



# **MEWP accident investigations**

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# MEWP Accident Report



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*When an accident occurs...*

*How do we*

- communicate*
- report*
- learn*

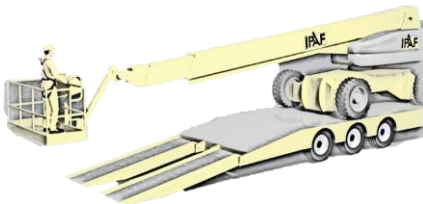


# MEWP Accident Report

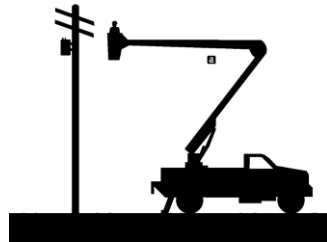


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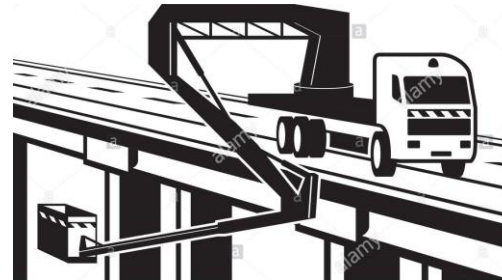
*What do we know about accidents ?*



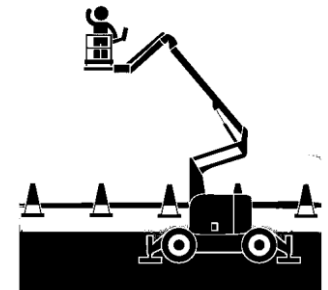
Loading/Unloading



Working near powerlines



Working near roadways



Operator conduct

*Fall From height*

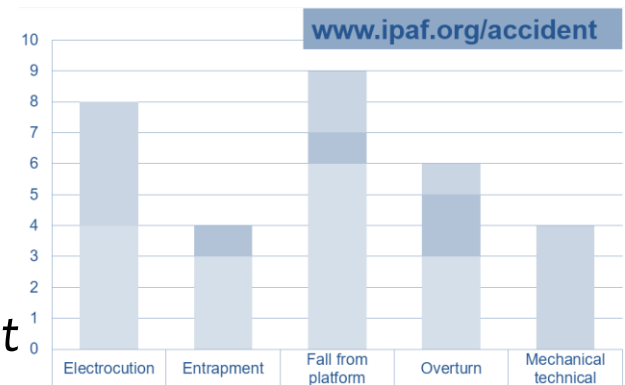
*Electrocution*

*Common MEWP fatalities → Overturn*

*Entrapment*

*Hit by vehicle or object*

*Mechanical*

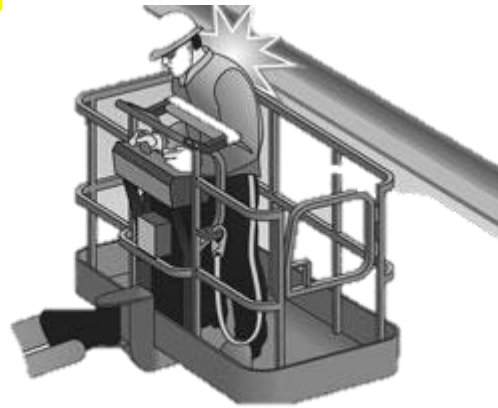


# MEWP Accident Report



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*Have we learnt anything?* ?



Improved  
Design

Training



# MEWP accidents in ASIA



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*What is the role of Asia?*



## BOOMING MEWPS

Large Fleet

Robust Regulations

Strong Industry



*Safety culture but there are still barriers*

*How to improve ?*

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## *Incident investigation method*

1. *Communicate*
2. *First Response*
3. *Rescue Hierarchy*
4. *Inspect the MEWP and worksite*
5. *Root cause : 6 key items*  
*People / Environment / Machine/Training/Procedures/Management*
6. *Closure → share the knowledge*

# MEWP accident investigation



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## *Communicate*

who needs to know?

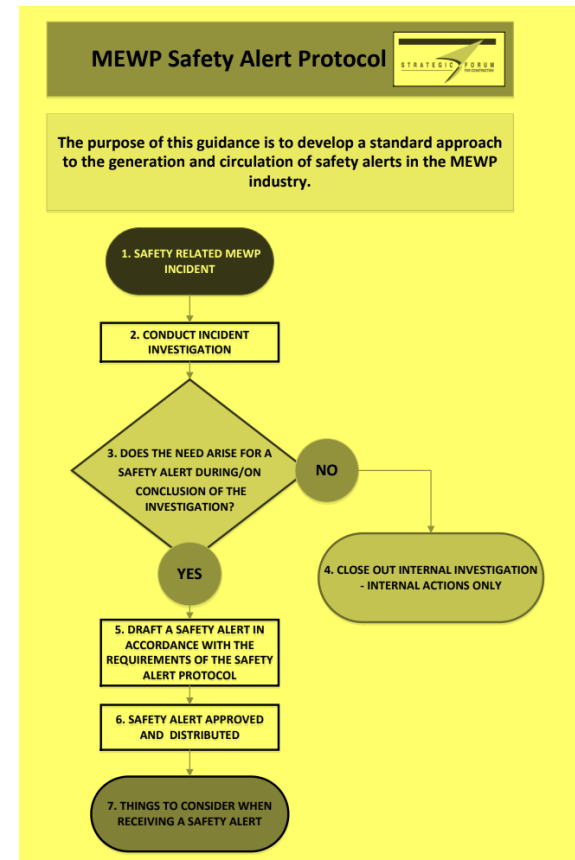
Owner, Manufacturer, Authority, IPAF

What do we do ?

- Can I keep operating this machine?
- What about the rest of my fleet ?

Does it need a SAFETY ALERT?

[MEWP Safety Alert Protocol](https://www.ipaf.org/en/resource-library/mewp-safety-alert-protocol)  
<https://www.ipaf.org/en/resource-library/mewp-safety-alert-protocol>



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## *First response*

### **PREPARATION**

Have an incident plan

Know the **lowering systems** -  
ground controls  
auxiliary system  
override

Consult the rescue hierarchy

Manufacturers instruction to  
retrieve platform

### **ACTION**

Is the operator hurt

Is the worksite safe

Cordon the area and **secure the MEWP**

Check MEWP system records

Use the **Rescue Hierarchy**

Retrieve the platform



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## *Is a Rescue required?*

*Follow the rescue hierarchy to safely retrieve platform*

If the MEWP stops

Check machine & warnings  
Use Auxiliary controls

Use primary ground controls

Assess operator conditions  
Wait for tech support

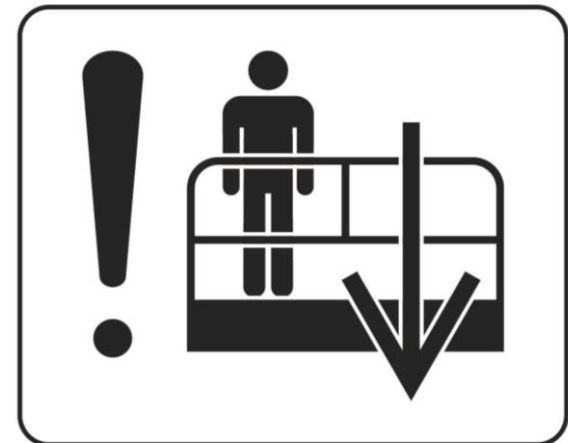
If unsafe to remain elevated

Consider basket to basket  
rescue

If rescue is required  
Consider controlled descent

If operator is incapacitated  
- Use primary ground controls

*There is always a risk of becoming stranded..... Have a rescue plan!*



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## *Inspect the machine and worksite*

### PREPARATION

Checklist for Inspection

Review specs

Check machine specs,  
operator manual,  
inspection records



### ACTION

Hazards?  
machine condition?  
worksite protocols?



Don't move the MEWP

Look up

Look down

Look around

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*Identify the cause(s)*

IMMEDIATE - UNDERLYING - ROOT

6 areas to consider



PEOPLE

ENVIRONMENT

MACHINE

TRAINING

PROCEDURES

SUPERVISION

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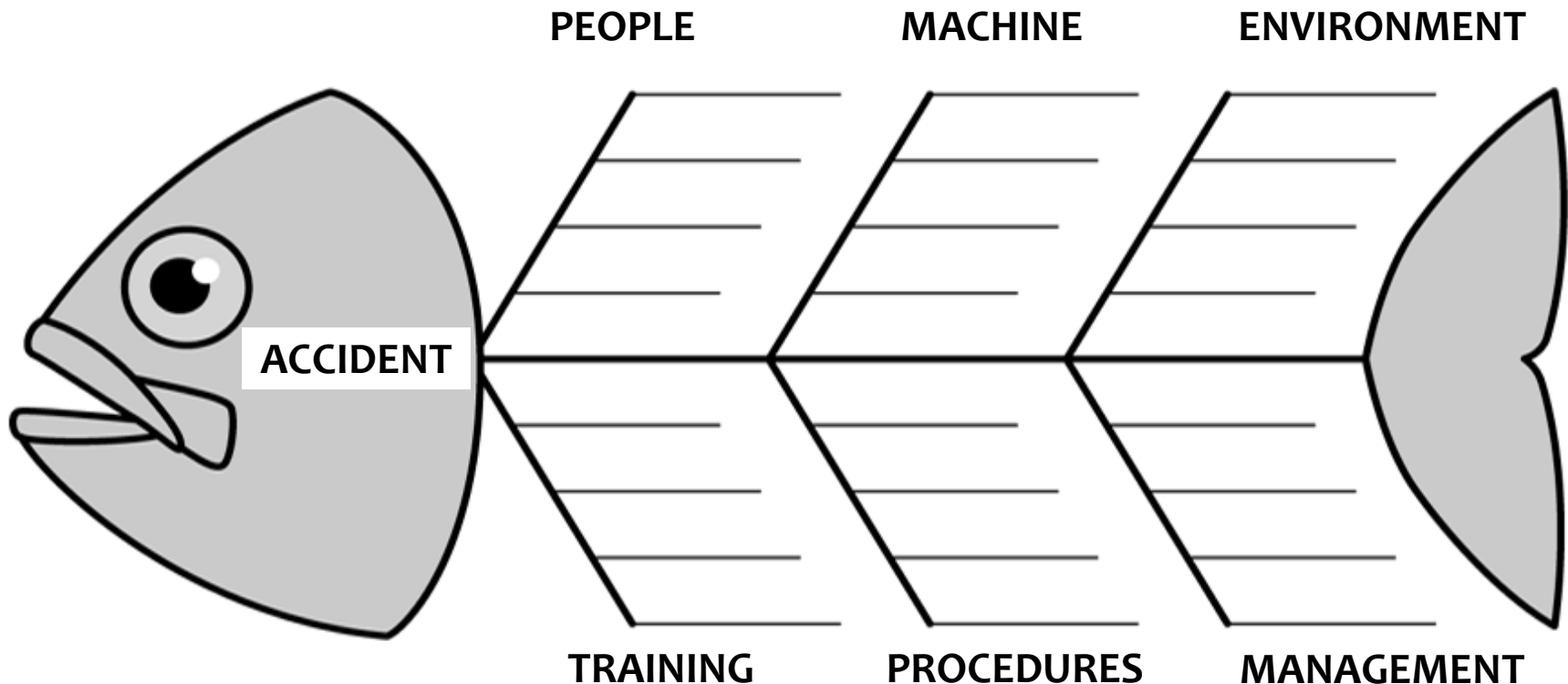


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*Identify the cause(s)*

IMMEDIATE - UNDERLYING - ROOT

What factors influenced this accident ?



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## *Closure*

*Learn and share!*

*What improvements need to be made to prevent future accidents?*

*Communicate back to the user and other interested parties*

*Communicate to your staff to instil safety changes*

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## *Case Study – overturn at Grand Prix*

People – stored equipment  
in platform

Machine –  
elevated for storage overnight

Environment –  
Heavy storm with high winds



**Drop protection (mesh/panels)**  
Increase wind loading – needs approval.

**Exclusion zone**  
Keep area clear to eliminate hazard

Training –  
was operator trained?  
Familiarised ?

Procedures –  
Equipment storage area?  
How to secure MEWPs?

Management –  
instructions to secure site  
Communication on safe use



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## *Case Study – collision with banksman*

People – Lack of communication between platform & ground

Machine – inspected before use  
Maintained as required.  
Responsiveness acceptable

Environment – wet conditions



**No** movement if the ground person is **not** visible!

Training – operator trained  
Banksman not trained

Procedures -  
for banksman.  
For travelling on site

Management – No instructions from management

# MEWP accident investigation



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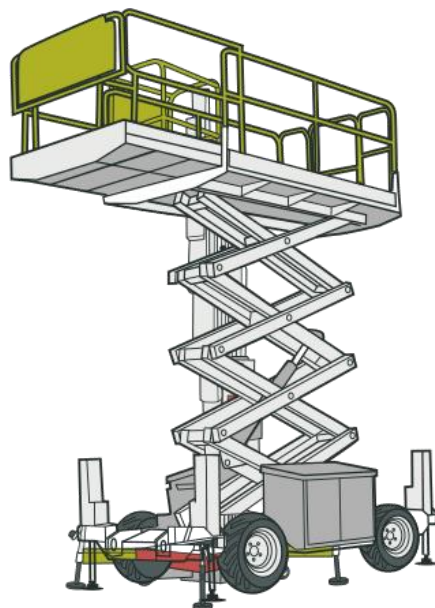
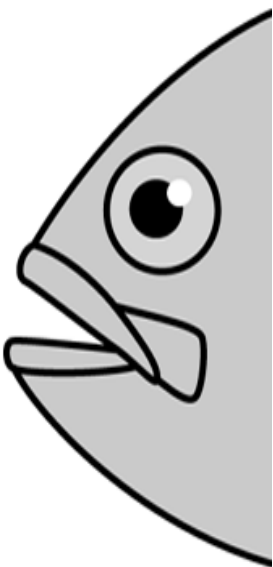
## *Case Study – poor maintenance*

People – Who inspects?  
Who conducts maintenance?

Machine – Is there a service history?  
Where is it stored?  
What are the manufacturers instructions?

Environment - harsh  
operating conditions?

*Inspection and  
maintenance is  
vital – see the  
new IPAF video*



Training – Are staff trained on  
this model?

Procedure – Regular  
maintenance and inspections?

Management – Who checks  
all maintenance has been



*Summary :*

*Report each accident and near miss to manufacturer and MEWP owner*

*Report using IPAF's anonymous portal*

*Use a thorough investigative model to identify all causes*

*Communicate how we can prevent future accidents*



*MEWPs are safe  
Are you and your workers?*

*Thank-you*