

DEVELOPING A MEWP SAFE USE PROGRAM GUIDE

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Promoting the safe and effective use of powered access worldwide

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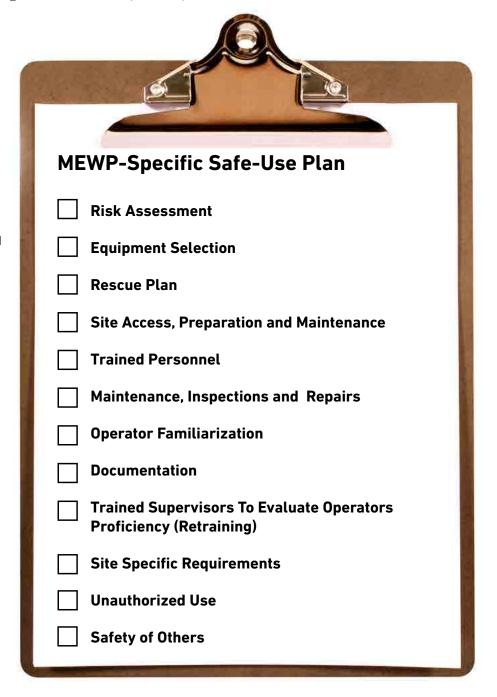
MEWP SAFE-USE PROGRAM

Federal regulations require employers to "furnish to each of their employees' a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm". Industry standards offer recognized practices that assist employers in meeting their obligation to provide a safe workplace when using Mobile Elevating Work Platforms (MEWPs).

The ANSI A92.22 MEWP Safe-Use standard specifies requirements for the application, inspection, training, maintenance, repair, and safe operation of MEWPs. A safe-use program specific to MEWPs shall be developed by the user to ensure all responsibilities are met. The pictorial identifies the topics that must be included, which should be consider all MEWP safe-use responsibilities defined in the standard.

IPAF has developed this guide to assist in your development of your MEWP-specific safe-use plan. For each topic to be included in the plan, it offers a brief overview, suggested actions steps, and resources to aid in your plan development.

The scope and depth of your plan should be based on your MEWP operations. An operation that occurs once a year – changing lightbulbs, hanging festive decorations – may only need a concise, targeted plan, while others need more complex plans. The key is to <u>plan</u> and have the tools to ensure a safe workplace.



RISK ASSESSMENT

A risk assessment is a essential component of worker site safety. MEWP Users (employers of MEWP operators) must ensure the completion of a site-specific risk assessment provides to "find and fix" potential workplace hazards before they can cause injury or illness. The A92.22/B354.7 safe use standard details the stages of a Risk Assessment to be completed by a qualified person for all workplaces where a MEWP will be operated.

ACTION STEPS

Assign a qualified person (eg MEWP supervisor) to complete a workplace risk assessment prior to the start of work, communicate the plan to all involved, and ensure continued monitoring of the workplace when works begins.

Identify the task to be undertaken: Provide a description of the work to be performed including as much detail as possible. Consider all activities where a MEWP will be operated (loading, unloading, inspections, demonstrations – any form of use). When is the work to be performed – day, week, month, year – what season, indoor or outdoors, what is the time allowed and deadline for completion? Day or night? Weather conditions?

Select an appropriate MEWP: How many people are required to perform the task? What is the weight of tools and materials needed? Where is the work that needs to be completed – location, access to the area, indoor/outdoor, height, reach, ground conditions, etc. Do you have trained operator(s) qualified for task?

Assess the Risks Associated with the Task: Consider the risks associated with the site location, the work to be carried out, the weather, the nature of the operation of the MEWP, etc. Assess the likelihood and severity of the risk.

Identify Control Measures & Safe Work Procedures:

Once your potential risks have been identified, determine countermeasures to mitigate that risk. Consider, training, warning, procedures, etc. that impact and reduce the exposure or severity of the risk to an acceptable level.

Create a Rescue Plan: Rescue planning is a necessary component of a risk assessment when working at height. There are situations that require prior planning to ensure a safe and timely rescue. System failures, falls from height where occupants are left suspended outside the platform, and operator incapacity are examples that may require different plans.

Communicate the Results & Ongoing reviews: Determine how the results of this risk assessment will be effectively communicated with those involved (eg discussion/review before work shift) and set periodic review schedule to review. If modifications to the risk assessment are required, these changes shall be communicated prior to resuming the work.

References & Tools

- Risk Assessment Worksheet
- Risk Assessment Guide
- IPAF Global MEWP Safety Report

 www.ipaf.org/accident

IPAF is developing more detailed information on assessing risk; to view existing supporting materials click here.



EQUIPMENT SELECTION

MEWP user/employer must assign a MEWP supervisor to select an appropriate machine based on factors including, but not limited to; the task to be undertaken, the constraints of the worksite. ground conditions, site access and proximity to the public or other workers. The more you know about your job task and site conditions, the easier it will be to choose the suitable machine. There are many different types of MEWPs with various rated capacities, working height and reache. Once you know and understand your needs, MEWP specifications and capabilities are critical in the selection of a suitable MEWP for the intended task that will operate safely within the intended design parameters of the manufacturer.

ACTION STEPS

Selecting the appropriate MEWP includes:

- → Complete MEWP selection site checklist by the MEWP supervisor or qualified person.
- → Understanding the different MEWP Categories, models, options, and accessories.
- → Understand unit specifications to determine if a machine can do what you need it to do.
- → Identify what associated work equipment may be required to complete the task.
- → Select and procure appropriate MEWP and associated equipment.



SITE ACCESS, PREPARATION AND MAINTENANCE

The risk assessment will determine the appropriate MEWP based on consideration of factors including the task to be undertaken, constraints of the site, ground conditions, site access and proximity to the public, other workers and equipment, and vehicular traffic. Ongoing monitoring and evaluation of the site access, preparation and maintenance must take place before and for the duration of the task to ensure the safe operation of the MEWP on the site. The provision and set up of signs, cones, barricades, or other devices to guard the work area must be planned and implemented.

It is critical to identify potential hazards caused by ground conditions, to include an assessment that the support surface can sustain the ground-bearing pressures imposed by the MEWP in all operating configurations. Note that the loading on a single point can be up to 80-85% of the weigh of the MEWP. This is required in all areas of MEWP travel and set-up. This must occur ongoing as site condition can change.

ACTION STEPS

Site conditions can and do change and must be regularly monitored and evaluated. MEWP supervisors shall continually monitor, and operators inspect and observe and report changes regarding:

→ Impact by weather conditions: Wind effects on MEWPs and equipment in the work platform; local wind effects: thunderstorms and lightening.

- → Ground Conditions: Uncompacted fill; proximity to excavations/cellars and basements; sub-surface voids; slopes and grades; weather conditions such as rain/snow and freeze/thaw
- → Travelling: To and from work area; within work area Set-up: Each location where the MEWP is to operate
- → Hazardous locations: Identify and prohibit operation in areas having potentially flammable or explosive gases or particles.
- → Work area: Clear of personnel and equipment
- → Unusual operating support conditions:

 Prohibit operations on trucks, trailers, railway cars,
 floating vessels, and scaffolds or similar equipment
 unless the application and the method
 are approved in writing.
- → Moving overhead obstructions: Assess required steps to take when an MEWP operates within the area of moving overhead obstructions e.g another MEWP or crane to prevent a collision with the MEWP.
- → Work on public roads: MEWPs exposed to operations on public roads, loading and unloading, travelling on, or MEWPs designed for use on, public roads, and shall identify potential hazards.
- → Parking MEWP: Identify location to park the MEWP at the end of daily work to include at a minimum the requirements for security and consideration for emergency access to site.

- → IPAF Guidance on the Assessment of Ground Conditions www.ipaf.org/en-us/resourcelibrary/guidance-assessmentground-conditions
- → IPAF Andy Access Safety Poster and Toolbox Talk www.ipaf.org/en/resource-library/ mewp-ground-conditions-toolbox-talk
- → IPAF Spreader Pad Calculator https://pads.ipaf.org/

RESCUE PLAN

Rescue planning is a necessary component of a risk assessment when working at height, addressing potential situations when MEWP occupants may be stranded, including machine malfunction or rescue from an accident. Proper planning must accommodate a prompt rescue that can make a significant difference to the outcome - the difference between life and death. The goal is to bring the occupants of the MEWP to the ground safely and must consider the safety of all personnel in the process. Certain tasks and circumstances might require more extensive planning to ensure a safe and timely rescue. The A92.22/CSA B354.7 safe use standard provides the framework for Rescue from Height that must be included in all rescue plans.

ACTION STEPS

Analyze the hazards that could result if the platform could become stranded. There are many ways the occupants of the platform can become stranded; loss of power, entanglement, ill health, fall arrest from the platform, etc. Review your site-specific work plan and determine the hazards and conditions that may result in this.

Create a plan for retrieving the workers in a timely $% \left(\mathbf{r}\right) =\left(\mathbf{r}\right)$

manner. Consider all reasonable scenarios that may strand MEWP occupants. Rescue solutions may include self-rescue, assisted rescue, technical rescue. In many situations, the auxiliary power available from the platform and ground controls may be the solution. Ensure MEWP set-up allows access to and not block access to auxiliary/emergency controls. In some situations, the use of specialized rescue equipment may be appropriate. In all cases, the workers need to be knowledgeable, trained, and willing to execute the plan.

Record your rescue plan in writing. Write down your rescue plan, specific enough for others to assemble the resources and execute the recovery.

Disseminate and train all affected workers before operation. Your plan, written down, will become part of your company's training manual. The rescue plan must be communicated to involved parties. It is recommended that rescue drills are performed to verify workers fluency and understanding of the plan and its timely implementation. The procedures to follow if they fall from the platform to be suspended by a fall-arrest system, or witness another worker suffer similar or any other situation that may strand the workers prior to the work being done.



TRAINED, FAMILIARIZED AND AUTHORIZED OPERATORS

Personnel selected must be physically and mentally to operate the MEWP safely. At a minimum, operators must successfully complete training and be familiarized on the model of MEWP prior to authorization to operate. The user must assess if personnel are qualified to perform the task.

ACTION STEPS

- → Ensure personnel successfully complete MEWP operator training as per ANSI/SAIA A92.24/CSA B354.8 for the MEWP category(s) they will be required to operate.
- → Ensure trained operators receive familiarization on the specific MEWP model and allow sufficient time on the MEWP to achieve operational proficiency.
- → Each operator must be assessed by a MEWP supervisor as qualified to perform the task.
- → Ensure the MEWP operator provides instruction to all occupants in the work platform so that they have a basic level of knowledge of how to work safely on the MEWP.
- → A user must assign a qualified person, typically the MEWP supervisor, to monitor, supervise and evaluate operators on a regular basis to ensure their proficiency.
- → Operators must be monitored, supervised and be evaluated on a regular basis to ensure their proficiency. They shall be retrained as required based upon the evaluation.







- MEWP operator standardized training and familiarization requirements
- ANSI A92.22/A92.24 Manual of Responsibilities
- → IPAF training and familiarization www.ipaf.org/en-us/ipaf-mewp -training-courses
- MEWP Familiarization Toolbox Talk www.ipaf.org/en-us/resourcelibrary/mewp-familiarizationtoolbox-talk
- Document familiarizationlogbook or digital app
- → IPAF ePAL app www.ipaf.org/en-us/ipaf-epal-ap

MAINTENANCE, INSPECTIONS AND REPAIRS

A MEWP must be in suitable operating condition as specified by the manufacturer. This is accomplished through MEWP maintenance, including inspection(s) and repairs as required by industry safe-use standard (US ANSI A92.20 and Canada CSA B354.7) and the MEWP manufacturer. MEWPs must be properly maintained regardless of owned, rented, borrowed, etc prior to authorization of their use.

The scope of responsibilities for MEWP maintenance varies for owners, users, service technicians and operators. The MEWP owner has broadest responsibility for MEWP maintenance and must establish a maintenance program in accordance with the manufacturer's recommendations and consider the workplace environment and severity of use of the MEWP. MEWP users have care, control, and custody of the MEWP, and must ensure its safe operation. All malfunctions and problems identified that affect safe operation shall be corrected by a qualified person and authorized by the owner before the



References & Tools

- → IPAF guidance for inspection of MEWPs www.ipaf.org/en-us/resourcelibrary/inspections
- → IPAF MEWP pre-use inspection checklist www.ipaf.org/en-us/resource-library/mewp-pre-use-inspection-checklist
- → IPAF Pre-Use Inspection Toolbox Talk www.ipaf.org/en-us/resourcelibrary/mewp-pre-use-inspectiontoolbox-talk

ACTION STEPS

OWNER RESPONSIBILITIES

Only assign any MEWP maintenance, inspection(s) and repairs to a qualified person. Always verify required maintenance, inspections and repairs are completed before placing a MEWP into service:

- → Register ownership with the manufacturer.
- → Ensure MEWP Operator's manual is stored on the MEWP and must keep and maintain Service and parts manuals
- → Ensure make/model-specific maintenance & repair training by a qualified person (includes safety precautions) for maintenance and repair personnel.
- → Ensure scheduled maintenance is completed.
- → Carry out pre-delivery inspections.
- → Carry out Frequent Inspections on time.
- → Carry out Annual Inspections on time.
- → Carry out necessary service and repair work.
- → Ensure replacement parts are identical or equivalent to original MEWP part or component.
- → Implement with safety-related bulletins.
- Only carry-out modifications with approval from the manufacturer.

USER RESPONSIBILITIES

- → Always carry-out a daily Pre-Start Inspection
- → Complete operational maintenance as required.
- → Provide assistance to operators as required.
- Reporting problems or malfunctions to a Qualified Person and isolate MEWP.



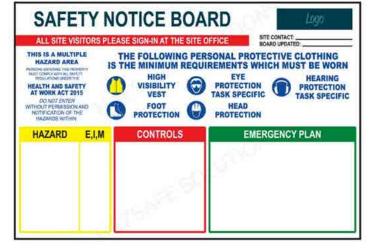
SITE SPECIFIC REQUIREMENTS

Site requirements by building owners, construction managers, general contractors or other site authorities must be identified before entering the worksite prior to commencing work and added to the site risk assessment plan. The user must inform the operator of local site requirements and warn and provide the means to protect against identified hazards in the areas where the MEWP will be operated.



ACTION STEPS

- → Attend site orientation/safety meetings as required.
- → Be aware of any site-specific employee training requirements (ie HAZWOPER, Fall Protection, OSHA 10, specialized rescue, First Aid/CPR, fire prevention and protection).
- → Know the project name, project manager and contact info.
- → Know any additional required site contact names & numbers
- → Know all local emergency contacts (ie ambulance, fire, hospital, poison control).
- → Be familiar with site specific alarms/warning systems (ie fire, chemical spill, evacuation alarms etc.)
- → Understand all site-specific PPE requirements (ie protective footwear, hand/eye/face/ear protection, protective clothing, respirator, allowable noise levels).
- → Be aware of all site-specific policies (ie parking, refueling, equipment shut down, traffic signage/rights of way, cell phone usage, spill containment, waste management, hours of operation).



References & Tools

 Site-specific requirements template, must be added to the site risk assessment plan.

TRAINED SUPERVISOR TO EVALUATE OPERATOR PROFICIENCY

A MEWP supervisor is a person assigned by the MEWP User to monitor operator performance and supervise their work. Users must ensure personnel that directly supervise MEWP operators are trained as defined in ANSI A92.24 Section 7.5 that includes the rules, regulations and standards that apply to MEWPs, including the provisions for safe use as defined in ANSI A92.22 They must be aware of the user and operator requirements for safe use.

The User/Employer shall designate a qualified person (supervisor) to monitor, supervise and evaluate operators on a regular basis to ensure their proficiency. The evaluation will be accomplished through visual observation, at a minimum, and be documented and retained by the User. To demonstrate competency, each operator must show proficiency in both theory and practical (hands?on). Results of the theory and practical (hands-on) evaluation shall be documented. (See Appendix A?D for examples.). MEWP supervisor training provides the knowledge for an individual to evaluate MEWP operators.

ACTION STEPS

- → Personnel who directly supervise MEWP operators shall complete MEWP Supervisor Training
- → Define the role for the MEWP supervisors that includes conducting MEWP site-specific risk assessments, MEWP selection, operator evaluations, and other MEWP user responsibilities that can be assigned to a qualified MEWP supervisor.
- → Establish a plan to evaluate MEWP operators on a regular basis to ensure their proficiency.
- → Define how evaluations will be consistently applied, what is to be measured, and how it will be documented.
- → Define how often evaluations will be required and ensure they are scheduled and completed.
- → Evaluate new technology such as VR simulators as potential tools to assist in the objective and timely evaluations of MEWP operator's proficiency and issue required documentation.





UNAUTHORIZED USE

When a MEWP is used in a project, regardless of whether it's owned or rented, the user is responsible for its care, control and custody. Only individuals who are trained, familiarized and qualified to perform the task shall be authorized to operate the MEWP. The user is responsible to protect against unauthorized use.



ACTION STEPS

- → Only persons trained, familiarized, and authorized by management are allowed to operate a MEWP. This must be documented with a "Authorization to Operate" form.
- → The operator shall not provide the MEWP to another person or entity for any use without the authorization of the user.
- → The User shall direct, and operator shall comply with, the requirement to park and secure the MEWP at the end of daily work. At a minimum, the following must be in place:
- → Wherever possible, MEWPs should be parked in a designated area that is secure or supervised, and which is inaccessible to unauthorized persons. Keys shall be removed from the MEWPs when not in use and maintained by the authorized operator.
- → On completion of work, the MEWP shall be parked in the designated area with the engine or motor switched off, the work platform lowered to its stowed position and the brakes applied. The MEWP shall not be left unattended in the elevated position unless this is approved by the manufacturer.
- → The MEWP must be stored in a location that will not block fire exits or entrances that is a secure or supervised area inaccessible to unauthorized persons.



ance on MEWP security

If y misuse MEWPs, expose themselves and those around a duty to implement measures to secure the MEWPs are secured and managed correctly to ensure that only in the employees have a duty of care for MEWPs are secured and managed correctly to ensure that only competent and nominated measures to secure the MEWPs should be stored and managed correctly to ensure that only competent and nominated MEWPs should be stored in a safe and secure manner when left unattended. This document evating work platforms (MEWPs) without authorisation or Jy misuse Mewps, expose themselves and those around personner operate the equipment in accordance with the employer's safe system or work. All MKVPs should be stored in a safe and secure manner when left unattended. This document provides guidance on how this may be achieved. Lockable switch

Lockable switch
in accordance with design standards, manufacturers provide a lockable switch, which is
controlled by a key specifically to prevent unauthorised use. These keys should only be issued
in authorised investor and inhumed by them at the end of the work partial. Fertimere shrinks controlled by a key specifically to prevent unauthorised use. These keys should only be issued to authorised operators and returned by them at the end of the work period. However, similar makes and models of MEVIP can frequently be operated by a common key design. This always possible.

When in use

When in use
It is important to ensure that the MEWP's over-riding emergency systems be available during
normal operation for immediate use should the operator suffer an injury or become
inconsolitated. This can be shown by ensuring that the key remains in the base with division. normal operation for immediate use should the operator suffer an injury or become incapacitated. This can be done by ensuring that the key remains in the base unit during normal operation.

It is essential that a work site risk assessment should be performed before any work is

It is essential that a work site risk assessment should be performed before any work is attempted with a MEWP and the appropriate precutions should be followed to easy the operator and others in the area. The resulting risk management plans hould not a detailed resource plans hould not a detailed resource plans hould not a detailed resource plans hould not be the plans of the pla safety of the operator and others in the area. The resulting risk management plan should a detailed rescue plan for any activity involving MEVIP operators working at height.

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Ref: UKBL 06/14-001

References & Tools

- IPAF guidance on MEWP Security
- IPAF Andy Access: prevent unauthorized use

Download free posters at www.ipaf.org/andyacces

SAFETY OF OTHERS

Industry safe-use standards (ANSI A92.22/CSA B354.7) require MEWP users to identify potential hazards to those who are not involved in MEWP operations, and to provide ways to eliminate or mitigate those hazards.

Training and supervision of the user's employees alone will not ensure the safety of others not involved in your MEWP operations. User's need to plan for the safety of employees, other workers on site, and the safety of any other person, including the public, who may come in proximity to MEWP operations.

While the user can train personnel about how to stay safe on site, non-employees on site or persons passing by the site require users to apply safeguards to protect them from potential hazards in or near the work area.

ACTION STEPS

Always ensure the safe use program considers the safety of others and include topics such as:

- → Preventing equipment, vehicles or persons from entering the work area, including areas when the MEWP can extend with any part of the MEWP structure;
- Precautions when other moving equipment and vehicles are present;
- Personnel and pedestrians in the proximity of the work area:
- → Properly secured tools and ensure materials can be safely handled by a person(s) working from the work platform;
- → All travelling routes of the MEWP on site;
- → Transportation of MEWPs to and from site;
- → Working on MEWPs near public roads or rail lines;
- Ongoing monitoring and supervision of MEWP operators for safe operation around all personnel.

- Street Smart | IPAF www.ipaf.org/en-us/resourcelibrary/street-smart
- Drop Zone Beware of falling objects
- → Andy Access: Beware of falling objects www.ipaf.org/en-us/resourcelibrary/andy-access-beware-fallingobjects
- Training on Loading and Unloading www.ipaf.org/en-us/safe-loadingunloading-training-course
- Safe Delivery of MEWPs www.ipaf.org/en-us/resourcelibrary/safe-delivery-mewps



DOCUMENTATION

Industry standards specify requirements for documents that must be retained for at least four years. There are other required documents that are also required to be retained, such as operator evaluations with no defined retention time.

Industry standards provide a section record retention for specific documentation, Industry standards offer a section titled "record retention" that defined specific documents that must be retained and by who. These documents must be retained for a minimum of 4 years in the US and 10 Years in Canada.

However, there are other documents defined in other sections of the standards the standard that must be retained. We have attempted to identify all in this guide.

A92.22/B354.6 Safe-Use Standards Section 4.4 – Requirements of safe-use record retention

A92.24 Section 8.6/B354.8 Section 7.3 Training Standards — Requirements of training record-keeping

ACTION STEPS

Identify, complete as required and retain the following:

- → Transfer of ownership: Name and address of the purchaser MEWP, new and used, by serial number and date.
- → Frequent and annual inspections: For owned MEWPs, inspections performed, date, any deficiencies found, corrective action accomplished, and identification of the person(s) performing the inspections and repairs.

- → Pre-delivery preparation, service and repairs:
 For owned MEWPs, written records include
 all service and repairs made on the MEWP
 to include dates of work, corrective action
 accomplished and identification of the entity or
 person(s) performing the service and/or repairs.
- → Daily prestart inspections: While documentation is not required, consideration for a log to ID who and when the inspection is completed may be considered.
- → Training and familiarization: Records shall include the name of person(s) trained/familiarized, name of person(s) or entity providing training/
- → familiarization, date of training/familiarization, and MEWP classification (training) or model (familiarization)
- → Operator evaluation will be accomplished through visual observation, at a minimum, which shall be documented for retention by the user
- → Training Test Results of the theory (classroom/online) and practical (hands-on) evaluations shall be documented.

- MEWP manufacturer's Service manual
 Service Inspections (frequent and annual)
- MEWP Operator's manualDaily Pre-start inspections
- MEWP operator training testing:
 ANSI A92.24 Appendix A-D MEWP operator theory and practical testing
- MEWP Operator Certificate: ANSI A92.24 Appendix E
- IPAF MEWP Operator log-book for familiarization

About IPAF

The International Powered Access Federation (IPAF) promotes the safe and effective use of powered access equipment worldwide in the widest sense – through providing technical advice and information; through influencing and interpreting legislation and standards; and through its safety initiatives and training programs.

IPAF is a not-for-profit organization owned by its members, which include manufacturers, rental companies, distributors, contractors and users. IPAF has members in more than 70 countries, who represent the majority of the MEWP rental fleet and manufacturers worldwide.

Visit www.ipaf.org for local office information

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Become an IPAF member

By joining IPAF you are joining a global movement to ensure a safer and more productive powered access industry. Membership also brings a host of special services and benefits including access to the members' safety analysis dashboard. IPAF brings multiple benefits including the following:

- Global harmonization with regional focus on standards development;
- Resources for technical experts;
- A wide range of products and technical guidance to assist MEWP users, supervisors and user meet their responsibilities;
- Opportunities to network and promote your company
- A consensus voice for all industry stakeholders, large and small;
- Certified training program to ensure complete, consistent and compliant training.

For more information about becoming a member of IPAF visit www.ipaf.org/join

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