that the MAD is never compromised.

6 When working near overhead cables:

> The MAD should be clearly marked on the ground, allowing for maximum boom outreach.

> Ensure extra supervision is provided and emergency plans are in place.

MEWPs are designed to provide a safe means of temporary work at height – but they are only a safe option if their use is planned and managed appropriately.

"The MEWP user must comply with requirements defined by the MEWP manufacturer and industry standards," says Groat. "This includes developing and implementing a safe use program; monitoring personnel performance and supervising their work to ensure the use, application and operation of the MEWP is in conformance with industry standards; warning personnel of potential hazards; providing means to protect against identified hazards; and explaining the potential consequences of not following proper operating guidelines."

Electrocution is one of the leading hazards with the use of MEWPs in the US. Make sure you, and those you are responsible for, apply the '30- and 50-foot plus fully extended boom' rule to ensure that everyone stays safe.

For more information, please visit: www.ipaf.com/safe ▲



DON'T LET IT HAPPEN TO YOU

Electrocutions can happen due to many causes, including:

1. Operator or boom of MEWP inadvertently coming too close or touching overhead cables
2. Lack of awareness of the proximity of overhead power lines
3. Complacency or lack of awareness of the voltage running through the cables
4. Moving the boom in the wrong direction when close to the overhead cables
5. Operating the boom erratically and not stopping when and where expected

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IPAF Training: The 'Next Generation' Ventures Boldly Forth

eLearning is now available in six languages, with more to follow



by Matt Brereton, communications manager, IPAF

IPAF's 'new generation' training program offers a new weapon in the armory for accredited training centers: An eLearning online module that allows PAL Card trainees to undergo the theory element of the course at their own convenience, anywhere, on any device and at a time of their choosing. Interest in the program is increasing and the eLearning module is currently available in six languages with more to follow.

IPAF's eLearning module, originally introduced in 2014 and revamped into the current "New Generation" program in 2016, aims to replicate the theory element of the PAL Card course, normally delivered in a classroom environment. Candidates must still complete the practical element of training, and pass a theory and practical test under the supervision of an IPAF-accredited instructor or evaluator.

The main benefits of IPAF's eLearning, which has been designed and delivered in conjunction with IPAF's online training partner Bolt Learning, are that trainees can attempt the learning module any time up to 40 days prior to taking the practical module and exam, at any time, in any location, and on the device of their choosing. This in turn can mean PAL Card candidates need to take less time away from their job, and for those who do not have an accredited test center nearby, minimize the time required to complete the full training to receive their PAL Card.

How does eLearning work?

Once a trainee has signed up for an IPAF PAL Card course, the training center delivering the instruction will issue them a web link and a log-in code to access the eLearning online, which is compatible with most computers and tablet devices.

But surely an online training module can't replicate what an instructor in a classroom can deliver? In fact, the online delivery has a number of benefits – candidates can pause the training whenever they like, for instance, though it is advisable that they keep a couple of hours clear to

IPAF's eLearning uses interactive exercises to reinforce the training message.

complete the course without distraction. Also, some of the graphical demonstrations in the eLearning are very effective ways of demonstrating the principles of safe MEWP operation, for instance, when considering risks or illustrating how load distribution works when rotating or extending a boom-type platform. And each section is followed up with a mini-test to help reinforce the messaging.

There are built-in safeguards to ensure the eLearning is given due attention and not just glossed over. Candidates cannot skip sections or advance without having got the questions right, and they can revisit any section of the tutorials or tests if there's anything they are unclear on. Finally, the eLearning module can be retaken as many times as the candidate likes – for instance, those who complete the eLearning but want a quick refresher prior to undergoing the practical part of the training can do so to their heart's content. Once the eLearning is complete, the candidate will get a receipt with a unique identifier code which will be cross-checked by the training center when the candidate turns up for the practical.

A serious undertaking

Giles Council, director of operations at IPAF and the man in charge of overseeing the eLearning as it was developed and rolled out to training centers, says: "The eLearning project was one of the more significant projects undertaken by IPAF in terms of training development; we knew it would be a great benefit to trainees and training centers alike and would open up new



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possibilities in terms of IPAF's goal of pushing out robust training to all operators and managers of MEWP equipment around the world.

"It's been really heartening to note that, after a long and detailed development and testing phase, the training is now available in six languages and is being taken up with increasing enthusiasm by IPAF training partners worldwide.

"It's important to note, however, that IPAF is still firmly committed to maintaining a strong practical element to its training courses and has no plan to change this now or in future; the New Generation training is just another string to our bow and is designed to extend new flexibility for training centers and their training candidates."

He continues, "All IPAF's investment into the eLearning is also designed to enhance the traditional face-to-face training, providing trainees more choice in how they complete the PAL Card course and giving better resources for the classroom instructors to use as well."

Tamlin Roberts, MD of Bolt Training, adds: "We have worked

with a great many organizations in a number of countries, so we knew our expertise could have really positive applications for a partner such as IPAF. We developed the eLearning module for IPAF by taking a forensic look at how the instruction was being delivered in the classroom, and considering ways we could replicate this and indeed enhance for delivery in an online format.

"We've been really pleased to receive positive feedback from IPAF and also the training centers and their successful trainees, and we're not resting on our laurels either, as we constantly monitor and update the eLearning module to improve it. We're also developing new language variants, enhancing the quality and photorealism of the 3D videos and also looking at other applications, such as standalone classroom aids, and even a virtual reality application that takes users through a pre-use inspection.

"This is currently just a demo, but it does offer a glimpse into the role that new technology can play in improving technical and safety instruction and offers trainees and test candidates the opportunity of trying out various scenarios without physically placing them in the way of potential harm." ▲

IPAF'S ELEARNING TRAINING MODULE: A TRAINEE'S POINT OF VIEW

When Matt Brereton joined IPAF as communications manager in January 2017, he had no experience with operating MEWPs. IPAF encourages all its staff members to obtain a PAL Card license, so he soon found himself signed up to a training course at a nearby IPAF-accredited center... and tackling the eLearning module. Following is his account.

IPAF's Chief Executive Tim Whiteman is very keen for all staff to undergo training and achieve the PAL Card qualification, so that we all have a good idea of what the equipment can do and have a basic understanding of the basic principles of safe, effective operation of MEWP machinery. Tim suggested that a colleague and myself test out the eLearning option that had not long since been introduced, as this would also give us longer to spend on the practical element and allowed us to qualify to use both 3a mobile vertical lifts and 3b mobile boom platforms.

Once we had booked a date at a local training center, we were both emailed a personalized link providing access to the eLearning online, and were told we would need to complete it no more than 40 days ahead of the practical element of the course. We would further need to download the certificate to prove we had completed the eLearning before we would be allowed to progress through the practical element and undergo testing on what we had learned.

I didn't sit through the online tutelage right

away, as this would have been more than 40 days in advance of the practical module. In fact, I decided to wait to much nearer the time so the online course was fresh in my mind. So on the Friday afternoon before our date at the training center on the following Tuesday, I cleared a couple of hours in my schedule and sat down to complete the eLearning module.

Having worked for IPAF for a few months at this point, I was aware of some of the relevant safety and technical info contained within the eLearning, but nonetheless I found much of the content very illuminating, particularly the animated segments showing how loads can shift as a boom slews and extends/retracts. I thought the little quizzes at the end of each section were useful too, as this helped reinforce the information I had just learned, and the final test was also helpful in this regard. It also appealed to my competitive nature when it comes to pop quizzes!

The eLearning moved along at steady pace and broke down the topics in a logical way, while giving a good overview that would surely be of use to more experienced operators as well as novices like me.

I was very pleased to find that much of the information I'd gained had been retained when it came to the day of the practical course, as it was put to the test by the instructor in the classroom. Both my colleague and myself

passed with only one incorrect answer between us, which the instructor then reviewed and explained.

For first-timers trying to get and grip on personal protection equipment, harnesses, and of course, the MEWP machinery, it was good to have had the basic theory so effectively instilled in me. This allowed me to focus more clearly on what our instructor was telling us before we were allowed to operate the equipment for real!

Our instructor was also interested in comparing notes about the eLearning, and helpfully walked us through the topics and his usual delivery in the classroom-based version of the course. He even commented that some of the sections were in some ways an improvement over the older classroom teaching aids, and so he was pleased that some of the graphical representations were also available to trainers to use in their classroom presentations. Either way, he was alive to the benefits the eLearning module can offer trainers and those under instruction, and said he looked forward to IPAF refining and expanding its range of new generation training as time goes on.

For more information about IPAF training, including how to find an accredited training provider and the types of courses offered, please visit the website at www.ipaf.com/training

Making Safety Central for MCWP Operators

Stopping unauthorized use is a major step toward safe employment of these workstations in the sky

Mast-climbing work platforms (MCWPs) are popular on worksites across industries, and are used by thousands of operators around the world each year. While high-level regulatory guidelines and oversight are paramount when considering such a prevalent and international work tool, it's also important not to lose focus on those at the front line and the very serious consequences that improper MCWP installation and operation can cause.

Effectively functioning as workstations in the sky, MCWPs are relatively simple to operate in standard configurations compared with other forms of powered access. They provide variable-height access across specific areas of structures above ground level and are used for cladding, window replacement, refurbishment, cleaning and painting and much more.

While MCWPs have a good safety record in general compared to other forms of powered access, when something of that size and height fails, it's a major event and can lead to severe, if not fatal, injuries for operators and bystanders.

Operators should not only be properly trained on how to work safely with an MCWP, they should be familiar enough with the controls and installation processes to know when an MCWP could be dangerous to use.

As well as use of the most up-to-date equipment, comprehensive operator and installer training, and thorough daily and pre-use inspections are vital to safe work with MCWPs. Full knowledge of controls, controlling stability, dismantling, transport and installation are also crucial.

Stop unauthorized use

Since MCWPs can be on a jobsite from start to finish, many different workers will potentially want to use them for a variety of tasks. However important it is that they get the job done, stopping unauthorized MCWP usage must take priority and access to the platform must be limited to trained operators only.

The technology does exist to enable this – IPAF's machine-readable Smart Powered Access Licence (PAL) card is issued as standard to operators who have passed MCWP training, and installing card readers on machines is simple and cost-effective. This way, contractors are taking the necessary steps to ensure the safe, authorized use of MCWPs throughout the duration of the contract.

Regulatory updates

Change is coming to the MCWP market in terms of updates to American National Standards Institute (ANSI) and Canadian CSA standards, which broadly agree with each other. The ANSI standards for MCWPs and Transport Platforms, A92.9 and A92.10 respectively, were reaffirmed at their last review, but are at least two years away from a full review.

So, while it will be a few years yet before any unified North American updates filter through, it is to be expected that these will continue to be brought in line with European standards, resulting in a picture that looks more like global standards commonality for the first time. This can only be a good thing for clear and concise communication of safety dos and don'ts across the market – from manufacturers to end users and renters. ▲

RAISING AWARENESS OF MCWP SAFETY

IPAF believes more could be done to raise awareness among MCWP users on the importance of training, procedures and inspections.

The Mast Climber Committee will spend the coming months encouraging the industry to report accidents at the IPAF accident database www.ipaf.org/accident as well as developing and distributing case studies that highlight the safe and effective use of mast climbers. It is also continually developing content for its mast climber web site - www.ipaf.org/mcwp - and reviewing the mast climber training manual to simplify the language and structure.

For more info, contact Romina Vanzi, IPAF mast climbing work platform department manager on: mcwp@ipaf.org

To find out more about training and Powered Access License (PAL Card) visit: www.ipaf.com/PAL. To find an IPAF MCWP training center visit www.ipaf.com

What is Compliant Operator Training?

What do you need to know to ensure you're doing everything you should to promote the safe use of MEWPs

The soon-to-be-published ANSI A92.24 Standard "Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWPS)" will hopefully open some eyes to the responsibilities of everyone involved in aerial lifts, from the manufacturer to the operator/occupant. The Standard's primary objective states, "... to define rules for safeguarding persons and objects against the risk of accident due to the operation of MEWPS."

For starters, we will need to get used to calling aerial lifts "MEWPS." That's a term used globally, and conformity in the marketplace makes sense. Remember, "change is good..."

As of July, 2017, the Standard has not been finalized, and is still receiving comment and review, but publication is expected in 2017... there are only a few terminology changes from the last public comment draft. This draft of the Standard is applicable to the most common types of lifts - booms and scissors - as well as manually propelled elevating work platforms and mobile under-bridge access machines. Expect that other types of aerial lifts will be included in the near future. This new A92.24 changes the way that training involves all MEWP-related parties.

Now, the big question is what does everyone need to know (and do) in order to comply with the new training standard? It comes down to what your job is in the realm of aerial lifts, and are you doing what is expected of you? You have a stake in this if you are a: manufacturer, dealer, owner, user, supervisor, operator, occupant, lessor, lessee or broker of aerial lifts. If you are reading this magazine, you fit into at least one of these categories. The new Standard is more specific in describing the responsibilities of each entity to support training and familiarization requirements than ever before.

Since the obvious intent of mandatory training is to prevent injuries and fatalities associated with improper use of MEWPS, the required knowledge is extensive. The specific items constituting TRAINING are spelled out in A92.24, and include both Theory (Classroom/Online Training) and Practical (Hands-On Training). Both have a provision for evaluating proficiency, but also for record keeping since each trainee's results must be

documented and recorded. The content of required training covers topics ranging from jobsite risk assessment, MEWP selection, understanding operator's manuals and warning placards, to knowing factors affecting machine stability such as ground conditions, platform loading and weather conditions.

The Practical portion of MEWP Operator Training includes familiarization of the machine, walk-around inspection, operating ALL of the functions properly to complete the tasks of a challenge course, securing the MEWP after use, and many others. Compliance requires that the trainee "...operate the MEWP for a sufficient period of time to demonstrate proficiency..."

It should be apparent, and alarming, to managers and supervisors that in the best interest of everyone involved in MEWP use,



▲ Compliant training includes both theory and practical components.

a 10-minute instruction online is not sufficient to train operators, nor should a "drop-off" of the equipment be considered adequate in lieu of familiarization on a specific model of MEWP.

Familiarization is addressed in the ANSI

A92.22 Standard, Safe Use of Mobile Elevating Work Platforms, and includes the following: use of the manuals, confirmation that the manuals are on the machine in a protected enclosure, the purpose and function of the controls on that specific model, features, limitations, devices and operating characteristics on the specific model. These points must be addressed any time an operator will be using a different model of lift that is new to them. Not only will familiarization help prevent accidents, but it will save time and money. Fewer incidents translate to better profits for the entire jobsite.

I urge every reader of *IPAF Elevating Safety* to consider the new A92.22 and A92.24 as unique opportunities to assess their current training practices, realize what they have been doing properly, and address those circumstances that require improvement. A comprehensive MEWP training program such as the IPAF PAL Card certification will open eyes and astound lots of "old hands" with their newfound knowledge. ▲



Mark Hinkel operates both Hinkel Equipment Rental and The Institute for Aerial Lift Safety, and has made responsible rental practices and accident prevention a personal aim.

Supervisor Training Ensures Everyone Plays by the Rules

New ANSI standard helps ensure supervisors have the knowledge needed to properly manage MEWP operators

FOR MORE INFORMATION on IPAF's MEWPs for Managers course, please visit www.ipaf.com/m4m

The new ANSI A92 standards place several new requirements on the access industry including new classifications, acronyms (MEWPs), engineering requirements and training requirements. Supervisor training is one of the new requirements.

A good supervisor ensures that the workers they supervise have the tools they need to do a job safely and efficiently, which is good for the workers and the business. To do this, the supervisor must know several things about the people they are supervising and the job they are performing. The Supervisor Training requirement in the new ANSI standard helps to ensure that supervisors of MEWP operators have the knowledge needed to properly supervise workers using MEWPs.

ANSI A92.24 defines a supervisor as, "An entity assigned by the user to monitor operator performance and supervise their work." Section 7.5 in the new A92.24 standard says the following about supervisor training:

Users shall ensure personnel that directly supervise MEWP operators are trained in the following:

- a) *proper selection of the correct MEWP for the work to be performed;*
- b) *the rules, regulations and standards that apply to MEWPs, including the provisions for safe use as defined in ANSI A92.22, training and familiarization, and the work being performed;*
- c) *potential hazards associated with use of MEWPs and the means to protect against identified hazards;*
- d) *knowledge that the manufacturer's operation manuals are an integral part of the MEWP and need to be stored properly in the weather-resistant compartment on the MEWP.*

Let's take a brief look at each requirement.

a) *proper selection of the correct MEWP for the work to be performed;*

Proper selection means the workers are provided the proper tool for the assigned job. The supervisor needs to know what equipment options are available for the environment and task assigned. Supervisors must understand factors impacting proper selection including work surface, working height, equipment weight and several others. Well-designed supervisor training will provide the supervisor with basic MEWP selection criteria and provide the supervisor with a process for verifying that the MEWP is the correct MEWP for the job at hand.

b) *the rules, regulations and standards that apply to MEWPs, including the provisions for safe use as defined in ANSI A92.22, training and familiarization, and the work being performed;*

Supervisors play a critical role in ensuring that operators are properly trained and familiarized with the machine or machines they are using. Also, supervisors must know the safety requirements and regulations to ensure they are followed. The new ANSI A92.22 Safe Use standard requires that a risk assessment be conducted and specifies several other requirements that the supervisor should ensure are in place prior to and during MEWP operation. The A92.24 supervisor training requirement will ensure that supervisors understand these requirements.

c) *potential hazards associated with use of MEWPs and the means to protect against identified hazards;*

Supervisors must know the potential hazards associated with the use of MEWPs and the potential hazards associated with the work environment to help ensure worker safety. Supervisor training should provide the supervisor with a process for identifying potential hazards and protecting MEWP workers from identified hazards.

d) *knowledge that the manufacturer's operation manuals are an integral part of the MEWP and need to be stored properly in the weather resistant compartment on the MEWP.*

The manufacturer's operation manual is an integral part of the machine and it must be with the machine – period. Manufacturers put a lot of effort into providing thorough and accurate operation manuals – good supervisors will set an example to the workers they supervise by ensuring the manuals are present and that they are used as appropriate to conduct inspections, etc.

Bottom line – I think the Supervisor Training requirement is a good thing; it will help supervisors do their job of ensuring their workers do their assigned jobs safely and efficiently. We all expect the coach of the baseball team to understand the rules associated with baseball – we should expect the same for the people supervising workers. ▲



Rick Smith is senior director, product training, at JLG Industries Inc., responsible for all aspects of product training globally.



New Standards Result in Core Design Changes

Load sensing, wind force requirements and more are some of the differences you can expect to see in new MEWPs

New North American access equipment Standards – put forth by the American National Standards Institute (ANSI) and The CSA Group in Canada – will result in many changes to machine design when they're finalized later this year. Following are the main points to be aware of.

LOAD SENSING – Most machines will actively monitor load and NOT operate with normal functionality if overloaded beyond rated capacity.

As with current standards, it's the responsibility of the machine operator to ensure the unit is not loaded beyond the restrictions displayed on the unit by the manufacturer. Moving forward into ANSI A92.20 or CSA B354.6 (A92.20/B354.6), however, MEWPs must be equipped with a means to avoid overturning and exceeding permissible stresses, which is most commonly a load sensing device that will disable the normal elevating functions of the machine and sound/flash an alarm when overloaded.

Rental companies and contractors alike should be aware that jobs which had previously been inappropriately completed by overloading a machine will require different planning and execution with new units that will be designed to inhibit this misuse. While load sensing does add some complexity to units, equipment operators should be aware that identical technology has been in use in other markets (such as Europe and Australia) for over 10 years; the required modules are extensively field tested and validated in those market places. Scissor lifts will generally use a combination of scissor stack angle sensors, pressure transducers on the lift cylinders and/or load sensing pins, while booms will typically use load cells to measure platform load.

NEW WIND FORCE REQUIREMENTS – Increased weight and reduced capacities in outdoor/wind conditions.

At a high level, wind load is assessed more aggressively under A92.20/B354.6. Scissors and vertical masts will feel the sharpest impact of more conservative wind load assessments, with a larger change in added weight. Narrower electric slab units are more affected than the wider, heavier rough-terrain units. It should also be anticipated that personnel capacities for outdoors (wind-rated) use will differ under A92.20/B354.6 from current A92.6/B354.2 machines. For example, a typical A92.6/B354.2 scissor might have a two-person capacity with a 28-mph (12.5m/s) wind rating. The same scissor lift under A92.20/B354.6 might have a two-person

capacity under a 0-mph wind load (often referred to as "indoors use") and one-person capacity at up to 28-mph (12.5m/s) winds (often referred to as "outdoors use").

For booms, while some added weight can be required, standard 40- to 80-foot self-propelled booms are generally much less affected by the wind rating requirements of A92.20/B354.6.

NEW STABILITY TESTING REQUIREMENTS - Expect to see foam-filled tires.

Variations exist in the calculation of overturning and stability moments between A92.20/B354.6 and A92.5/A92.6/B354.4/B354.2. These mostly have only subtle effects on machines, but you can expect to see foam-filled tires only (no air-filled) on the vast majority of RT scissors and RT booms under A92.20/B354.6.

ENTRANCES ON ELECTRIC SCISSORS AND VERTICAL MASTS - Toe boards must be present.

The most prevalent scissor lift entrance in the North American market today is the chain gate entrance. With the move to A92.20/B354.6, flexible devices are no longer permitted to be used as platform gates and toe boards have to be present on all areas of the platform, including the entrance. This mandates a shift away from chain gates to half height, full height or saloon-style gates for all scissors. Boom lifts will keep broadly the same entrances as today's machines, with the exception that the toe boards must cover the entrance area.

RAILING HEIGHTS - Compact DC scissors now mostly equipped with folding instead of fixed rails.

Under the current standards, smaller scissor lifts in the North American market have solid, non-folding rails approximately 1m (39.5") in height. A92.20 mandates a railing height of 1.1m (43.5") from the platform floor. This additional height results in these smaller units no longer being able to fit through standard door heights with the rails deployed, necessitating a change to folding rails as standard on a number of units. Additional familiarization will be required with end users. ▲



Ian McGregor is director of product safety at Skyjack. He's been an active member of the SAIA/ANSI A92.20, A92.22 and A92.24 sub-committees and the CSA B354 committee.

How to Exit a Platform at Height

Many manufacturers have developed an authorization letter that covers the process

Mobile elevating work platforms (MEWPs), such as articulating and telescopic booms and scissor lifts, are designed to carry personnel to elevated work locations. The number one priority on any aerial jobsite should be to promote a safe workplace for both the operators and the equipment. To do this, it's important for everyone onsite to follow safety rules and regulations set forth by industry agencies, such as OSHA (United States) and Provincial (Canada) authorities, ANSI (United States) and CSA (Canada), as well as those outlined in the equipment manufacturers' guidelines.

It's important for articulated and telescopic boom operators to take proper precautions when exiting the boom platform at height. These booms are designed to allow operators to work at varying heights while remaining inside the platform. And, according to most boom lift operator's manuals, the operator should never enter or exit the platform unless the machine is in the stowed position and the platform is at ground level.

With that said, there are certain applications where it becomes necessary for the operator to exit an elevated boom platform to complete a task, such as when working on the wing of a plane or servicing a ride at an amusement park. OSHA and ANSI require an operator to be authorized in writing by the manufacturer before exiting a boom platform at height, and many manufacturers have developed an authorization letter that covers the process operators must follow for just such a need.

Follow specific rules and take special precautions

Before performing any operation that requires the operator to exit an elevated boom platform, make sure he/she is preauthorized from the equipment manufacturer to do so, often with a letter.

This letter should outline owner, employer, user and operator responsibilities for exiting at height as well as detail requirements for 100% tie-off and personal fall protection requirements. It's important to note that a copy of the authorization letter must be kept in the weather-resistant storage compartment located on the equipment at all times.

First and foremost, when an operator is on a project that requires exiting a platform at height, as with any boom application, he/she must be trained and qualified on how to safely operate the equipment and be familiar with that specific model. In addition to complying with all local, state, provincial or federal standards, the worker must operate the boom in accordance with

the restrictions outlined in the authorization letter.

An approved full-body harness and appropriate lanyard must always be worn while working inside or exiting the platform. If a self-extracting lifeline/lanyard is used, it cannot allow more than 6 feet of free fall. Also, workers must enter or exit the platform only through the sliding mid-rail entry or gate provided, never climbing over the platform guardrails.



Types of fall protection

Fall protection equipment, such as a full-body harness and appropriate lanyard, is crucial for operator safety when working on aerial equipment. Because different types of MEWPs have specific requirements for fall protection, here's what owners and operators need to know:

Fall Protection Requirements on Manually Propelled and Scissor Lift Products — Standards for Manually Propelled Elevating Work Platforms and Self-Propelled Elevating Work Platforms do not require the use of personal fall protection equipment (PFPE) in addition to guardrails.

Fall Protection Requirements on Booms — Use of approved PFPE, in addition to a guardrail for operator fall protection, is required in the U.S. and Canada for boom-mounted aerial platforms. All occupants in boom-supported aerial work platforms must wear personal fall protection, with the lanyard attached to the designated anchorage, whenever they are in the platform.

Personal Fall Protection Requirements on Boom-Supported Mobile Elevated Work Platforms — An employer is responsible for providing approved fall protection for all employees/operators, and a personal fall arrest system used on a boom-type aerial lift cannot allow the operator to fall more than 6 feet, exceed 1,800 pounds arresting force or allow the operator to come into contact with any lower surface.

There are many unique requirements that must also be adhered to. **For a full explanation, please view IPAF's leaflet "Exiting the Platform at Height" at www.ipaf.com/safe**

To prevent incidents and mishaps from happening on an aerial jobsite, it's important to proactively make sure everyone in contact with an aerial work platform understands and adheres to all fall protection requirements. ▲



Scott Owyen joined Genie in 1983 and currently serves as the global training manager. He was instrumental in the development of the Genie Lift Pro Online Aerial Work Platform and Telehandler Operator Training Programs that have trained over 8,000 operators since they were launched.

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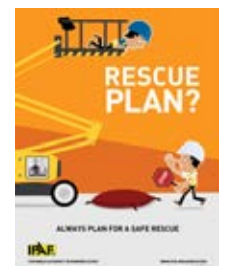
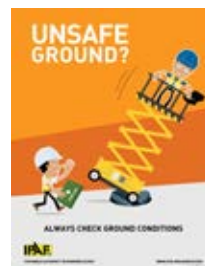
A little character called Andy Access is driving home safety messages about the correct use of mobile elevating work platforms (MEWPs), in a simple and direct way.

Contractors, end-users and rental companies can download free poster artwork for use in their daily operations, as part of IPAF's Andy Access campaign.

The Andy Access posters communicate important safety messages highlighted by the results of IPAF's global accident reporting project (www.ipaf.com/accident). They also reinforce the key messages covered in IPAF's training programs.

Ideas for more Andy Access safety themes can be e-mailed to technicalofficer@ipaf.com

Download the posters now and keep checking back for more updates at www.ipaf.com/andyaccess ▲



Andy Access is a character who shows the right way to perform work at height. Each poster illustrates a specific safety message and can be downloaded for free.



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