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ELEVATING SAFETY

Fall 2023



WHY DO ACCIDENTS STILL OCCUR?

EXPERTS DEBATE WHY ACCIDENTS ARE STILL HAPPENING IN THE POWERED ACCESS INDUSTRY, DESPITE WIDELY KNOWN SOLUTIONS TO COMMON UNDERLYING CAUSES.



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MEETS OR EXCEEDS THE REQUIREMENTS OF THE MEWP ANSI/CSA STANDARDS

THROWING DOWN THE SAFETY GAUNTLET

This year's Elevating Safety magazine focuses on safety, incident reporting and analysis and what these tell us about the challenges our industry still faces to shift the dial on accidents.

Our cover article poses a similar challenge to that, which I laid down when faced with a room full of access industry professionals at the ALH Conference in Chicago last year: Annually, we are sustaining serious injuries and deaths from accidents involving falls from the platform, electrocution, overturns, entrapment and being hit by vehicles or falling objects, so why wait for the standards to be written into OSHA law to follow known solutions that can prevent these incidents from occurring? What more can we do to effect positive change?

Back in March, at CONEXPO/CON-AGG in Las Vegas, IPAF launched its High Voltage! safety campaign, aimed at raising awareness around the risks of working in the vicinity of power lines and reducing accidents involving electrocution and electric shock — which data gathered via IPAF's Accident Reporting portal shows happen in disproportionate numbers in the U.S. As part of that campaign, IPAF has created a comprehensive new guidance document all about the Safe Use of MEWPs in the Vicinity of Power Lines, which you can read more about in the following pages.

Other articles inside focus on what IPAF is doing to celebrate its 40th anniversary since its formation in 1983, and highlight the ongoing Women in Powered Access initiative. Inspired by our first female president, Karin Nars, it aims to showcase the pathways into and how to progress through our industry for women. We hope it will in turn inspire others to get involved and to better understand what a truly diverse and inclusive industry ours can be. I hope you enjoy this year's magazine.



Peter Douglas,
IPAF CEO & Managing Director
www.ipaf.org

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IPAF Offers Guidance on Avoiding Contact with Power Lines

Comprehensive new guidance outlining key principles and ways to reduce risks when using MEWPs in the vicinity of power lines, with the aim of helping to reduce electrocution and electric shock incidents, were launched by IPAF as part of its High Voltage! targeted global safety campaign, at the Conexpo event in Las Vegas, Nev.

The new guidance document, titled *Safe Use of MEWPs in the Vicinity of Power Lines*, has been developed by IPAF in collaboration with the IPAF International Safety Committee (ISC) and supporting members and is available to view or download initially in English. The document can be viewed and downloaded free of charge in digital format and is also available print ready.

"By analyzing data from the past 10 years of accident reporting via IPAF's portal, it's evident that incidents involving electrocutions and electric shocks have notably increased since 2015," says Brian Parker, IPAF's head of safety and technical. "One standout statistic is that reported incidents of electrocution are nearly always fatal. Working in the vicinity of energized power lines can expose workers to

health and safety risks including death by electrocution or electric shock. As with all common causes of accidents involving MEWPs, workplace safety culture and behavior can play a big part in reducing the number of incidents. Ignorance or lack of awareness of the main underlying risks can lead to complacency and potential exposure to unsafe situations.

Parker adds: "We hope all those who read this document will let us know their thoughts. Like all of IPAF's industry safety and technical guidance, this is a 'living document,' and we place huge emphasis on listening and responding to constructive feedback, so I urge people to view and download the document, read and understand it and share it with colleagues."

Included among the key points of safety guidance included in the new document are:

Plan thoroughly: Look out and around for power lines in the work area. Conduct a site survey and risk assessment ensuring an

Safe System of Work (SSoW) is completed. Correct machine selection is critical. If power lines are in your work area, contact the Energy Supply Authority (ESA) before work commences, ensure operators are briefed prior to work commencing and that they are made aware of any power lines in the vicinity.

Ensure operators are trained: Anyone involved in the safe use of MEWPs must be properly trained on the type of MEWP they are using and must receive machine-specific familiarization. Managers must ensure MEWP operators, supervisors and spotters are briefed on the SSoW.

Stay outside exclusion zones: An exclusion zone is the prescribed safety envelope around live electric power lines. You must

not operate a MEWP where there is potential for any part of it to enter an exclusion zone. Distances for exclusion zones can vary; these must be obtained from the relevant ESA.

Know your rescue plan: If someone has been electrocuted by arcing of electricity or has been in contact with a power line, call the emergency services immediately and call the ESA to have the power turned off and the

lines isolated. Observe the Stay, Call, Wait protocol.

"Our accident data shows there is a particular prevalence of this type of incident in the U.S., so I'd like to thank all the members of the IPAF team, the ISC work group and those members who devoted time and effort to producing this guidance," says Peter Douglas, IPAF CEO. "IPAF would also like to thank all those who continue to report accidents and near-misses via the IPAF portal; analysis of this vital data has been invaluable in shaping the safety guidance and continues to inform all of the work that IPAF and its committees do."

Visit ipaf.org/resources to view or download the new IPAF *Safe Use of MEWPs in the Vicinity of Power Lines* guidance document for more information about **High Voltage!** as well as **Don't Fall For It!** ▲



Tony Groat, manager of IPAF North America, relays the ins and outs of IPAF's new guidance on avoiding contact with power lines.

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Clark Takes Helm of IPAF North America Council



Brian Clark of Sunbelt Rentals took lead as chair of the IPAF North America council at their virtual meeting Jan 25, 2023. He and council members agreed to three primary goals for the year: to build on relations with OSHA and the SAIA, to establish an industry-recognized service technician certification program and to begin work with OSHA to have ANSI A92 design and safe use standards incorporated by reference.

"Collaboration with regulators and other associations can leverage our reach, capacity and impact to add value to our members and our industry," Clark says. "Service technician shortage has long been a struggle for our industry, and now we are competing with other industries for qualified people. Our industry standards will only reach their true value when they are seen as law and not voluntary. While we may be working on these goals beyond 2023, we need to place our focus and energies on issues that will provide the most impact. It is clear that past chair Ebbe Christensen has left council leadership in good hands!" ▲

IPAF Names 2023 International Awards for Powered Access Winners

The International Powered Access Federation (IPAF) honored the winners of the 2023 International Awards for Powered Access (IAPAs) at a gala ceremony on April 20 at the H4 Hotel Berlin Alexanderplatz. The host location for the 2024 event was announced as Copenhagen, Denmark.

"For the second year running, we had a fabulous set of entries across the various awards categories, and the competition was fierce," said Peter Douglas, CEO and managing director of IPAF. "A very well-deserved congratulations to all the winners, and for all the companies or individuals shortlisted but not selected as winners this year, I hope you will enter the 2024 awards, the winners of which will be announced in Copenhagen."

There were 13 categories in the 2023 IAPAs program. The 2023 winners include:

- **Access Rental Company of the Year:** Sunbelt Rentals, U.K.
- **Contribution to Safe Working at Height:** Nationwide Platforms, U.K.
- **The Sustainability Award:** Genie, U.S.
- **Digital Development Award** Alimak, Sweden, for its My Alimak customer portal

- **Equality, Diversity & Inclusion (EDI) Award** Vicki Allen, International Platforms, U.K.
- **Innovative Technology Prize** Nationwide Platforms, U.K., Harness On, Phase 2
- **Mast-Climbing Work Platforms and Hoists** Maber Hoist, Italy, MBC2000 transport platform
- **Scissor Lifts and Vertical Mast Platforms** MEC, U.S., MMAE16 vertical mast lift
- **Self-propelled Booms and Atrium Lifts** Manitou, France, 160 ATJ+e electric boom lift
- **Vehicle and Trailer-mounted Platforms** Elliott Equipment Company, U.S., E150i truck mount
- **IPAF Training Centre of the Year** Dayim Equipment Rentals, Saudi Arabia
- **IPAF Training Instructor of the Year** Anna Sarah Costa Morais, Mills, Brazil
- **Access International/IPAF Lifetime Achievement Award** Dante Fracca, founder of Hinowa ▲

SAIA elects Tony Groat to lead the SAIA MEWP Council



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After many years of partnership between SAIA and IPAF, the associations have taken another step in strengthening their alliance with the election of IPAF North America Ganager Tony Groat as chair of their MEWP council. The SAIA Mobile Elevating Work Platforms Council promotes Safety Awareness in compliance with ANSI/SAIA A92 standards through a more informed access industry.

This council will champion the specific needs and requirements for all its stakeholders, including manufacturers, dealers/distributors, owners, employers, users, operators, regulators and educators.

"This council has many opportunities to have a significant impact on MEWP safe use and raising awareness with MEWP users on how they can improve both effective use and safety for their MEWP operators," says Groat. "The SAIA has many existing best practice and guidance documents attached to their OSHA-SAIA Alliance that can be updated and expanded. We invite all stakeholders to consider joining our council to make a positive impact on our industry." ▲

IPAF Offers Free Compact Lift Webinar

Compact lifts, commonly known as spider or atrium lifts, are becoming more visible on sites and available in the marketplace. These machines are unique in the fact that they are narrow enough to fit through standard or double doorways

but can still reach over 150ft with the use of outriggers. The unique features of these machines can solve many worksite challenges, but also require that users are properly trained and familiarized in their use.

The IPAF North America Regional Council has produced

Pre-use check of surroundings

If used outdoor in an area with traffic, make sure to secure a safety zone around the unit with cones and/or other means of markings to avoid collision with traffic. If a very busy road, consider to park a vehicle with flashing lights in the driving direction to block the lift



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a free webinar, broadcast May 18th, titled Compact Lift Safety – Guidance and Best Practices, in which two industry experts, Ebbe Christensen (Ruthmann Reachmaster) and Ben Taft (Spimerica) offer

their expertise to raise awareness about the safe and productive use of these dynamic machines. IPAF records all its webinars for reviewing and sharing at a later date. Visit IPAF's YouTube Channel at www.youtube.com/@IPAForg to view the full range of webinars and films on offer. ▲

New Andy Access Posters and Toolbox Talks Published

As MEWP accident reporting indicates a need to address the high level of risk from overhead energized power lines, IPAF has developed new Toolbox Talks for helping reduce

electrocutions in our industry. The "Avoiding Contact with Power Lines Toolbox Talk" and an accompanying "Andy Access Poster: Keep Clear of Cables" are available now and can be downloaded free for use on worksites as part of the preuse safety briefings of MEWP operators and supervisors.

The subject matter is known hazards associated with the use of MEWPs, and unfortunately IPAF's accident data analysis shows this hazard is still a dominant cause of accidents in the first quarter of 2023. All MEWP users are encouraged to use this new toolbox talk to increase operator awareness of the high level of risk when an overhead powerline is in the vicinity of the worksite. Take action to prevent an incident occurring on your site. ▲



IPAF Summit Celebrates 40 years and Looks to the Future

Attendees at the IPAF Summit 2023, held in Berlin, Germany, on April 20, enjoyed presentations on the theme “The Future of Powered Access: Dynamic, Digital, Diverse” — highlighting what four decades of learning can teach us about innovation through collaboration, safety through automation and embracing a future fraught with change in powered access worldwide.

Jay Iyengar, executive vp, chief technology and strategic sourcing officer — Oshkosh Corp., parent company of IPAF member JLG, talked about technology without borders. “Technology is no longer an option — it’s an imperative. Customer expectations are changing — they don’t care how technology works, but they do care what it can do for them.”

Lars Thomsen, chief futurist — the Future Matters and member of the World Future Society, opened by saying: “We tend to underestimate what is possible in the next 10 years. When you are young, the world is a playground for great ideas. What we discover when we are working with companies about a future roadmap is that often we have lost that childhood ability to contemplate technology that doesn’t exist yet.”

Marco Einhaus, head of subcommittee building construction, Berufsgenossenschaft, focused on the causes of accidents that should be addressed, including the catapult effect and machine overturns — “How much has changed in preventing these incidents in the past 10 years? How can we stop these incidents occurring?”

Susan Xu, CEO, Sinoboom Intelligent Equipment, spoke on advances in artificial intelligence. Sinoboom has been utilizing “intelligent manufacturing” techniques for many years, “AI is not an enemy, it just means that humans are not necessarily required to work on the shop floor or the production line, and can be utilized elsewhere in the company,” she concluded.

Jürgen Küspert, managing director, Bundesverband der Baumaschinen-, Baugeräte- und Industriemaschinen-Firmen (BBI), gave an overview of the German construction market, beginning on the issues with inflation on German GDP at least in the first quarter of 2023.

Kate Bell, head of UK Training & Partnerships, and **Alana Paterson**, (pictured, right) head of HSE – Nationwide Platforms, jointly presented on the importance of accident reporting and innovation in training, “training comes as standard when we think about MEWP operators, but how do we record operator competence?” she asked.

Ángel Ibáñez, IPAF MCWP global representative, and

Kevin O’Shea, director of safety, Hydro Mobile, talked about how in 2022, IPAF moved rapidly to coordinate a response to an industry safety alert that effectively grounded around 80% of the UK mast-climbing work platform (MCWP) rental fleet.

Katrin Blau, IPAF audit manager, and **Romina Vanzi**, IPAF head of regional development & MCWPs, discussed building diverse teams: “Most times diversity is an asset, but sometimes there are challenges, not least when people have different points of view,” Romina said.

The Summit concluded with a panel session, the panel consisting of Alice Henault, strategy and development director, Loxam; Karin Nars, managing director, Dinolift & IPAF president; Oana Samoila, key accounts sales manager, Almac-Italia; Carolin Winkel, director of strategy & CSR, Zeppelin Rental; and chaired by Julie Houston-Smyth, Director of Lolex Ltd, who started by asking: “Did you know that women at the top, are more likely to attract women across all levels of a business?”

Karin responded: “We are making ourselves visible, and only when we do this do things start happening.”

Romina Vanzi, IPAF’s head of regional development and MCWPs, kicked things off with an informative presentation on IPAF and MCWP/Hoist industry over the past 40 years, covering the historical developments over the past four decades, and highlighting IPAF’s role in promoting safety, training, and good practice.

Among other speakers in the break-out session, **Peter Lindelöf**, business development manager digitalization and regional divisional manager, Nordics of Alimak Group, gave a presentation on innovation as a

Karin Nars, IPAF president, offered her closing comments to the Summit: “Safety is never an end game. It is a journey, and what we are doing here today, sharing ideas to increase safety, is important. When safe work practices happen when no one is looking, that is when safety has become part of the culture.” ▲





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WHY DO ACCIDENTS STILL OCCUR?

Experts debate why accidents are still happening in the powered access industry, despite widely known solutions to common underlying causes.

Accident data involving mobile elevating work platforms (MEWPs) has been monitored for decades. A notable report issued by the Center for Construction Research and Training (CPWR), covering the U.S. between 1992 and 1999, stated that an average of 26 construction workers die each year from using aerial lifts—this comprised 2-3 percent of all construction deaths. The report detailed the causes of deaths in construction by type of MEWP and identified the

leading causes of the accidents to be electrocutions, falls from the platform, machine tipovers, being caught in or between (crushing) and being struck by or against.

To help prevent such accidents in the future, the International Powered Access Federation (IPAF) has been reporting on accidents involving MEWPs since 2012.

In IPAF's 2023 Global Safety Report, the data shows that top of the list in terms of fatalities were falls from the platform,

with overturns second. Hit by machine, vehicle or object was third, entrapment fourth and electrocution/electric shock fifth.

While numbers going up can be a result of better reporting or more MEWPs being used in the marketplace, it's still concerning that the main causes of serious injury and death when using powered access machines haven't changed in 10 years.

Industry experts and seasoned professionals debate why such accidents are still occurring.

WHERE ACCIDENTS OCCUR

Before looking into the factors influencing the number of accidents, it's important to first look at where the accidents are occurring.

Sean Ward, national and accounts manager, U.S. and Canada, Haulotte, notes that many accidents occur in the arborist industry and close to overhead power lines.

Ebbe Christensen, president and CEO of Ruthmann Reachmaster, agrees, adding that the window cleaning segment and construction industry also experience a disproportional number of accidents.

If those working in tree care select a machine with a fiberglass basket in the mistaken belief it is an insulated aerial device, then this can also be a cause of electrocution incidents if occupants think they are isolated from contact with power lines.

Christensen adds that the tree care industry also tends to attract individuals with a high level of adrenalin-driven decision-making rather than evaluating the safety aspects.

"It all boils down to education and what level of education can you impose on an industry culture," Christensen says.

Scott Owyen, director of training at Genie, says that his team has noticed significant accidents in the construction and industrial applications, large and small.

"Many of them own their own equipment, so they don't have the benefit of a knowledgeable rental partner to educate them or provide training and technical support," Owyen says.

Tony Groat, North America regional manager for IPAF, says that while the construction and tree care industries experience accidents because they are a major user of the equipment and need to work at height in hazardous locations, small businesses and occasional users also add to the overall accident count.

"They face the added challenges due to limited resources, lack of safety experiences or insufficient training programs," Groat says.

Owyen adds to that sentiment by noting that "big box home goods stores rent MEWPs to anyone with no mention of training, fall protection, etc."

WHY ACCIDENTS OCCUR

Lack of emphasis on safety

Despite the adage "safety first," Groat says many companies don't place enough value on safety.

"Despite the slogan of safety being a priority, so are productivity, cost efficiency and other competing priorities," Groat says.

Groat adds that the mentality of "find a way to get it done" is rewarded while "find a way to get it done safely" is punished.

The human factor

Christensen argues that human ingenuity is both people's best and strongest asset and at the same time, their worst enemy.

"Looking at recent years' MEWP accidents, it is clear that human error rather than equipment failure is the root cause for accidents," Christensen says. "The human factors are not just present, but they are the indisputable biggest factor in accidents prevention and safe operation."

Christensen says that training and education at all levels of an organization are key.

"The main reason for human error is lack of knowledge one way or the other," Christensen says. "It all drops down to having proper knowledge about the equipment, how to evaluate its condition, the worksite, the application and the proper use of the right equipment for the right job."

In addition to a lack of training or education, a lot of human error can boil down to not planning properly, distractions and a rush to complete the work, according to Groat.

"Human factors that can impact an accident include being overtired, complacency, lack of situational awareness or attitudes such as 'I'm not afraid to do that,'" Groat says.

Randy De Coteau, product safety engineer, Genie, says poor judgement is also to blame.

"Many of the incidents that I see are not so much error but poor judgement or complete disregard for proper use of the machine and safety," De Coteau says.

Pat Schmetzer, director, product training and risk management at MEC Aerial Work Platforms, says human error also comes from lack of preoperational risk assessment, undue risk training and insufficient personal protective equipment.

Schmetzer also argues that due to the labor shortage, companies are hiring in operators who aren't qualified to perform the job in the first place

"Operators lack the necessary skills and experience, and in many cases, (companies) are 'scraping the bottom of the barrel' for talent," Schmetzer says.

Insufficient training

Untrained or inadequately trained operators should be reiterated as a root cause of accidents, Owyen says.

"Much of the time, it is because the operator has not received



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adequate training, if any," Owyen says. "Untrained supervisors also play a role when they direct an individual to perform an unsafe act to get the job done, often without being aware of the danger they are placing the operator in."

Owyen says that Genie provides safety courses for operators who may have never had actual training.

"The information they receive astonishes them, as they have been performing unsafe acts for years without knowing any better, often at the direction of their supervisor," Owyen says.

He adds that although the new ANSI A92 standards require MEWP Supervisor Training, most organizations are still unaware of that requirement, and some choose to ignore it completely.

Kevin O'Shea, director of safety at Hydro Mobile, agrees that safety is not always a priority at companies.

"Rental companies sometimes take a 'bare-bones' approach to training and familiarization," O'Shea says.

Standards and regulations

When it comes to the question of whether current standards and regulations are sufficient, the experts are split.

On one side, De Coteau says standards and regulations have set a good bar for safety.

On the other hand, O'Shea notes that standards *are not* regulations, so it's difficult to persuade all users to address responsibilities consistently.

"Most companies look at OSHA as something they have to comply with, but anything more (ANSI, safety and technical guidance documents, etc.) is seen as unnecessary and costly," O'Shea says.

Groat agrees, noting that OSHA regulations are the minimum legal requirements for safety and that while OSHA regulations for MEWPs were written in the 1970s, industry standards are required to be reviewed every five years.

"The ANSI/SAIA A92 standards provide additional or more specific requirements and safe practices for MEWP use, and many go beyond OSHA requirements," Groat says. "As OSHA regulations are enforceable by law and compliance is mandatory, standards are generally voluntary, and compliance with them will be more demanded when a lawsuit commences."

Groat also cites a statistic from the Bureau of Labor Statistics (BLS), stating that the number of workplace fatalities in the U.S. has decreased from approximately 14,000 per year in 1970 to around 5,000 per year in recent years.

"(Standards) do work but require employer leadership to place a real value that is adopted by all employees as the only accepted outcome," Groat says.

Schmetzer says that while standards adequately address the risk, specific regulations (OSHA) are outdated, lacking specifics and are confusing even to

compliance officers. He also notes that its only enforcement tools are Section (5)(a)(1) General Duty Clause or "Incorporation by Reference," which is seldom used.

Owyen thinks the challenge arises when it comes to getting the word out that the standards have changed.

"There is a lot of excellent supporting documentation regarding the requirements, but the information is not getting to the right people (owners, dealers, users, operators)," Owyen says.

Ward posits that until the latest ANSI is adopted and published widely, there is a gap between OSHA regulations and industry standards that cause MEWP user confusion over safe-use requirements. He adds that corporate manslaughter in the U.K. — stating that companies and organizations can be found guilty of corporate manslaughter as a result of serious management failures — was a game-changer for safety there.

When it comes to enforcement, Schmetzer says that OSHA's enforcement or penalties do not provide sufficient motivations for employers to comply, and the process of enforcement and the issuing of fines and citations drags out too long to be effective.

Owyen somewhat agrees, noting that the threat of a penalty does little to persuade companies until they actually receive one.

Christensen thinks that current regulations and standards would do a better job of reducing accidents if accidents were monitored and penalties were better enforced.

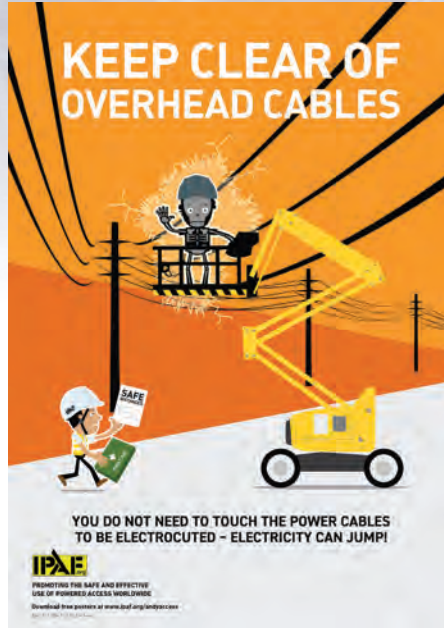
"In many cases, there is no formal monitoring from a regulatory point of view, and it is up to the players to both interpret and follow the rules," Christensen says.

Christensen says it is logical to look at other markets with frequent use of MEWPs and compare regulations and standards.

"When looking at Europe, we will see that there is both a culture, tradition and appetite for stronger government involvement and control in all aspects of life. I spent the first 28 years of my life there, so I speak not just from theory, but practical experience," Christensen says. "The Europeans find it much more acceptable that there are laws and rules for everything, and as such, they have implemented much stricter regulations and standards."

Seen from that angle, Christensen says that the U.S. regulations and standards can appear somewhat lax and inefficient, but from a culture point of view, Americans are generally less in favor of regulations at the expense of what's considered personal freedom.

Christensen says that while the U.S. does have sufficient regulations and standards, the industry needs to advocate better observations of standards through education on one side and better enforcement on the other side.



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"American culture leans toward achievement rather than punishment, but we need to push both sides to raise the overall professionalism in the industry," Christensen says. "There is a gap not so much in the objective regulations and the standards as much as there is a gap between the people that observe and enforce them on both sides of the fence."

THE SOLUTIONS

Technological advancements

Some experts believe technology advancements can help cut down on incidents. For example, O'Shea points to Live Line Defender, SiOPS or similar mechanisms.

Schmetzer agrees: "We seem to be in a period where new safety innovations are emerging, especially addressing proximity

to overhead electrical conductors as well as devices to ensure lanyard attachments."

"Xtra Deck is a safety innovation addressing climbing on



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rails or other means to access tight overhead areas on scissor and booms, and various innovations designed to reduce entrapment and crushing injuries are emerging," Schmetzer says.

Christensen says modern technology with CAN bus-operated systems allow for machinery that can react quicker than an operator.

"Today's lifts are safer than ever before as the monitoring systems on the MEWPs take over a lot of the decision-making by only allowing active operation within the safe work envelope of the equipment," Christensen says.

Christensen points to level sensors, load sensors, active monitoring of ground conditions (outrigger based equipment), anticollision systems, startup systems (where the lift runs an electronic safety check on all key components and connections to make sure all systems are go before operation is allowed), systems to ensure safety harnesses are properly attached, anemometers that will reduce extension of a lift, lightning warning systems, power line distance warning systems and more.

Owyen says while of the new design requirements in the ANSI standards, such as platform load sense and terrain sensors, may minimize the potential for a situation that could cause an accident, they should never even come into play with a well-trained operator.

De Coteau agrees: "There is no technology that will influence the safe operation of a machine more than a competent and attentive operator."

Trainings

To ensure operators are properly trained, Groat says that all operators should report to management and that management must ensure that they assign a qualified person to monitor operator performance and supervise their work.

"That individual must be trained as a MEWP supervisor who understands the rules and regulations that apply to MEWPs, the selection of the correct MEWP for the task, knowledge of the potential hazards associated with use of MEWPs and the means to

protect against identified hazards," Groat says.

In addition to more stringent operator training, Ward points to stricter management protocols, risk assessments and method statements as ways to prevent accidents.

Christensen says it comes down to establishing a healthy safety culture (overall) in a company.

"If there are not only very visual guidelines, but also execution of safe work mentality and operation, then a company can foster a natural focus on safety, multiplying the chances to develop efficient systems dramatically," Christensen says. "So, it all starts with the end in mind, evaluation of all the links from start to finish and how you implement safety conscience in every link."

Regulating bodies and associations

Some experts think that associations can do very little to enforce compliance.

"It has to be driven by the law," Ward says.

Groat notes that if the key word is "enforcement," that is a role for OSHA and laws.

"That requires industry standards to be adopted by reference into OSHA regulations," Groat says. "Industry associations submit a proposal to OSHA to get the standards into the rulemaking process."

Owyen says that OSHA's compliance officers need to have a deep understanding of the ANSI standards that they reference and how to use them.

"If they don't really understand them or are not familiar with them, there is a good chance that they will not enforce them," Owyen says. "Creating a continuous flow of information on the standards may assist them in being more proactive rather than reactive when it comes to MEWP-related violations."

O'Shea adds that the industry can lobby authorities, distribute best practice info, raise the standard of training and improve the quality and adoption of standards.

Schmetzer says that associations have the means to gather many industry safety professionals together to provide a unified focus on product safety without competitive pressures.

"Associations can be the conduit to other industry associations where a strong, forceful and consistent message can be delivered," Schmetzer says.

Christensen agrees.

"I think there could be a better and more aligned cooperation between the industry and OSHA to create a more holistic approach to the goal of safety. We must never forget what is the goal and how we reach it," Christesen says. "It is important that OSHA and OSHA rulings are based on competent decisions and industry knowledge. For that to happen, it is vital to establish a close cooperation between authorities and private enterprise that will allow for best practices to be based on realistic terms and realistically implemented."

Christensen adds that associations and trade organizations need to find better common grounds to work together rather than

compete on something as important as training and safety.

"I am not advocating for one single entity to conduct the training as a monopoly, but I am advocating for transparency for how training is provided," Christensen says.

Reportings

O'Shea and Schmetzer point to IPAF's Global MEWP Safety Report as a detailer of many metrics and indicators.

"The top source for this accident reporting is the IPAF Accident Reporting Data Summaries. Of course, this requires companies to report at a higher level," Schmetzer says.

Groat notes that IPAF's database has been in operation for more than a decade and that the industry can support it with individual company reporting.

"Accident reporting specific to MEWPs would be critical: data to identify issues and ongoing performance," Groat says. "The more detail available, the greater ability to address the issues."

Christensen says that more timely and precise these systems are, the better indicator for what causes the accidents.

"What would really make a difference is reporting of near-misses as well," Christensen says. "The accident reporting system IPAF operates allows for this, and while it is not mandatory, it seems like there is growing understanding of the need for it. With

the technology available today, including social media, we have a much better chance to collect data, and if addressed correctly, I am sure they will lead to better indicators of causes for accident."

Attitudes

O'Shea says that mentalities such as "the can-do attitude" and "productivity over safety" are culprits in breeding a bad safety culture.

Schmetzer says companies must 100 percent commit to safety practices and adopt a zero-tolerance attitude.

"Operator safety must always trump deadlines and budgets, and operators, supervisors, on-site safety staff and all workers must be fully trained and committed to 100 percent compliance with standards and regulations, possibly with team awards for outstanding performance," Schmetzer says.

In creating that culture, Christensen notes that nonoperating employees need to understand the safety rules as well as those who will be operating the equipment and that there should be a positive mentality toward safety.

"It's always better to be safe than sorry, and you are not considered a 'whistle blower' if you report hazardous issues," Christensen says. "Rather, you are a safe team player." ▲

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In 2022, the U.S. MEWP rental market boomed, though rental and utilization rates have yet to return to levels seen in 2019 amid uncertainty around inflation, supply chain issues and ongoing conflict in Ukraine, according to the latest IPAF/Ducker report.

In 2022, the U.S. MEWP rental market boomed to exceed prepandemic levels, though some key indicators such as rental and utilization rates have yet to return to levels seen in 2019. Uncertainty around inflation and energy prices as well as persistent supply chain issues and the ongoing conflict in Ukraine cloud the outlook slightly for 2023 to 2024.

MEWP rental revenue reached a record high, a direct consequence of the country's rapid market growth, rising by 15 percent to reach \$13.6 billion. Total fleet size expanded, while rental companies were able to increase rental rates by an average of 5 percent in 2022. Utilization rates increased to an all-time high of 73 percent, though these are expected to fall back once supply chain issues abate.

Rental market value grew 15 percent year over year and is expected to remain at these elevated levels over the next two years, owing to the U.S.'s continuing strong economy. Rental revenue increased as a result of rental companies increasing rental rates and expanding fleet size in line with increasing

demand in the market. Demand is expected to remain high, though revenue growth may slow down over the next few years.

Cross hire grew slightly in 2022, owing to growing demand and continuing delays in the fulfilment of orders for new MEWP machines. In many countries in Europe, Chinese manufacturers have stepped into the breach where long lead times and delays to OEM fulfilment have stifled fleet growth; tariffs have meant this has not been a viable alternative in the U.S.

Overall, the U.S. total fleet size increased by around 10 percent across 2022, adding more than 70,000 units to the country's estimated total MEWP fleet. The U.S. fleet is forecasted to continue growing in 2023. The total number of units in the U.S. MEWP fleet is expected to reach almost 850,000 units by end of year 2023. For comparison, the European fleet stood at a total of approximately 340,000 units at the end of 2022.

Within the total U.S. fleet, all MEWP categories saw similar increases in 2022, with the exception of particularly robust growth rates reported for spider/tracked lifts, owing to their versatility and suitability for use in tight spaces or on rough terrain. Spider

lifts are increasingly used in forestry, gardening, painting and industrial cleaning. Overall fleet mix remained broadly the same as in previous years and is expected to remain relatively unchanged in years to come.

Average revenue per MEWP unit rose by 5 percent in 2022. After a sudden drop in 2020 at the height of the pandemic, average rental revenue partially recovered in 2021. As rental companies expect to be able to further increase rental rates and, amid ongoing levels of demand, they expect it to drive up average revenue per unit by 3 percent in 2023.

With unprecedented market demand and both inflation and MEWP purchase prices rising, rental companies were forced to substantially increase rental rates in most European countries, leading to an average rise of around 4 percent in 2022.

The American Rental Association (ARA) strikes a word of caution. Following 2022's vibrant equipment rental markets across the U.S. and Canada, the construction and industrial industries should prepare for limited revenue and growth this year, according to expert economists who provided an updated outlook during the 2023 ARA Show.

While the IIJA infrastructure bill, introduced in 2021, is set to inject up to \$1.2 billion into related projects, its impact will not fully be felt until 2024, and even then, the industry will only see 1.9 percent growth for construction and industrial rental. Peak spending related to IIJA work will not surface until 2025.

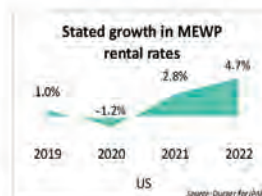
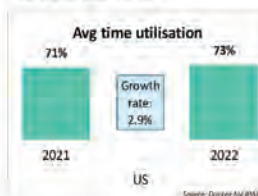
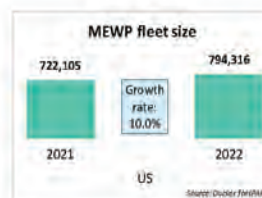
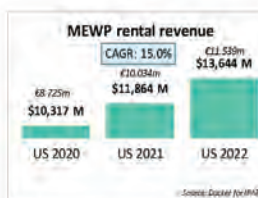
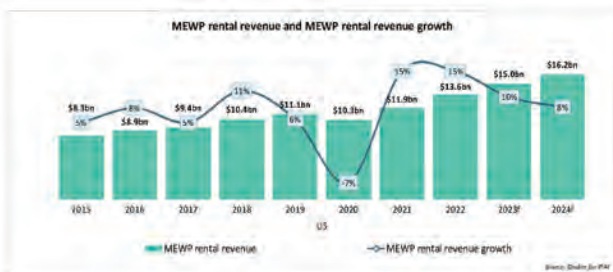
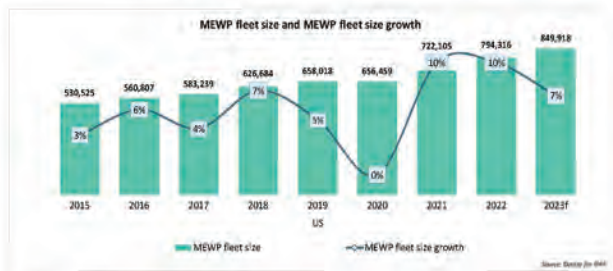
Despite these ripples, the long-term market in the U.S. looks positive. The percentage of access equipment in rental fleets deployed in mega projects defined as projects with a value of \$400 million or more has more than doubled over historical levels.

The U.S. MEWP rental market remains oriented toward construction applications and exhibits around a 75:25 ratio between construction and nonconstruction end uses, which has remained largely unchanged since 2015 and is expected to remain so over the next few years. Both construction and nonconstruction subsectors experienced a healthy level of activity in 2022. While commercial remains by far the strongest construction market, in nonconstruction subsectors, warehouse activities and wind energy were reported to be experiencing the strongest growth in end-use demand.

After a significant increase in 2021, MEWP rental companies were able to further increase investment in 2022. An additional increase in the amount of investment is expected in 2023.

Chinese manufacturers were affected considerably by the tariffs imposed last year by the U.S. Government on MEWPs made in China entering the U.S. However, this has not stopped them from seeking business in the country. A solution being adopted by some of those manufacturers is building factories in Mexico, where labor is less expensive.

MEWP fleet size in the U.S. grew by 10 percent, as rental companies resumed increasing fleet size in a bid to cap utilization rates from further rises. Utilization rates rose to 73 percent on average. Despite lead times improving on new OEM MEWPs,



rental companies reported backlogs persisting in 2022-2023.

Average payback period of MEWPs remained steady in 2022, after previously declining by around nine months, reflecting the high utilization rate for rental equipment in the U.S., which largely returned to prepandemic levels over the course of 2022.

The average retention period increased by six months in 2022, to stand at five years and eight months on average, compared to five years and two months in 2021. Lead times on the delivery of new equipment recovered slightly, but backlogs remain.

Another issue in the U.S., pointed out by Italian spider lift manufacturer CTE Lift, is rising interest rates, combined with the direct extra cost of power, and borrowing rates. This has had a particularly detrimental effect on smaller "mom & pop" rental companies.

Exhibitions continue to demonstrate their value postpandemic. The 2023 CONEXPO-CON/AGG was confirmed as a resounding success. A record-breaking 139,000 visitors were registered through the gate at the Las Vegas show grounds. To order a copy of the IPAF Rental Market report, please see ipaf.org/reports. ▲

By Katherine Price, contributor

Since 2022, and the inauguration of Finland's Karin Nars as the International Powered Access Federation's (IPAF) first female president, the federation has been celebrating the contributions of women and highlighting the rewarding career paths that are open to all through its Women in Powered Access initiative.

"We cannot afford to exclude anybody from the conversation surrounding safety in our industry," says Nars, who also serves as managing director at Dinolift.

After becoming the first woman to be named IPAF president, Nars set out a clear priority to bring more women into powered access as part of a wider drive to improve the sector's diversity.

Already suffering a skills shortage, the powered access and wider construction industries desperately need to attract a wider pool of candidates as well as do everything to retain those already in it. IPAF's Women in Powered Access initiative was launched in May 2022 both to celebrate the contributions of women in the sector and to highlight the career pathways available.

The initiative's goals

The initiative has four main goals:

- Celebrate and raise awareness of equality, diversity and inclusion (EDI) initiatives, as well as diverse individuals across the industry
- Raise awareness of women in powered access and their roles
- Provide EDI support including materials, guidance and signposting
- Promote the wider industry to attract more women and diverse candidates

After 18 months, the focus has been on raising visibility of women by publishing their career stories on the IPAF website and sharing them via social media (see panel).

"It seems like a small thing, but it's important to make women visible and feel they can also belong," says Nars. "We know there are incredibly passionate and professional women in the powered access industry, and we want to make them visible so they can act as role models for women of all ages to join our industry and see that there are lots of opportunities. We also want to show different



paths to start a career in access and how that can develop into something meaningful."

For the year ahead, the focus is on promoting the industry to young people, presenting to schools and colleges, as well as the new IAPA EDI Award, and developing EDI support materials for the industry.

A mentorship scheme is potentially in the pipeline and a LinkedIn group is already established.

Also, a well-attended women-only breakfast event was held during the APEX 2023 event in Maastricht, Netherlands, in June.

To ensure that words lead to actions, IPAF is targeting 40 percent female speakers at its five main events this year, including keynote speakers, and also aiming for 30 percent of the attendees to be women.



Since 2022, and the inauguration of Karin Nars as IPAF's first female president, IPAF has been celebrating the contributions of women and highlighting the rewarding career paths that are open to all through its Women in Powered Access initiative.

Nars acknowledges that quotas can be a divisive move.

"But, as long as we have such a huge gap between men and women in this industry, we need quotas, because it might be the only way for a person to get in," she argues.

For her, it's not a box-ticking exercise, but about promoting inclusive working cultures and better leadership.

"Everyone should feel like they belong, that they are listened to, that they are making a contribution," Nars says. "That's also how you make a woman feel comfortable in an industry where she might not, at first sight, feel that she belongs."

Companies need to be thinking about inclusivity across the entire recruitment process, from the language and pictures used in media to the interview process, and then retaining those women.

"It doesn't help if you have policies around diversity, equality and inclusion if you're not then showing that you are actually living those policies in your actions," Nars says.

Nars ultimately hopes to make changes that ignite a long-term shift toward a more inclusive future.

"I want to make sustainable change and show that diversity and inclusion should be on everyone's agenda, because it makes our companies perform better. We make better decisions in diverse teams, and we make fewer mistakes, because we are able to see things from different angles," she adds. "It's not about excluding someone or promoting one group instead of another. It is about including everyone, improving work cultures and making a positive impact on safety in our industry."

Women at height: Five career stories



Charlotte Brogren,
Chief Technology Officer,
Alimak Group, Sweden

IPAF: How did you come into the industry?

Charlotte Brogren: I have worked in R&D and innovation management since I graduated with a Ph.D. in the 1990s.

After 15 years in the automation and robotics industry, I was thrilled to take the opportunity of becoming the chief technology officer of Alimak Group to be part of driving change, innovation and digital technologies for our sector.

IPAF: What attracted you to it?

Brogren: It's all about people, and working with experienced colleagues, customers and suppliers with enormous know-how, with new talents bringing in new perspectives and technologies. Together we can develop new solutions, improving productivity and working conditions while minimizing the effect on the environment.

IPAF: What advice would you give to women in or thinking of entering the industry?

Brogren: First, you must believe in and have a passion for what you do. Second, make sure you have a manager who believes in you and gives you opportunities to grow. Then the sky is the limit!



El Ioannou,
Operations Manager,
Mr Plant Hire, U.K.

IPAF: What is your role in powered access?

Ioannou: My role is to ensure we are working to and maintaining the IPAF Rental+ certification. The department has 23 members of staff; my role is to support the manager and guide him through the regulations and legislation.

IPAF: What do you find inspiring about your role?

Ioannou: Making a positive change in the industry. Not only working in London servicing some incredible sites, including hospitals during the pandemic, but also becoming chair of the IPAF Rental+ committee in 2022.

Standardizing safety and excellence in our industry is the goal, U.K. and worldwide and helping my colleagues develop in their own careers. Nothing is more satisfying than seeing someone grow.

IPAF: What's one piece of advice would you give to other women in/thinking of entering the industry?

Ioannou: Never let your gender get in the way of your ambitions. When you believe in yourself, others will believe in you.



Marzia Giusto,
Managing Director,
Loxam, Italy

IPAF: How did you come into this industry and what attracted you to it?

Giusto: In the beginning, I was joining the family business, and then I became fascinated by the

need for adaptability to the different dynamics that arise, the need to have a high aptitude for problem-solving. Relationships with customers, employees, suppliers and colleagues are a fundamental part of this business.

IPAF: What do you find inspiring about your role?

Giusto: The possibility to continually improve the way we do business (there is always room for improvement). It is very important to be able to make a difference and to make a contribution to safety for workers in the lifting world.

IPAF: What advice would you give to women in or thinking of entering the industry?

Giusto: Jump into this business; it will fascinate you. There are no obstacles and no barriers to what you can achieve; it depends only on you!



Catherine McCreedy,
Apprentice Engineer,
Speedy Powered Access, U.K.

IPAF: How did you come into this industry and what attracted you to it?

McCreedy: It sounded like a challenge, and I like a challenge!

IPAF: What do you find inspiring in your role?

McCreedy: There are so many opportunities out there and I feel that I can amount to anything — the opportunities are endless.

IPAF: Where do you see yourself in five years? What do you want to achieve?

McCreedy: My goal is to be a competent, qualified engineer, working in a job I enjoy.

IPAF: What advice would you give to women in or thinking of entering the industry?

McCreedy: You can do anything if you stay focused and work hard. Mainly I would say try and enjoy it!



Anna Sara Costa Morais,
Training Instructor,
Mills, Brazil

IPAF: How did you come into this industry and what attracted you to it?

Costa Morai: I had the opportunity to work at Mills,

which here in Brazil, is a well-known business in the MEWP rental and training sector.

I embraced this opportunity as the perfect professional development project, to specialize more and more in safe methods of operation of MEWPs to work at height.

IPAF: Where do you see yourself in five years? What do you want to achieve?

Costa Morai: I see myself in a few years to still be in the continual learning process. More and more new technologies keep arising to benefit safe operation, and I want to continue to learn and to share my knowledge.

IPAF: What advice would you give to women in or thinking of entering the industry?

Costa Morai: I have increasingly been keen to identify and encourage other women who want to specialize in MEWP operations. This demonstrates that there are opportunities for women to develop our skills.

Difficulties still exist, but our perception, resilience and plurality only add value to work teams, allowing us to dream big and to go far! ▲



For a full profile on IPAF President Karin Nars, follow the QR code. <https://rnt.news/t2cenv>



COMPACT LIFT SAFETY: Guidance and Safe Practices

An overview of compact lifts, their intended applications and best safety practices to operate them.

Industry veteran and subject matter expert Ebbe Christensen, president and CEO of Ruthmann-Reachmaster, presented a webinar on compact lifts, their applications and safety factors.

Compact lifts

Think about a high reach task inside a building courtyard or a task that requires you to set up on a sloped surface. How are workers going to access their work at height? There's a good chance the solution is a compact lift.

A compact lift, also known as a spider lift or compact crawler, is a type of mobile elevating work platform (MEWP) designed for accessing hard-to-reach areas. It is characterized by its versatile and flexible nature, making it ideal for various applications in construction, maintenance and other industries. Compact lifts have a long, narrow body with swing-out outriggers and are lightweight compared to other types of lifts that reach similar

heights. This allows them to access narrow spaces, confined areas and locations with limited accessibility, such as indoor environments or uneven terrain.

Most lifts are designed as a combination between a set of two articulating fixed arms, a telescoping boom and a jib that can be maneuvered independently. This concept combined with basket rotation enables the lift to reach up, over and around obstacles, providing increased

versatility and flexibility.

One distinguishing characteristic of a compact lift is the stabilization features. They all have extendable outriggers that can be adjusted individually to accommodate maximum setup environment flexibility while at the same time provide sufficient and safe stability.

With the outriggers (not counterweight) being the main offset for operational reach, setting up the outriggers correctly is the most single important function to setup the units. For that reason, most brands offer automatic stabilization and leveling on both even or uneven or sloping surfaces. Most brands have sensor technology that will monitor stability during operation and in case of any instability, shut the unit down.

These lifts are available with either a tracked-based or wheeled-based configuration, and while they are drivable when in a stowed position, they require outriggers to be set to elevate the work platform and are considered a type 1 or nondrivable MEWP.

Applications

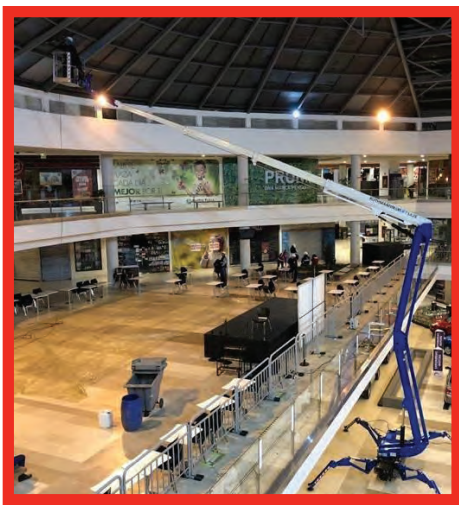
Due to their compact size and low ground pressure, compact lifts are suitable for both indoor and outdoor applications. They can operate on surfaces with limited and/or strict weight limitations as well as delicate flooring surfaces without causing damage. Other comparable work height MEWPs cannot do this as they are several times heavier.

These lifts are available in with various power options, including electric (batteries), diesel and hybrid models. Electric models are ideal for indoor use due to their zero-emission and low-noise operation, while diesel or hybrid models add greater flexibility for outdoor applications and overall utilization.

Compact lifts are designed for highly controlled maneuverability, often operating within confined areas and right



IPAF



Reachmaster

next to delicate and breakable surfaces like glass and stone walls. The narrow dimensions and advanced control systems allow operators to navigate through tight spaces, around obstacles and access elevated areas safely.

For a MEWP category that can reach between 35 feet to 170 feet, these machines are, for the most part, easy to transport but are by design somewhat fragile compared to other MEWPs.

Safety

As with all MEWPs, qualified persons are required to perform all of the related task with their use. MEWP operators, ground personnel and those performing maintenance or repairs must be properly trained and assessed as qualified prior to the start of task.

Compliance with ANSI/SAIA A92.22 safe use and A92.24 training standards is a must. While the standards will provide

general guidance, machine specific familiarization and reading and understanding the machine's operator manual is needed to safely perform required tasks. MEWPs can have different controls, safety devices and operating characteristics that must be identified before operating any MEWP. Compact lifts have large outriggers, some self-leveling, and others not, and many machines are equipped with remote controls that require an operator to obtain machine specific familiarization.

When using a MEWP with tracks, it is important to check the track condition for tension. You don't want the tracks to come off when you are trying to position the machine. The operator manual will guide you on what to look for and how to adjust when necessary. Another important fact is that when raising the lift with the outriggers, you must raise the tracks off the ground 6 to 12 inches, depending on the manufacturer recommendations. Additionally, ensure the chassis is level.

Compact lifts are becoming increasingly popular and available option in rental fleets. These machines are well designed and manufactured to allow high reach access into areas

where a MEWP could not previously access. ▲



To watch the full webinar:
<https://rnt.news/dr5or0>

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STEP-IN HEIGHT

ELECTRIC
STEERING



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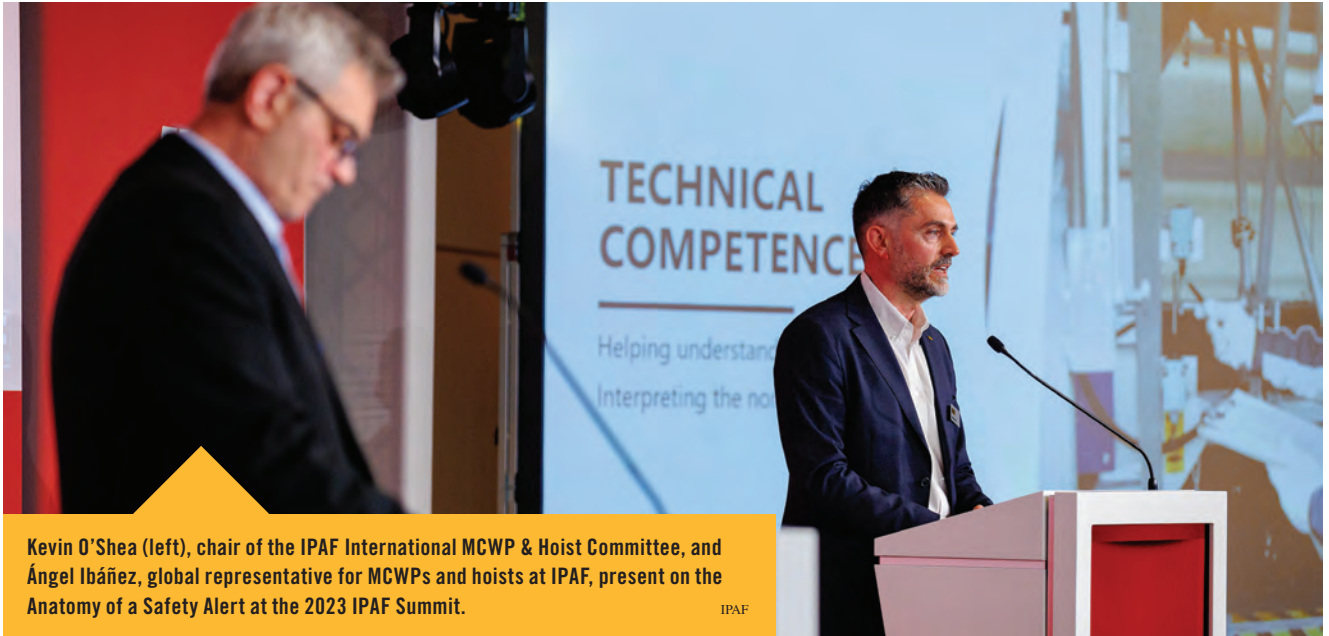
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 or visit www.snorkellifts.com

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Kevin O'Shea (left), chair of the IPAF International MCWP & Hoist Committee, and Ángel Ibáñez, global representative for MCWPs and hoists at IPAF, present on the Anatomy of a Safety Alert at the 2023 IPAF Summit.

IPAF

MAST CLIMBING WORK PLATFORMS: Anatomy of a Safety Alert

How a U.K. Safety Alert grounded a huge percentage of the MCWP rental fleet and how the industry response to the alert highlighted the value of collaboration.

Following its investigation into the cause of a double fatality MCWP accident in the U.K., the U.K. Health and Safety Executive (HSE) issued a National Safety Alert.

The safety alert

The safety alert was titled "Mast Climbing Work Platforms: Failure to detect mechanical failure in drive units leading to uncontrolled fall of platforms."

Distribution of the alert was aimed at the HSE's identified target audience:

- Construction and all other industry users

- Employers, duty holders and anyone else who has responsibility and/or control directly or indirectly for supply, installation, use, inspection, servicing, maintenance and thorough examination of mast climbing work platforms (MCWPs)

The industry impact

Almost immediately, equipment owners and users throughout the U.K. grounded all MCWPs and asked rental companies and manufacturers to verify the safe operation and compliance of their equipment.

The initial challenge for the industry was that the alert was unexpected, and it caught everyone by surprise. The second issue was that the industry was having difficulty in interpreting exactly what the HSE was saying.

What type of mast climber was identified in the HSE alert? What was the specific issue identified? What modifications were required to ensure compliance?

Additionally, the HSE alert seemed to be saying that mast climbers, which were regarded by manufacturers as compliant to the European standard, EN1495:1997+A2:2009, might not be regarded as acceptable to the HSE.

What was certain at this early stage was that the safety alert grounded around 80 percent of the U.K.'s rental fleet, delayed many construction projects, created immediate concern and instability in the industry and raised many legal concerns.

Coordination and leadership

The International Powered Access Federation (IPAF) took a leadership role at this point, coordinating with industry players to assess the national problem in its entirety and reached out to HSE to begin to understand fully what the HSE was saying.

IPAF brought together mast climber industry technical experts from all over the world to analyze the alert language, examine the alert language in the context of the current EN regulation and the language in British Standard BS7981, and then communicated the industry's questions and requests for clarification as required, subsequently bringing the HSE's responses back to members for important updates. Those communications were periodic, objective and clear.

The early identification and encapsulation of the problem not only provided a coordinated industry understanding and response, but it also provided an accurate picture for the wider construction industry, effectively managing the potential of the rumor mill.

IPAF achieved a number of important outcomes through this coordination and leadership role:

- Minimize the negative impact of the alert in the market
- Prevent the alert from affecting other regions outside the U.K.
- Coordinate manufacturers to analyze and increase machine safety controls
- Help rental companies and equipment owners get their fleets back up and running as soon as possible
- Learn from the alert, and share that knowledge to raise safety standards in the industry
- Create a stronger position to influence future industry standards and regulations.

Dealing with safety alerts as an industry

Product safety alerts can come from a number of sources and can be classified as:

- Government/regulator alert (reactive): This is an "industry,

external" alert, generated outside of the industry but which affects the industry and in many instances is generated without industry collaboration, and without notice.

- Industry organization alert (proactive): This is an "industry, internal" alert, which generally emanates from an analysis of accident statistics, industry safety issues or other industry performance factors. The alert is identified by the industry bodies and is arrived at through a process of consultation with manufacturers, owners and users.
- Equipment owner/user alert (proactive): This is usually a "company, internal" alert relating to a design/performance or user issue. The equipment owner/user recognizes the need to inform its customer and user base of the issue and may require elevating the issue to the wider industry.

In all the above cases, the formula to deal with the alert can be based on a number of important steps:

Identify. What exactly is the issue? (For instance, hydraulic cylinder creep is a symptom, but a malfunctioning check valve is the problem.)

Quantify. How many units are involved, in what countries? What action is immediately necessary? What's the solution and the cost?

Impact. How will the global population be affected? For example, a mass stand down of equipment, legal implications, contract consequential loss liability, etc.

Solution. Based on the identification, quantification and impact, put the best solution into practice.

In the proactive scenarios, the opportunity to craft a consistent and considered message to the market is extremely important. Therefore, outreach becomes a very significant tool to manage the impact, provide a consistent solution and reach as many affected owners and users as possible. It's also vital in the outreach process to remember that customers will likely see the outreach material and need to be reassured and confident about the solution.

IPAF was vital in the response to the U.K. Mast Climber Safety Alert by the HSE.

Government bodies and/or regulators find it easier to talk to "the industry" than an individual company and, to that end, IPAF was crucial in this regard. It presented to the HSE a nonbiased industry representative with the ability to provide industrywide outreach and impact with integrity and consistency.

Additionally, IPAF's ability to bring together industry expertise, provide resources to assist and facilitate the process, and its ability to bring industry expertise from all over the world to collaborate on an effective solution was more than significant.

It's really simple: Safety Alerts are industry problems, best solved by the industry, and IPAF is the representative of the whole powered access industry. ▲

IPAF Celebrates 40 Years of Raising Safety Standards

2023 marks the 40-year anniversary since the foundation of the International Powered Access Federation. Here's a rundown of its history.

This year marks the 40-year anniversary of the International Powered Access Federation (IPAF). Created from the merger of two industry bodies in the U.K. in 1983, IPAF quickly grew to around 100 members, and contrary to popular belief that IPAF was and is a U.K.-centric organization, the membership was international right from the

very outset. Now, 40 years later, the federation has more than 1,700 members in 80 territories worldwide. IPAF has issued more than 2 million PAL Cards certifying training and recently launched the ePAL app for operators and supervisors, which has exceeded more than 400,000 first-time downloads in almost 200 countries.

1983
IPAF founded with Paul Adorian as Managing Director

1987
100 members and counting

1988
IPAF MCWP Committee formed

1993
MEWP operator training launched

1998
Arrival of the PAL Card

1999
Training Centers open in Germany, Belgium, Netherlands

2000
Training arrives in North America

2003
100,000th PAL Card issued: Tim Whiteman becomes CEO

2004
Development of Quality Control & Standards

2005
IPAF training certified to ISO18879

2007
Tony Groat appointed as IPAF's North America Region Manager

IPAF's beginnings

IPAF was formed in 1983 from a merger of the International Federation of Hydraulic Platform Manufacturers and the International Work Platform Association, bringing together manufacturers and end users for the first time.

When the IPAF operator training course was created in 1993, it proved a game-changer, both for the industry and for IPAF. Training, and the PAL Card that is awarded to successful candidates, quickly became the industry's most well-recognized way of promoting safe practice, which has always been the *raison d'être* of IPAF.

IPAF's reach

In the 21st century came major expansion, with IPAF representation across Europe, the Middle East, Asia, Africa and the Americas.

In its promotion of safe practice, IPAF has always played a role in the development of international standards. EN 280 for mobile elevating work platforms (MEWPs) was written in the mid-1990s, prompted by the 1992 Single European Act and finally approved for publication in 2002. It was the work of many hands, but the leading figure was IPAF Technical Director Denis Ashworth. Similarly significant was ISO 18878 Mobile elevating work platforms — operator training (driver), published in 2004



with strong IPAF involvement. And, more recently, IPAF's North America Regional Manager Tony Groat sat on the various committees that drafted and reviewed comments on the updated ANSI and CSA standards.

Another landmark in 2004 was the launch of the IPAF Rental+ scheme, giving hire companies a kitemark to demonstrate their service credentials, with IPAF once again setting the bar. Recent years have seen numerous IPAF safety campaigns, including Don't Fall For It! and the latest High Voltage! campaign, as well as further developments to its accident reporting portal, adding it in extra languages and also developing a benchmark their own safety.

Training programs continue to evolve, with MCWP courses, MEWPs for supervisors, an updated load and unload and harness course and most now allowing at least modules via eLearning, as well as introducing the use of virtual reality simulator technology. Such has been the success of IPAF: It issued its two-millionth PAL Card in 2020 and is on track to exceed 200,000 courses certified in a calendar year for the first time this year, while the ePAL app for operators and supervisors, launched in 2021, has almost reached half a million first-time downloads in more than 180 countries.

Earlier this year, IPAF kicked off its 40th anniversary celebrations with the premiere of a short film at the IPAF Summit in Berlin, Germany. ▲

A horizontal timeline with vertical lines connecting milestones to a central axis. Each milestone includes a year, a title, a brief description, and a representative image.

- 2008**
First Major Safety Campaign
Image: IPAF Click-it! logo
- 2011**
Members on every continent
Image: Globe with location pins
- 2012**
Accident Reporting
Image: Accident reporting portal with QR code
- 2013**
Smart PAL Card launched
Image: PAL card in a holder
- 2014**
1 million PAL Cards landmark
Image: PAL card with '1 000 000' stamp
- 2016**
eLearning Training Introduced
Image: Laptop displaying training content
- 2019**
Peter Douglas named CEO
Image: Peter Douglas
- 2020**
2 millionth PAL Card issued
Image: PAL card with '2 000 000' stamp
- 2021**
ePAL app is launched
Image: Hand holding a smartphone with the ePAL app
- 2022**
Karin Nars elected President
Image: Karin Nars and another man shaking hands
- 2023**
IPAF proudly celebrates its 40th birthday!
Image: Three men standing together

Aerial Equipment Fatality Rate Falls

Despite the number of reports increasing over the past year, the fatality rates of the leading types of accidents have declined.

Despite reports increasing over the past year, the fatality rates of the leading types of accidents have declined, an encouraging sign that collective action across the powered access industry to tackle key underlying causes of accidents is starting to take effect, according to the latest report from the International Powered Access Federation (IPAF) based on analysis of incidents logged through its Accident Reporting Portal.

Launched via webinar on June 28, the *IPAF Global Safety Report 2023* analyzes the latest data collected via the IPAF portal covering the period 2013-2023, focusing on year-on-year trends to identify how well the industry is doing in tackling the key causes of accidents involving powered access.

While mobile elevating work platforms (MEWPs), mast-climbing work platforms (MCWPs) and construction hoists are statistically among the safest ways to work at height, this year's report shows that in 2022, there were 759 reports of safety incidents from 34 countries, up 15 percent and 21 percent, respectively. There were 831 people involved, and 102 deaths reported, a decline of around 19 percent on 2021, when there were 126 fatalities.

In terms of incidents resulting in deaths or major injury, falls from the platform remained the most common underlying cause, with overturns second. Hit by machine, vehicle or object was third, entrapment fourth and electrocution or electric shock fifth. Mechanical failure was joint seventh with falls from height (no machine involved) — a notable reduction following a spike in reported incidents across 2021.

In 2022, the main sectors from which reports were received were rental activity, construction and facilities management. There were 45 fatalities and 39 major injuries in construction, a decrease in the number of fatalities reported in 2021, when there were 55 deaths. In facilities management, there were 15 fatalities, down on 2021, and rental activity saw three fatalities in 2022, the same as in 2021, and 19 major injuries. The top MEWP categories involved were 3a-type machines with 217 incidents (26 percent), followed by 3b types on 197 (24 percent) and 1b vehicles on 152 (18 percent). Compared to 2021, 3a MEWPs saw 60 more reports,

to replace 3b machines for the most reports.

"When we look at the data from 2022 and the key trends and annual changes, there are some encouraging signs," said Brian Parker, IPAF's head of safety and technical. "For one, reporting has increased, both in terms of the number of reports received in total and countries reporting; up from 692 reports from 28 countries in 2021 to 831 (and counting) from 34 countries worldwide in 2022. There are

now more countries where IPAF members are mandated to report all incidents into the portal, and the three countries where it is a requirement of membership have seen increased reporting over the past three years. Reporting companies can also benefit from new dashboards to benchmark safety performance. (However, it is not yet possible to directly measure the impact of industry safety campaigns and the introduction of new safety and technical guidance or updates to training." ▲



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