

# IPAF

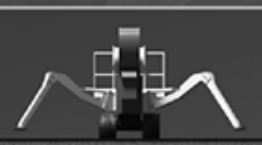


[www.ipaf.org](http://www.ipaf.org)



# IPAF's Global VR/Sim Consultation

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Director of Operations,  
International Powered Access Federation (IPAF)



# IPAF's Global VR/Sim Consultation



- Brief introduction to IPAF
- Learning techniques
- History and development of learning technologies
- Face to Face training versus new technologies
- The Future - IPAFs Consultation



# International Powered Access Federation (IPAF)



The objects of the Federation are to provide goods and services for the powered access industry, including education, training, and research, and representing and promoting the interests of its members at national and international level.



# IPAF Training – Argentina to Zambia



[www.ipaf.org](http://www.ipaf.org)



Chinese  
English  
English – US  
Czech  
Dutch  
French  
German  
Hindi  
Italian  
Korean  
Polish  
Portuguese  
Spanish  
Turkish



# International Training



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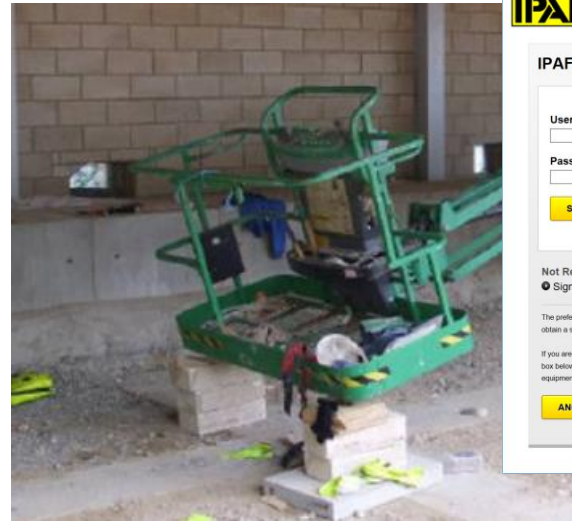
International ideas to local training





# Learning from accidents

- Aims and objectives
- How we use the information



IPAF ACCIDENT REPORTING

Username

Password

**SUBMIT** Forgotten Your Details ?

Not Registered ?  
● Sign Up !

The preferred way to report an accident is to register your details (above) and obtain a secure password to access the confidential reporting database.

If you are unwilling to register to use this reporting system, please click on the box below to inform IPAF of any fatal accident involving powered access equipment.

**ANONYMOUS REPORTING**

ACCIDENT DATABASE

www.ipaf.org/accident

IPAF is calling on all manufacturers, rental companies, contractors and users to report any known fatal and serious accidents involving AWP or MCWP's worldwide.

Information entered into the database will be kept strictly confidential and will be used solely for the purposes of analysis and improving safety.

**REGISTER AND REPORT AN INCIDENT**

Documents

2013-2016 Fatal Accident Data Summary Report (200,356KB)	↓
2012 Fatal Accident Data Summary Report (582,036KB)	↓

Companies will thus be able to track their accidents and manage their records.

There is also a facility for those who wish to report a fatal or serious accident, but are unwilling to register use the preferred reporting system.

Information entered into the database will be kept confidential and will be used strictly for the purposes of analysis and improving safety.

Report accidents, and help save lives!

# IPAF courses



[www.ipaf.org](http://www.ipaf.org)

## IPAF Operator course

1 to 3 day course

Theory test

Practical assessment

TÜV certified to ISO 18878

700+ IPAF-approved training centres  
worldwide

**164666** people trained in 2017

**725,779 VALID PAL CARDS WORLDWIDE**





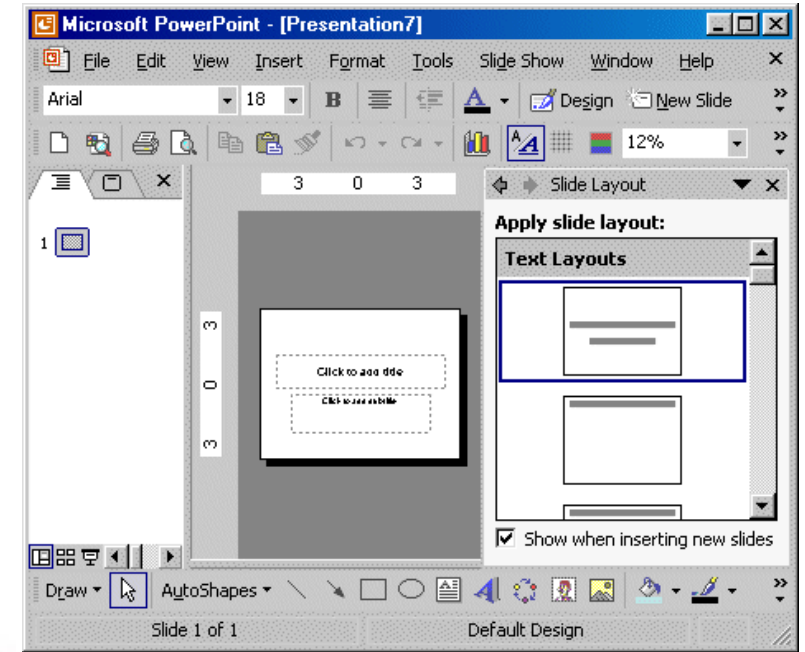


Is traditional  
training boring?

# We have come a long way



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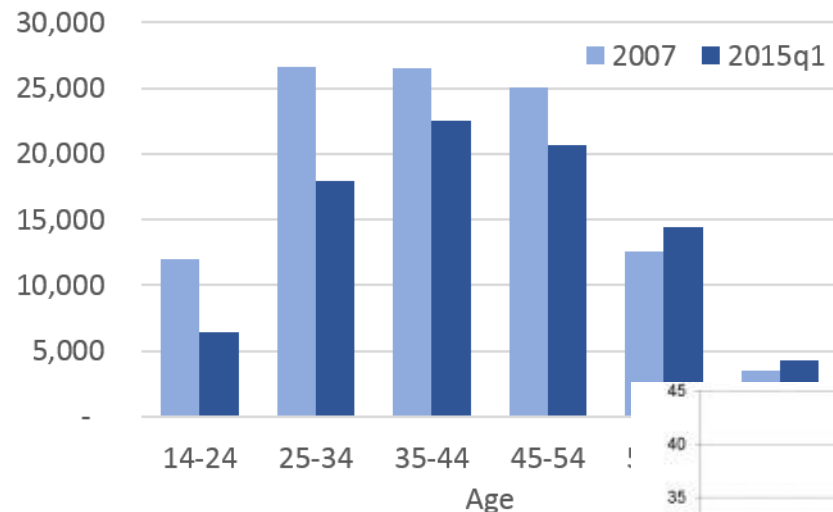


# The workforce is changing

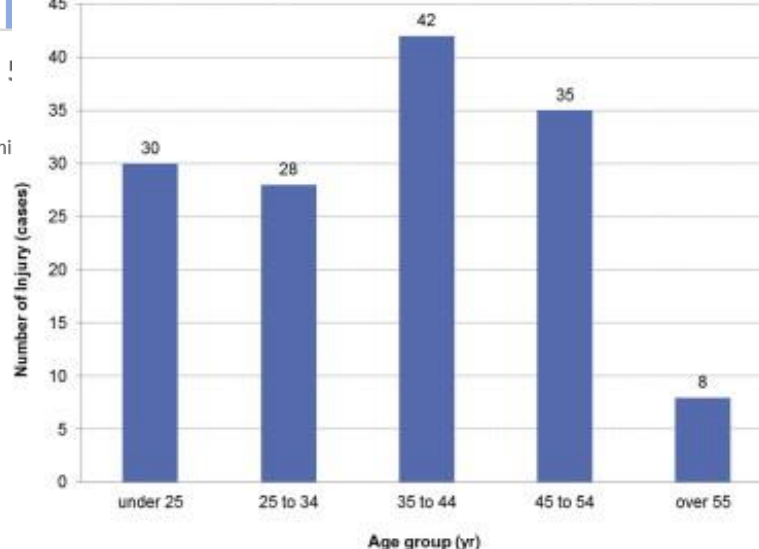


www.ipaf.org

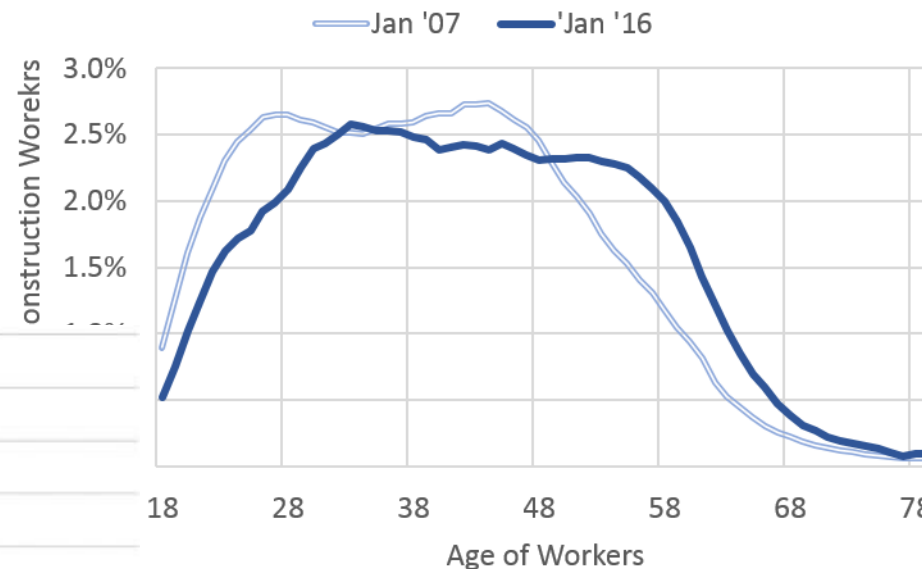
**Oregon Construction Employment by Age**



Data: LED, 4 Qtr Average | Source: Census, Oregon Office of Economic Analysis



**U.S. Construction Employment by Age**



Month averages of smoothed 5 year age groups. E.g. values for 18 year old workers represents between 16 and 20 years old. Source: BLS, Census, Oregon Office of Economic Analysis



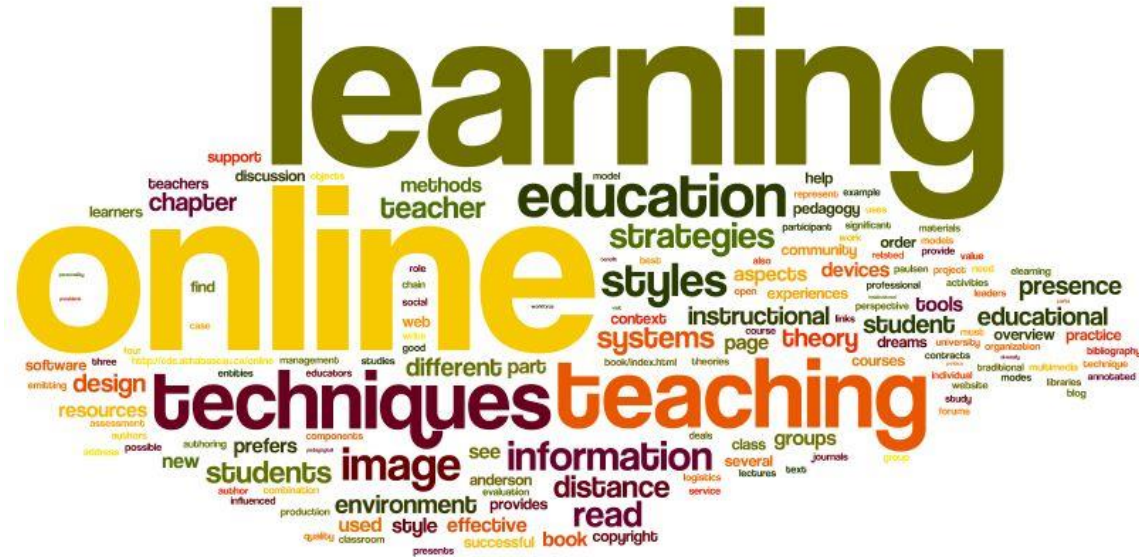
# How do we engage the workforce?



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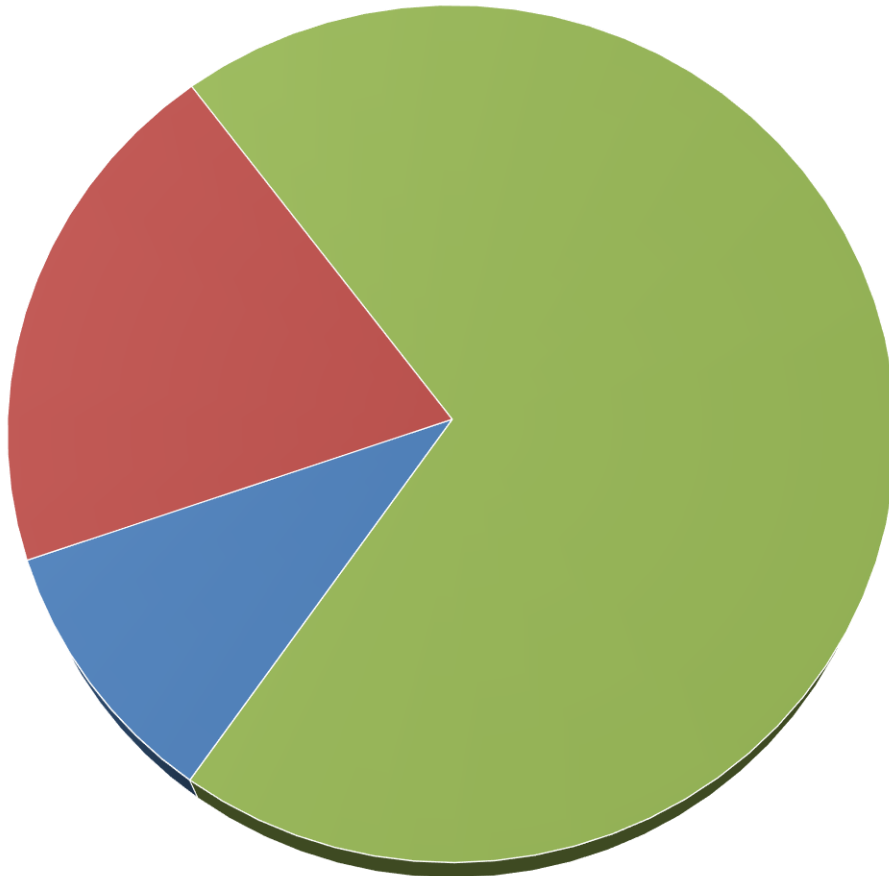


# How Humans Learn



People remember:		People are able to:
10% of what they read	<b>Passive Learning</b>	Define, List, Describe, Explain
20% of what they hear		
30% of what they see		
50% of what they see and hear		
70% of what they say & write	<b>Active Learning</b>	Analyze, Define, Create, Evaluate
90% of what they do		

# How Humans Learn



- **10% Formal:**

structured programmes, activity-based workshops  
seminars and masterclasses  
professional development, business schools  
eLearning modules and courses

- **20% Social:**

mentoring, reverse mentoring, coaching, informal feedback  
internal and external networks, teamwork, professional  
associations, action learning

- **70% Experience:**

**on-the-job experience**, applying new learning in real  
situations, **solving problems**, special assignments,  
**project reviews**, reading guides & manuals, new work  
within role, **increased span of control**, exposure to other  
departments and roles **stretch assignments**, community  
activities







# Pre-use inspection

IPAF.org - IPAF Inspecti

youtube.com/watch?v=Rykn0XarV0I

Search

IPAF.org - IPAF Inspection Demo (Vertikal Days 2014)

5,038 views

IPAF.org  
Published on 10 Jun 2014

For further information on pre-start inspections of MEWPs: <https://www.ipaf.org/inspections>

The International Powered Access Federation (IPAF) promotes the safe and effective use of

SUBSCRIBE 600

**IPAF MEWP PRE-USE INSPECTION CHECKLIST**

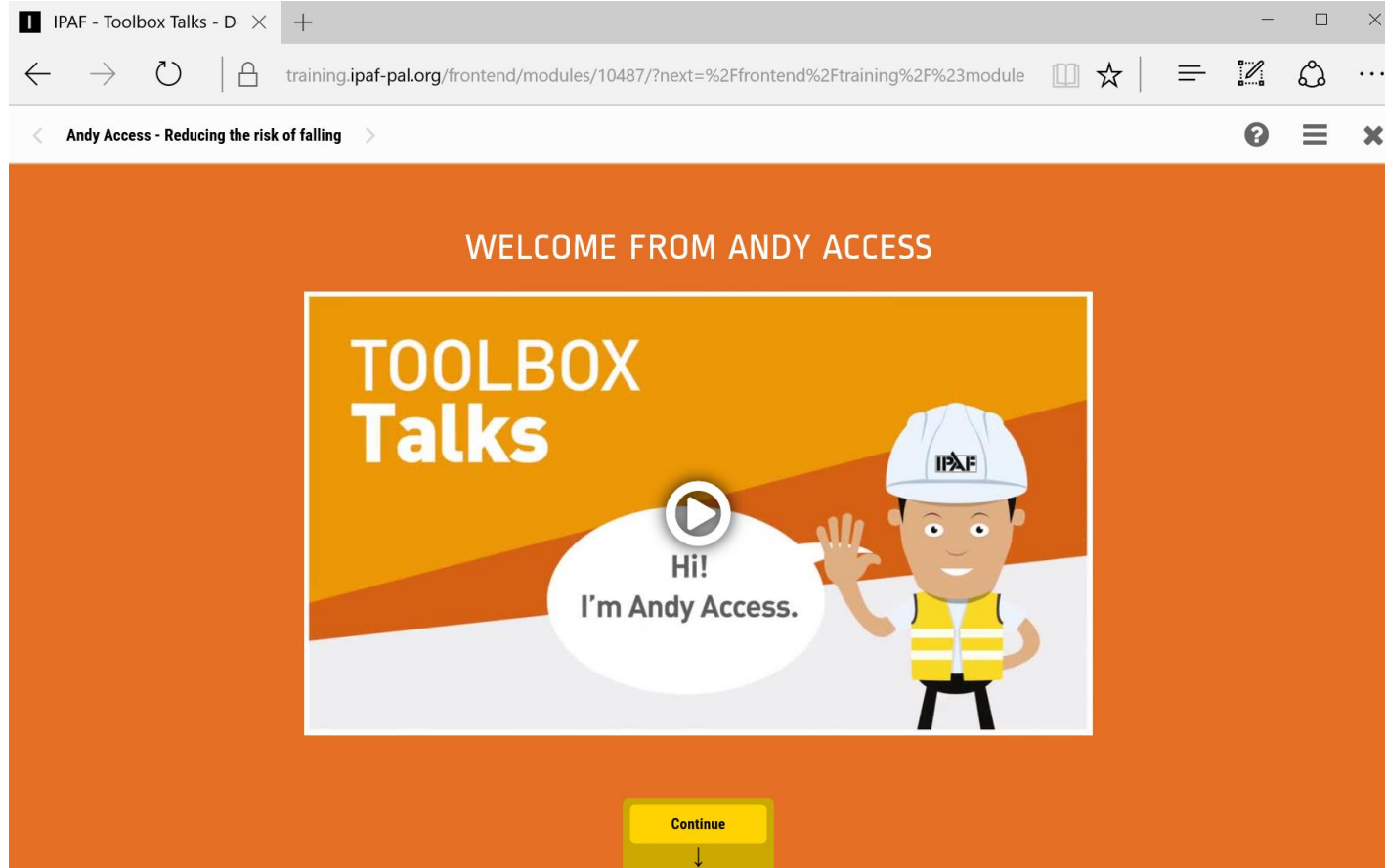
MACHINE: \_\_\_\_\_ WEEK COMMENCING: \_\_\_\_\_

All checks should be conducted in accordance with the manufacturer's manual

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
<b>Documentation</b>							
1. Current thorough examination certificate (within last six months)							
2. Manufacturer's operator manual							
3. Rescue plan							
<b>Wheels/tyres</b>							
4. Wheel security (nuts, retainers: loose, damaged, missing)							
5. Tyre pressure (pneumatic: foam filled or solid)							
6. Cuts, splits, exposed braiding, damaged rims							
<b>Engine/power source</b>							
7. Fluid levels (engine oil, coolant, fuel)							
8. Fluid leakage on ground and around engine							
9. Battery (electrolyte, security and charging plug condition)							
<b>Hydraulics</b>							
10. Hydraulic fluid level							
11. Leaks (hoses, pipe connections, rams, cylinders)							
<b>Hoses and cables</b>							
12. Security and condition (cuts, chaffing, bulges)							
13. Power track cable trays (free from damage and debris)							
<b>Outriggers, stabilisers</b>							
14. General condition, pins/retainers, footplate							
15. Sprinkler plates (present, condition, secure for travel)							
16. Interlocks (functioning, engaged)							
<b>Chassis, boom and scissor pack</b>							
17. General condition (damage, misalignment, corrosion)							
18. Cracks in weld							
19. Pins, retainers and chains (security, signs of wear)							
20. Canopies, guards, engine covers (security and condition)							
<b>Platform or cage</b>							
21. Steps for access/egress (secure, undamaged, clear)							
22. Entrance gate, guard rails and retaining pins							
23. Harness anchor points							
24. Clear of rubbish, debris and obstructions							
<b>Decals and signage</b>							
25. ID plate, safety, warning and information decals (legible)							
26. Controls (identification decals, directional arrows)							
27. Platform loads (SWL, max. wind speed, max. number of persons)							



# Andy Access – toolbox talks

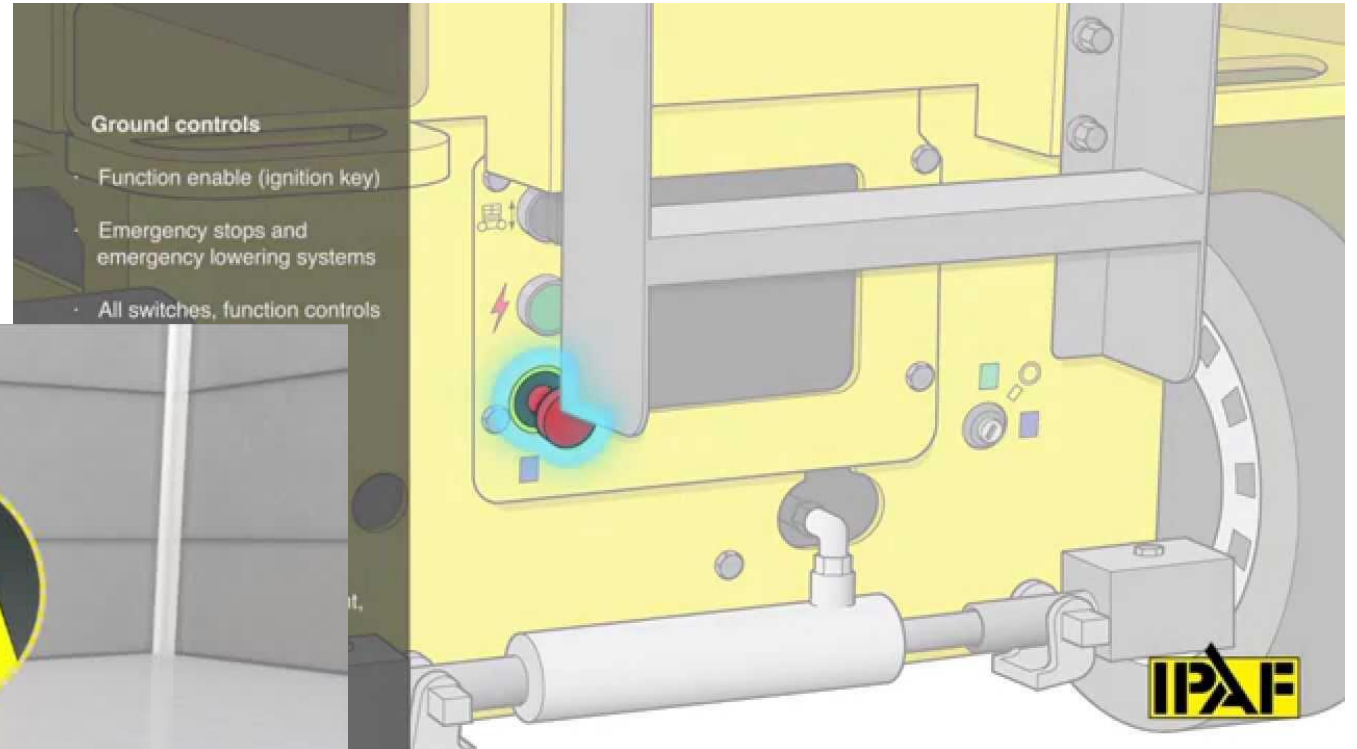


Download posters from [www.ipaf.org/andyaccess](http://www.ipaf.org/andyaccess)

# Pre-use inspection



[www.ipaf.org](http://www.ipaf.org)



# Virtual Reality (VR)



[www.ipaf.org](http://www.ipaf.org)





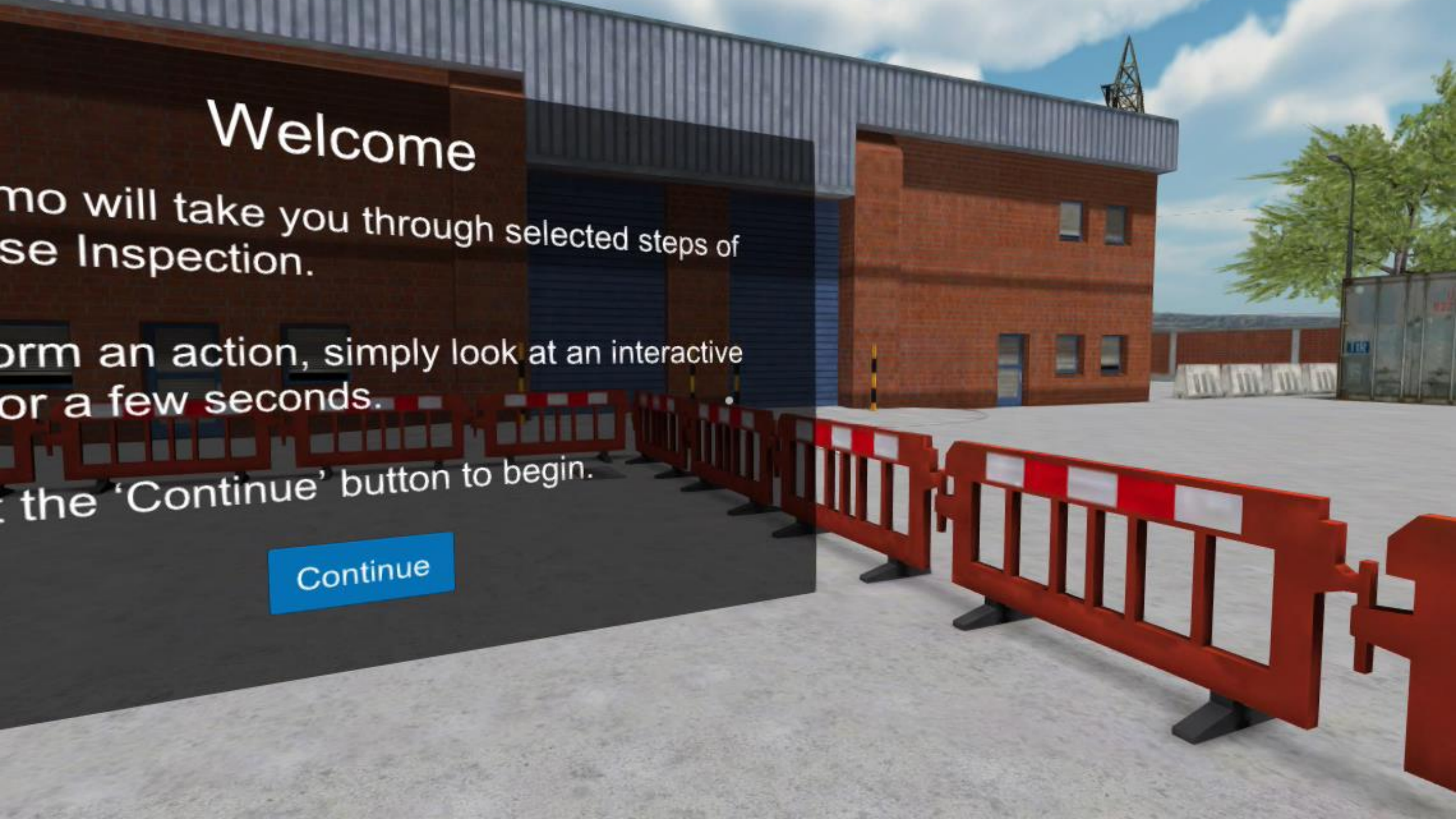
# Welcome

Who will take you through selected steps of  
the Inspection.

To perform an action, simply look at an interactive  
object for a few seconds.

Click the 'Continue' button to begin.

Continue





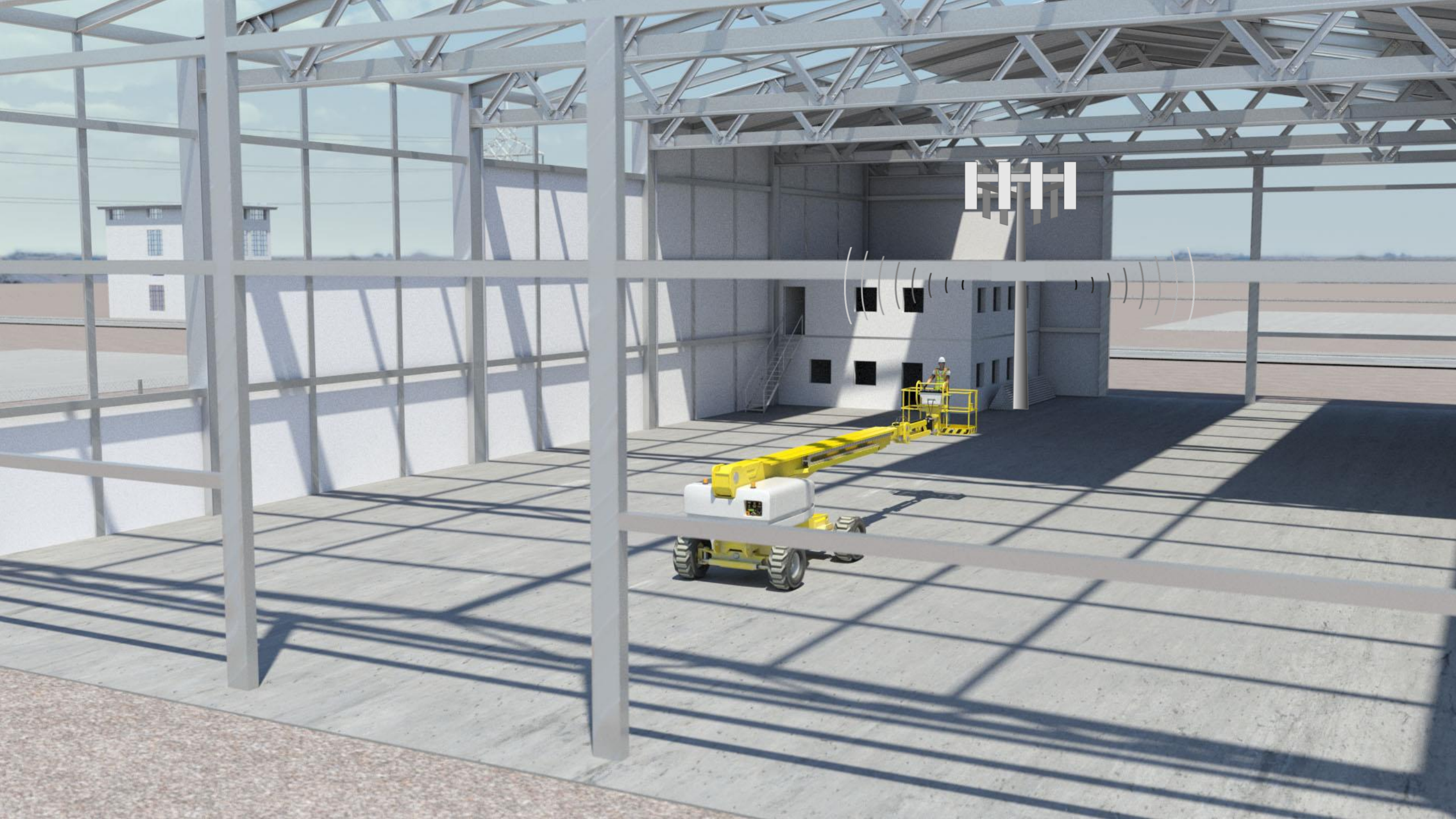
# VR Simulation / Gamification



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# Augmented Reality



[www.ipaf.org](http://www.ipaf.org)



Google Glass



Epson BT200



Vuzix m100



Optinvent ORA-X



Recon Jet



Laster SeeThru



Meta Pro



Atheer One



Lumus DK40



ODG Consumer



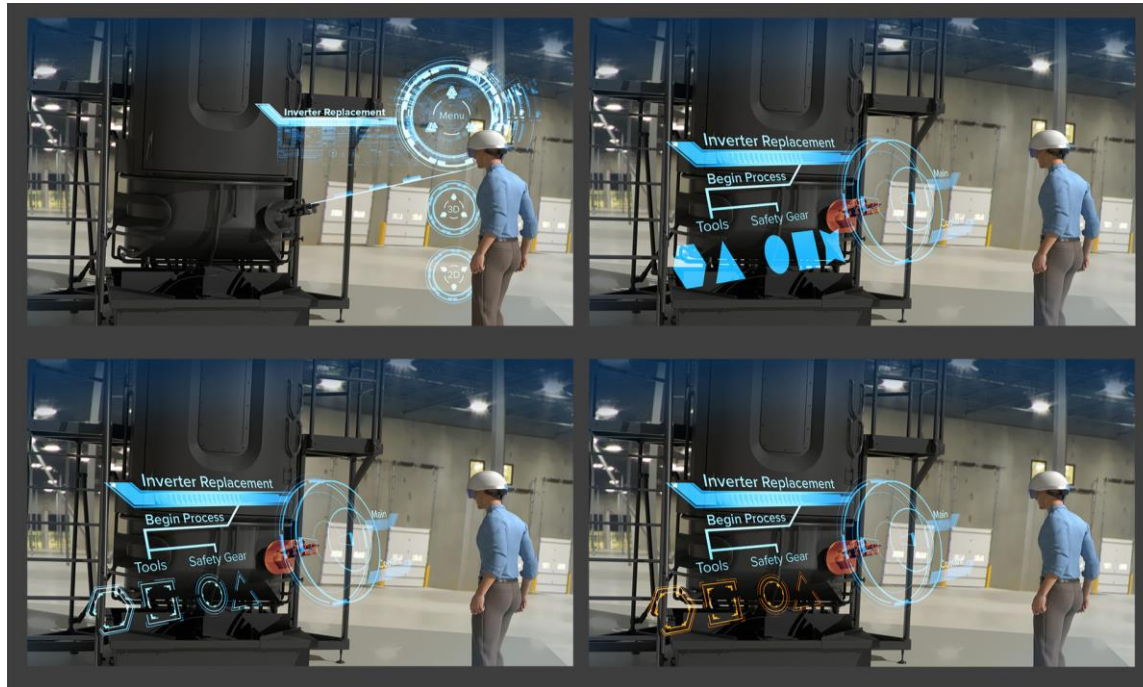
Sony SmartEyeGlasses



Microsoft Hololens



# Augmented Reality – Pre-Use Checks



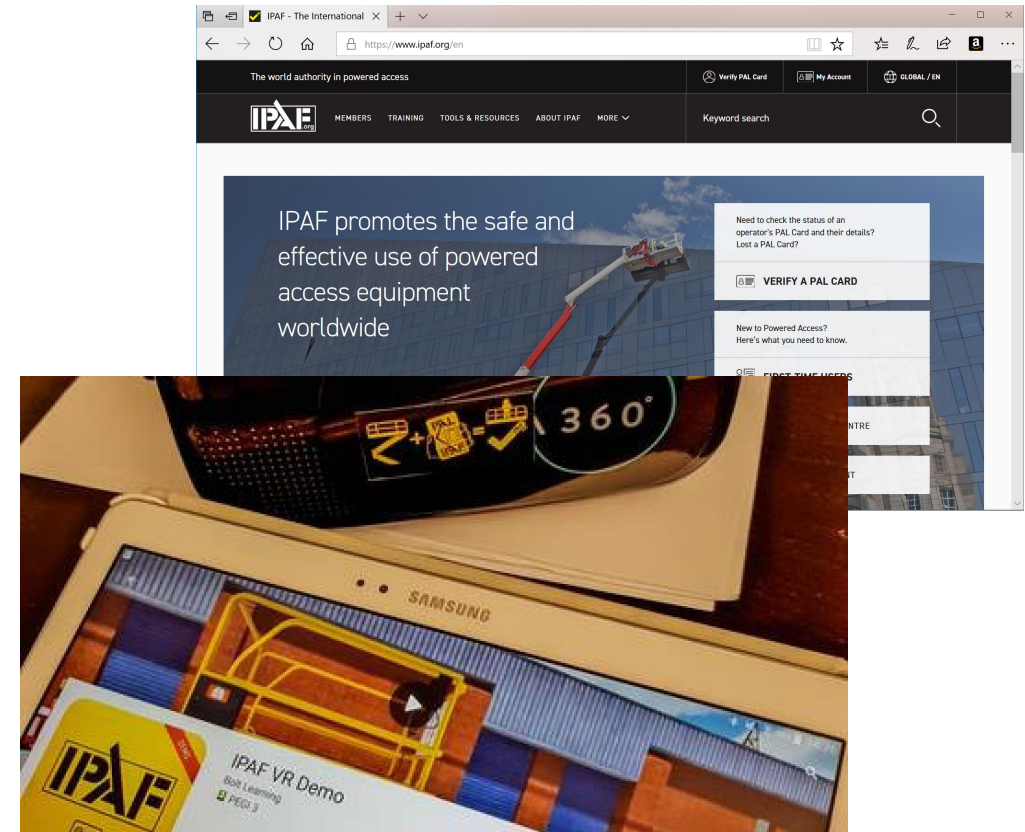
# New vs Traditional ?



# The Future? – IPAF's Global VR/Sim Consultation



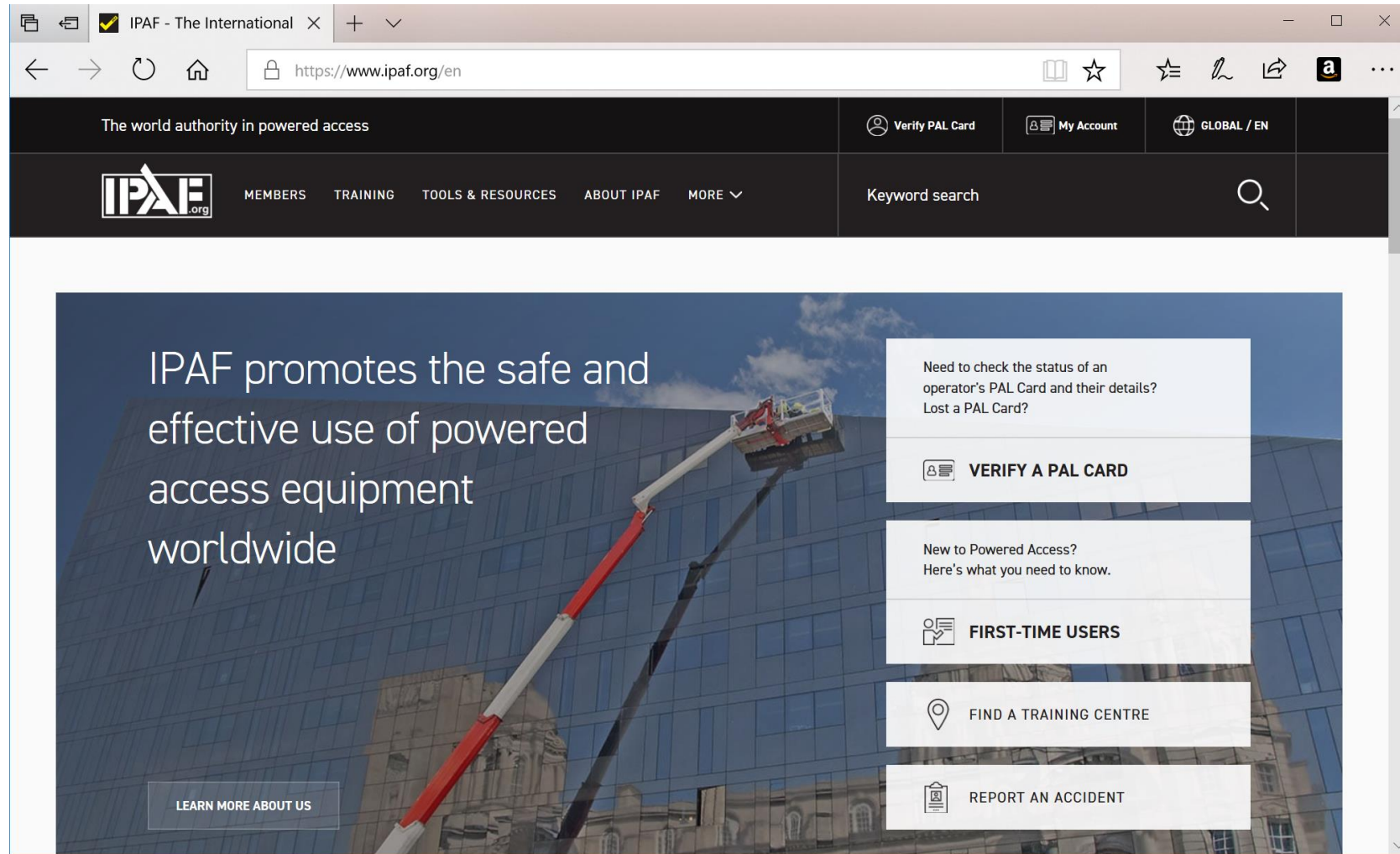
- Digital Questionnaire  
March 2018 – April 2018
- Review of feedback from questionnaire  
May 2018
- Working Group Review/Proposals  
May 2018 – June 2018
- Outcome of consultation agreed by IPAF Training Committee  
July 2018



[training@ipaf.org](mailto:training@ipaf.org)



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Thank you



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ANY  
QUESTIONS  
?