**ENSURING THE SAFETY OF AIRCRAFT**

**MAINTENANCE PERSONNEL**

**Common Aircraft Maintenance Personnel Issues**

Working on aircraft means working high above the ground, moving heavy objects, using powerful machinery and being near hazardous chemicals — not to mention the long-term risk of exposure to vibration and noise.

One risk for any worker who’s involved in a potentially dangerous industry like aircraft maintenance is the effect of ‘shift work.’ It’s important to realize these limitations of your maintenance team and adjust accordingly. Some of the potential hazards from shift work include:

* **Fatigue and Sleepiness:** Irregular hours of work can mean your mechanics may not get all the sleep they need. This can lead to inefficient and unthorough work.
* **Stress:** Distraction from stress can be dangerous if maintenance personnel isn’t paying attention to a detailed maintenance operation.
* **Medical Problems:** Health problems like gastrointestinal and cardiovascular issues can arise from interruptions caused by irregular work hours.
* **Age:** Older employees may have a more difficult time adjusting to irregular work hours or a changing schedule.



**Prevention of Accidents**

The best way to avoid accidents and ensure quality aircraft maintenance is to plan. Additionally, frequent employee safety training is the best way to educate your crew and keep them vigilant. Here are some aircraft maintenance safety topics to include both in your training and in your overall safety plan:

1. **Review Risk Management Practices**

By following risk management practices, personnel can avoid simple mistakes that can lead to severe accidents.

1. **Follow the Appropriate Procedures**

Service manuals are essential references with detailed information about how to complete each task and any specific tools required.

1. **Use Safety Signs**

The use of safety flags and other caution signage is a great way to promote safety when your personnel might otherwise be getting complacent working in a familiar space.

1. **Ensure Team Communication Is Effective**

Regularly holding safety meetings and bringing up safety issues whenever you communicate important information to your personnel, you’ll go a long way toward being proactive instead of reactive.

1. **Be Prepared for the Worst**

Make sure all members of your team — from the most senior to the most junior — are fully trained in the use of emergency equipment, as this is crucial for being prepared for a worst-case scenario.

**Use The Right Aircraft Maintenance Equipment and Tools**

Safe aircraft maintenance means not cutting corners. Here’s how the pros minimize the chance for injury:

1. **Use Protective Equipment**

The human body has no protection against extreme heat, sharp metal objects and caustic or noxious fuels and fumes. Use personal protective equipment — PPE, safety goggles, hearing protection, sturdy clothing and even breathing apparatuses must be used by personnel whenever appropriate.

1. **Use Respiratory Protection**

Areas contain asbestos and can contribute to the development of asbestos-related diseases such as mesothelioma.

1. **Use Aircraft Maintenance Equipment**

Safe access to a work area is essential for any maintenance job. Aircraft equipment that’s specifically designed for the task at hand is a great way to reduce slips, falls and other workplace injuries.

1. **Use the Right Tools**

Specific maintenance tasks can require unique tools— they help get the job done correctly.

1. **Return Tools to Their Storage Areas**

A misplaced tool can be dangerous if it finds its way into the wrong part of an aircraft. For personal safety and for protection of valuable assets, everyone needs easy access to fire prevention tools.

1. **Remove Jewelry**

Employees to remove all jewelry before getting started on any maintenance work.

**Keeping Personnel Healthy and Safe**

Minimizing the risks caused by employee fatigue and complacency:

1. **Daily Limits**

Set daily limits for your employees and try to make sure nobody continues to work if they’re not able to fully concentrate.

1. **Limit the Number of Night Shifts**

It’s much easier to make mistakes when your mind is unable to focus on the task at hand. Try to only give employees a maximum of two night shifts in a row, with a few days of recovery time afterward.

1. **Breaks**

Try to schedule adequate breaks for all employees and give them enough time to recharge and refocus before returning back to work.

1. **Set Multi-Day Limits**

Allow employees to take days off as necessary and use vacation days to recharge.

1. **Communicate**

It all comes down to your employees. They may not always feel comfortable voicing their concerns without being asked, so it’s always good to check in and make sure they feel healthy, well-equipped and well protected.

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