Subject: Personal Protective Equipment (PPE) or “Safety Glasses Saved the Day”

Area of Concern: Proper use of PPE

Distribution: All Aviation Activities

Discussion: You may not have thought about it, but PPE has been around for centuries. Ok, maybe not as far back as the caveman, but certainly during medieval times. That’s right, the armor knights wore was PPE. And how about the blacksmith that made the armor? Do you think the heavy leather apron was worn just to make a fashion statement? No, it was actually an early type of PPE. They probably didn’t call it PPE, but they realized the value of protection while performing hazardous functions.

Today, some people have a reluctance to wear PPE. Whether it’s a matter of comfort, time, or style, some will risk injury rather than wear protective equipment. However, there are events that prove that wearing PPE can and will protect you from injury.

On March 13, 2009, a mechanic was performing maintenance on an aircraft. The task was to replace the left nose gear actuator on an amphibious float. During the removal of the components that were being replaced, hydraulic fluid sprayed from the actuator hitting the mechanic in the face and eyes. Fortunately, he was wearing safety glasses as required by policy. Had he not been wearing safety glasses, he would have sustained serious injury to his eyes.

PPE worked for me!
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Here are a few considerations when using PPE:

First, PPE is used as a last resort. PPE should not be used as a substitute for engineering controls, administrative controls, or work practice controls. Simply try to eliminate or mitigate the hazard, and if it still exists, use PPE for protection against the recognizable hazard(s). With that being said, a hazard assessment must be completed in order to determine the “recognizable hazards” and what PPE should be used for that identified hazard. Once these steps have been followed, select the best PPE to use, not necessarily the least expensive or the newest/coolest design.

Second, train every employee on the use of PPE. Minimum topics that should be included are:

- Evaluation of equipment
- Selecting appropriate equipment
- Use of the equipment
- Maintenance of the equipment
- Limitations of the equipment

Although PPE is worn frequently, common mistakes, misuse, and mishaps still occur. The following recent example shows what can happen when an employee is not trained on the PROPER use of PPE:

A young man had just been approved for aircrew training. He was manifested on the helicopter but since he didn’t have his own helmet, he had to borrow one. The aircraft he was riding on was involved in a mishap. When the investigators arrived at the crash site, the helicopter fuselage was resting on his helmet, but the helmet had not changed shape. Unfortunately, the aircrewman received fatal injuries. However, it was later found that the cause was from the chin strap not having been worn properly. As a result, the aircrewman died from strangulation, not from impact forces.

The Lessons Learned from this mishap should not be forgotten: every piece of your equipment is part of a system that’s been designed / selected to save your life, if used correctly.

/\s/ Robert Galloway  
Robert Galloway  
Aviation Safety Manager

/\s/ Ron Hanks  
Ron Hanks  
Chief, Aviation Risk Management and Training Systems