

You down with the new Up rules?

BY PHIL REILLY

DO YOU AND YOUR CREW know the new rules for using height-access equipment such as boom lifts, scissor lifts, and mast lifts? No? Well, if you're looking sheepishly at your shoes right now, you still have a few, short months to turn over a new leaf to take safety and compliance more seriously on your next production. Yesterday's "aerial work platforms" now have a fancy, new name and, after 50 years under the old guidelines, a new suite of standards that govern their use in the United States and Canada.



The rules for mobile elevated work platforms have changed with the times.

These new standards were issued in December 2018 by the Scaffold and Access Industry Association (SAIA), the ANSI secretariat for the consensus standards dealing with aerial equipment known as the A92 standards. *Protocol* readers undoubtedly know that ESTA is the ANSI accredited developer for entertainment-specific standards, but these SAIA standards cover

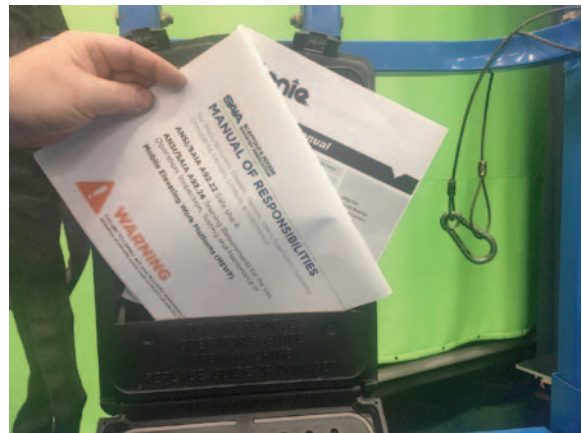
many fields including the construction, maintenance, **and** entertainment sectors. Now is the time for North American productions to get up to speed with ANSI/SAIA A92.22 "Safe Use" and A92.24 "Training Standards" for Mobile Elevating Work Platforms (MEWP, pronounced "moop"). In the US, we are already halfway through the implementation period, so we only have until December 20, 2019 to learn about, and fully apply these new guidelines. Canadian crews are already working under their own version: CSA B354.

Think your production is exempt? It's not. No professional worksite is excluded. Blissful ignorance of industry standards is **never** a practical legal defense because, simply put, OSHA law requires that employers and employees abide by manufactures' safety guidelines, and every major MEWP brand, including SkyJack, JLG, and Genie, have signed on to these new standards. Rental companies including Herc, Sunbelt, and United Rentals are also on board. Will your productions be compliant in 2020? Or, will lives, fines, and lawsuits be at risk?

Fact: These new A92 standards affect every single entity—construction or entertainment, large or small, that use MEWPs—from manufacturers to rental yards, show producers to supervisors, operators and occupants. Some of these entities have overlapping responsibilities. Employers (described as Users in the standard) are now required to take an even more active role in MEWP compliance.

First, **everyone** must be trained so they know and understand their unique responsibilities under A92. This training must be documented because, as the lawyers say, "If it isn't in writing, it never

happened." I'll focus on summarizing some of the responsibilities of Users, Supervisors, Operators, and Occupants, although Manufacturers and Owners are obligated to fulfill their responsibilities too. I'll also suggest how you can get your people trained to the new level required to be compliant, because safety should start before the engine. To buy PDFs of the full standards, visit <https://shop.saiaonline.org> ("Safe Use" download is \$55, "Training" download is \$35.) To meet your deadline, purchase both standards, study them, and implement the requirements of these new guidelines before Christmas 2019.



Regardless of the age of the MEWP, a copy of the latest Manual of Responsibilities must be in the document box.

Why the update?

The first mobile lift standards were adopted way back in 1969, and although they've been tweaked over these 50 years, we were overdue for a fresh take on elevated safety. Year after year, height-access workers have been injured and sometimes killed, most often because their employers failed to choose the proper model MEWP for the job



Proper MEWP selection must be made based on task requirements.

to be done or failed to ensure their workers were operating their MEWPs safely. In short, it was apparent that worksite “accidents” were happening because of a serious lack of enforcing safety guidelines. These new rules aim to force employers to do more than just simply tell their employees to be safe, employers now must take documented steps to insure their employees know **how** to be safe. For manufactures like SkyJack, JLG, and Genie, the new A92 standard puts the US and Canada more in line with the ISO machine design requirements found in Europe and beyond. This means US makers will design MEWP types that can be sold worldwide, and that North American customers will be buying models with many of the same safety features and technologies



ANSI/SAIA A92.22 requires a written Safe Use Plan, which must be customized for each job and location. The User (employer) must share plan details with crew members.

that Europeans already have.

After December 20, 2019, each MEWP you own, lease, or rent must have a copy of SAIA's latest “Manual of Responsibilities” (M.o.R) kept, along with Operator’s manuals, inside the weathertight document box, which is usually bolted to the platform’s guardrail. While the MEWP’s Owner is responsible to purchase and place the M.o.R in the doc box, it is the responsibility of the User, Supervisor, and Operator to confirm the M.o.R. is inside the doc box, ready to be read.

Users

This entity is generally understood to be the employer. The User is the only entity that has “care, custody, and control” of the MEWP. The User may own, lease, or rent the MEWPs its employees operate, and has final say over how those machines are used. In our world, the User may be a film/TV studio, a theatre company, a production company, a school district, a university, etc. Of course, a User rarely, if ever, operates the MEWP. Instead, Users hire Operators who should be monitored by Supervisors. Users must:

1. Know and understand their responsibilities under A92.22, including MEWP inspections
2. Train and evaluate their employees (i.e. Supervisors and Operators, full-timers or freelancers) per *ANSI/SAIA A92.24*
3. Familiarize Operators with the specific make and model of MEWP to be operated
4. Document all inspections, trainings, familiarizations, and evaluations
5. Determine the selection, provision, and use of a suitable MEWP and associated equipment
6. Develop and share a detailed, written “Safe Use Plan” including a worksite risk assessment and a “Rescue Plan”
7. Re-evaluate US employees after an accident, near miss, when the work site risks change, or when a new model of MEWP is to be used that is significantly

different from the model employees were originally trained on. These same triggers apply in Canada under the *CSA B354* standard, with the added requirement that re-evaluations must take place minimally every four years.

Supervisors

This entity can be thought of as the linkage between the User and the Operator. The Supervisor is the full-time or freelance employee who directly oversees the operation of the MEWPs at the job site. Operators should be monitored by a “boots on the ground” Supervisor. This person may or may not be listed as “supervisor” on the call sheet, and SAIA takes no position if this person is considered a manager or a worker such as a crew chief. What’s important is that someone qualified is choosing the most appropriate MEWP model for the task and is closely monitoring the actual use of the MEWPs. Under A92, a Supervisor must receive the same degree of classroom theory training that an Operator receives, but needn’t be evaluated in hands-on operation. Therefore, unless a Supervisor is fully trained as an Operator, he or she shall **not** operate a MEWP. Supervisors must:

1. Know and understand their responsibilities under A92.22 and User-specific worksite rules
2. Determine the selection, provision, and use of a suitable MEWP and associated equipment
3. Ensure only trained Operators are operating the MEWPs
4. Have knowledge of the potential hazards of MEWP operation
5. Ensure that Operators are in full compliance with the job site rules, the provisions of the A92 standards, the use of appropriate PPE
6. Take steps to keep the MEWP zone of the worksite free of recognized hazards
7. Know that the model-specific Operator manuals and the A92 Manual of Responsibilities must be kept inside the doc box on the MEWP

Operators

No surprise here, Operators are the employees (full-time or freelancers) who actually operate the MEWP. They should carry their training qualification card. They must be familiarized with the functions and safety devices of the MEWP and must be authorized by the User to operate the MEWP. An Operator must:

1. Know and understand their responsibilities under A92.22 and User-specific worksite rules
2. Have knowledge of the potential hazards of MEWP operation
3. Perform a work site hazard assessment, remove hazards, and practice hazard avoidance
4. Perform a visual pre-operation inspection of the MEWP equipment
5. Perform a function test of the MEWP equipment
6. Wear properly selected and fitted PPE. (Full-body harness with a shock-absorbing lanyard is required for boom lifts. User may choose to also require harness PPE for scissor lifts. Three-foot lanyards are “fall-restraint;” 6’ lanyards with shock absorber are “fall-arrest.”)
7. Know and understand all details of the User’s Safe Use Plan and Rescue Plan
8. Know that the model-specific Operators manuals and the A92 Manual of Responsibilities must be found inside the doc box on the MEWP
9. Impart “knowledge” to untrained Occupants

Occupants

Sometimes an Operator is instructed to allow an untrained person as a passenger on the MEWP. This untrained Occupant may be a producer, a client, or a photographer that has been authorized by the User to get a bird’s-eye view of the worksite. Examples of worker Occupants may include a painter, set dresser, decorator, camera op, or any passenger who has never received full MEWP training. Whether employee or not, visitor or worker, Occupants can no longer

be allowed to remain ignorant about the potential hazards of MEWP operation. Briefed by the Operator, an Occupant must:

1. Know and understand the potential hazards of MEWP operation
2. Know how their movements on the MEWP can affect occupant safety and MEWP stability
3. Wear properly selected and fitted PPE. (Full-body harness with shock-absorbing lanyard required for boom lifts.)
4. Know how to lower the MEWP to safety should the Operator become incapacitated

Choose by Type and Group

Also new in A92 are the terms now used to classify designs of MEWPs in the standard. All models are described by Type and by Group. Push-around mast-lift models are considered Type 1 because they must only be moved when the platform is at its lowest position (“stowed position”) and designated Group A because regardless of height, if the unit is levelled, the platform always remains within the footprint of its chassis or base, in other words “inside its tipping lines.” Tow-around boom lift models with spider-leg outriggers are also considered Type 1 because they must be lowered

before being towed to a new position, but designated Group B because the platform is designed to operate outside of the footprint of its chassis. All Group B MEWPs are cantilevered designs. A scissor lift is Type 3 because it is designed to control its travel from a control device (joystick) found up on the platform and designated Group A because scissor lifts extend straight up, not in a cantilevered fashion. Boom Lifts are also Type 3 because their travel movements are controlled from the platform, but Group B because the platform is cantilevered from its base. Clear as mud? Remember this mnemonic: “T” is for Travelling Type, but ‘G’ is for Group that Goes up or out.”

Old and new models

Entertainment crews will begin to notice that new MEWPs manufactured as “A92.20 compliant” will be different in a number of ways. Platform guardrails will now be 43.5” high, which means typical 19’ scissor lifts may not fit through standard door openings unless the upper guard rails are folded down. Chain gates won’t be allowed. New lifts will be designated for outdoor or indoor use to protect against wind hazards. For example, a 19’ scissor lift may raise to 19’ if used indoors, but may be designed to limit elevation to 15’ when used outdoors. New MEWPs will include load-sensing technologies that will disable certain



Determining that the work surface can support the weight of the MEWP is just one of the required steps in the Risk Assessment of the work location.

functions if the platform is loaded beyond its rated capacity. Note: All “old” machines built before 2020 will be grandfathered under the new A92 rules, meaning the nation’s current stock of MEWPs will still be compliant, even though the units don’t meet the new design requirements. There is no retrofit requirements, so for years to come rental fleets will be a mixture of machine design eras. Again, the latest version of the Manual of Responsibilities must be kept inside the doc box with the operator’s manual, regardless if the MEWP is newly manufactured or grandfathered.

Safe use planning

One of the biggest adjustments for the entertainment sector will be the new requirement that every deployment of MEWPs be guided by a written Safe Use Plan (SUP). This detailed plan must be written by the User and needs to be shared with Supervisors and Operators **before** work starts. While some sections of your SUP may repeat from production to production, other sections are uniquely specific to your current production’s crew list, new locations, and changing worksite hazards. Expect this document to be part of discovery during a civil lawsuit. Your SUP must, at a minimum, include:

1. Performing a worksite risk assessment to identify hazards, evaluate risk, develop control measures, and communicate with affected persons
2. Selection, provision, and use of a suitable MEWP and work equipment associated with it
3. Access, preparation, and maintenance of the site, as required, to include an assessment that the support surface is adequate to support the weight of the MEWP
4. MEWP maintenance including inspections and repairs as required by this standard and by the manufacturer
5. Only trained and authorized personnel are allowed to operate or occupy the MEWP

6. Familiarization of authorized MEWP operators with the specific MEWP to be used
7. Inform the operator of local worksite requirements, and warn and provide the means to protect against identified hazards in the areas where the MEWP will be operated
8. Have trained and qualified supervisors to monitor the performance of the work of the operator to ensure compliance with provisions of the A92 standard
9. Prevention of unauthorized use of the MEWP



Untrained occupants now must receive basic safety information from the trained operator.

10. Safety of persons not involved in the operation of the MEWP
11. Documentation required for record retention.

Rescue Plan

Along with your SUP, Users must devise a site-specific Rescue Plan (RP) and communicate the plan with Supervisors and Operators so everyone knows their parts. This plan will be used at the production location in the event of a machine malfunction, entanglement, or fall from the platform.

There are three general types of MEWP rescues:

1. Self-rescue: If a boom lift’s engine fails, an Operator may use the platform’s electric bypass controls to lower the platform (very common) to safety. Or, if an Occupant is hanging from their lanyard and harness, they may be able to self-descend if they’re still alert and their harness is equipped with a self-rescue controlled descent device (less common).
2. Assisted rescue: This is where a trained crewmate working on the ground nearby lowers the platform



Now what?!? The new requirement to have a written Rescue Plan means that crew members must know exactly how to quickly get their crewmates to the ground.



Is your training curriculum “thorough and consistent” and compliant with ANSI/SAIA A92.24?



In-person familiarization should be part of your training program.

by operating the ground controls (somewhat common). If this approach is ineffective or could cause further injury, then trained rescuer crewmates may resort to using another MEWP to make a platform-to-platform rescue (less common).

- Emergency response: This is when the local 911 system is activated (uncommon). This will likely dispatch the local fire department, who will use ladders or technical rescue ropes and pulleys to get the worker to safety.

Your Rescue Plan must be tailored to the workday’s production location and specifically identify the names of the

assigned rescuers on your crew and the equipment on site to affect a successful rescue. JLG, Genie, and Skyjack offer SUP and RP guidance documents and white papers on their websites. Include “A92” in your search.

Training

Read ANSI/SAIA A92.24 for full details on the expanded training requirements for MEWPs. For employers, the standard requires that training classes must be afforded the weight, time, and attention needed to deliver “thorough and consistent” training to everyone involved. Insubstantial,

online, solo courses without in-person evaluations won’t meet the standard. Start now to design a training program that is effective for your workers and skip the quickie websites that offer bargain basement prices. For some production groups, a five-to-six hour, group session of classroom training, model-specific familiarization, and hands-on evaluation will be very effective. For others, a combination of solo, online curriculum and in-person group familiarization plus hands-on evaluation will be best.

At the TV studio where I work, we designed a six-hour class that uses a MEWP manufacturer’s workbook/video combo, a custom PowerPoint that details our Safe Use Plan, and hands-on evaluations with all of our Type 3A MEWPs. Add time for Q&A, harrowing war stories, a few breaks, and a deli platter for lunch, and next thing you know, you’ve invested a full workday in protecting your most valuable assets. Yes, time is money, but presenting quality MEWP training that meets or exceeds A92.24 could make the difference between everyone on your crew going home safe at wrap, or becoming an OSHA statistic.

You down with this? ■



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skid steer, UTV, and electrical safety for IATSE 481 where he co-founded its training program. He is recognized to instruct with both JLG and Genie’s Qualified Operators Programs and the IATSE Training Trust Fund. Phil volunteered with ESTA as a Subject Matter Expert for the ETCP Portable Power Distribution Technician exam. When the call sheet allows, and he’s not cutting his lawn in Boston, Phil spends time with his family on Cape Cod, cutting grass there, too. Phil can be reached at SafetyStartsBeforeTheEngine@gmail.com.