PHPA Main Rotor

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PHPA Supports the 2002 American Heroes Airshow

Main Rotor editorial staff

Professional Helicopter Pilots Association

PHPA members were first in and last out at this year's American Heroes Airshow held 27 July at the Hansen Dam Recreation area in Lake View Terrace.



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TECHNOLOGY & CRM TRAINING By Keith Johnson PHPA Board of Directors

Advancements in technology have had a dramatic effect on how we operate. These technologies include thermal imaging (FLIR), computerized mapping systems, video and microwave downlink, collision avoidance, stabilized hand-held viewing devices, night-vision goggles, slaved searchlight and imaging systems that were only a dream a decade ago.

However, this technology has some down sides, namely the risk of overloading the crew. It's worth noting that, for many years military aviation has struggled with balancing the benefits of technology against the potential for crew task overload.

While technology, individually and collectively, has the ability to make aircrews in the helicopter industry more effective, it has also increased the number of items of mission equipment that aircrews operate. With the introduction of new, more complex mission equipment, the less time they may have to focus on more fundamental duties such as collision avoidance.

With the advent of new technology, it may be obvious for the need for training to operate new mission equipment, but not so obvious for the need of all crewmembers to undergo crew resource management (CRM) training. Numerous studies have chronicled that accidents often occur when the pilot's attention is distracted from critical duties during various stages of flight where safe flight was possible had the pilot been properly focused.

Case in point. Crews are required to manage multiple equipment systems. In the human factors world this is known as multi-tasking, which can easily lead to task overload. When work is performed at a high mental PHPA + American Heroes continued from page 1

Airshows run on teamwork and PHPA members volunteered key professional talents to this annual, admission free event.

Volunteers from the PHPA included:

- Board member Jeff Miller Director Ramp Ops
- Board member Bill Graham Ramp Marshaller
- Board member Jim Paules Executive Producer

In addition to the event planning, PHPA Board and general members attending included

- Armen Dermenjian, our PHPA President was there to make sure we were working.
- Board advisor Ricarda Bennett was there to make sure Armen was working
- Board member Debra Shane was also there beautifully handling the PHPA booth.
- Board advisor Alex Calder was there to show new PHPA member Victoria Redstall the intricacies of airshow management.

PHPA members were out in force on the flight line :

- Board member Jim Woodaman presented Summit Aviation's helicopter for static display
- Board member Hanjo Kell flew in with HeliNet's Sikorsky S-76 from Children's Hospital.
- Board member John Gilkerson was 'on-scene' with the Glendale PD NOTAR

PHPA Calendar of Events

9 October Public Service / ENG Conference

17 October 94th AeroSquadron Restaurant Van Nuys. 7:00 pm dinner and presentation

27 October HAD 2002 - Helicopter Awareness Day at Los Alamitos Air Field. In conjunction with the Los Alamitos Chamber of Commerce and their Wings, Wheels and Rotors Expo. Free admission and parking. Gates open at 9 am PHPA volunteers needed !!

Check the PHPA website for more details and driving directions to these events.

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and / or physical energy level, at some point there is a loss of situational awareness, and a corresponding reduction in the margin of safety. As crew workload comes closer to its saturation point, accidents are more prone to happen.

CRM is intended to maximize the use of all human, information and equipment resources. With the increase in technology, there is a corresponding need for better coordination and communication between crew members. New technology may simplify some individual tasks, but it can also increase total workload. This has created a corresponding increase in the need for CRM training.

New mission equipment also has an impact on situational awareness. Even the best-trained, most competent crew members, have limitations. As technology brings us closer to the individual and collective limits of our abilities, we must also be prepared to invest more time training to enhance the CRM skills of all crew members. *Failing to prepare is preparing to fail.*

I frequently hear people say, "We can't afford the time and costs associated with training." My reply: If you think training is expensive, try having a fatal accident due to work overload resulting in:

- Midair collision;
- Controlled flight into terrain;
- Loss of control of the aircraft;
- Inadvertent IMC, and;
- Improper response to an in-flight emergency.

The bottom line, we cannot afford <u>not</u> to train. *It's pay me now or pay me later. Pay me later is much more expensive.*

Experts in the field of CRM and have documented that approximately 80 percent of all accidents are related to human factors performance errors, including flawed decision-making, attitude, knowledge and skill. Research has established that breakdowns in CRM performance are a major factor in accident causation. The objective of every organization should be to eliminate human error accidents.

President's Message

By Armen Dermenjian

In our June Newsletter, I asked pilots to fly neighborly because we have a civic responsibility to do so. In case good citizenship is not enough motivation, I would like to inform our pilots that the FAA is becoming tired of the increasing helicopter noise complaints. Whether the complaints will result in regulatory changes, I will not speculate here. I can tell you, however, that the FAA is revisiting the noise issue and developing an action plan to address the increasing noise complaints.

Recently, I attended a meeting with the Hollywood Hills homeowners. In addition to the residents, the audience included representatives from the FAA and city government.

"...The PHPA's role is not to be the 'noise police'..."

The residents were very emotional about the noise problem. Some of them were exaggerating how low the helicopters were flying over their homes. Others were wishing for helicopters to crash to eliminate the ongoing noise problem. Although some of the residents sounded unreasonable and even reckless, I heard their message, namely, helicopter noise is annoying and disruptive.

I attempted to assure the group that our pilots are professionals and are aware of the adverse affects of helicopter noise. After the meeting, however, I realized that I must have sounded hypocritical; that is, our actions speak louder than our words. For example, within a two day period recently, a twin-engine helicopter flew over the Hollywood Bowl at 1,800' msl while the concert was in session, a Robinson R-22 flew through the Cahuenga Pass at 1,400' msl (again, while the concert was in session), and a police helicopter flew over the City of Burbank at 1,000 msl (300'-400' agl) at 0130 at a speed that made me believe that the helicopter was not responding to an emergency incident. To be sure, many pilots do fly higher and quieter. But as the above examples show, we can do better.

The PHPA's role is not to be the "noise police." What I like to suggest, however, is that we each need to police ourselves—whether as organizations or as individual pilots. I encourage the experienced pilots who have knowledge of the area to educate the newer pilots and be good examples for them. The PHPA recognizes the importance of the noise issue. We are implementing a program that will allow us to accept noise reports from the community and disseminate them to our pilots. Additionally, we will have open forums on the noise issue during the upcoming meetings. I am hoping that public service agencies, private operators, and pilots will be willing to participate in a coalition to monitor ourselves.

Let's do our best to fly safe, and, just as importantly, let's do our best to fly neighborly.

Armen Dermenjian

Professional Helicopters Pilots Association President

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Technology & CRM Training

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Anything less is resigning yourself to having accidents. This is unacceptable. Ask yourself – Does your organization have a zero accident policy?

Historically, many CRM training programs have focused on personality conflicts. Modern day CRM training has begun to emphasize more operationally focused training. CRM training is every bit as, if not more important, as having the knowledge and skill to operate modern mission equipment systems. The benefits from CRM training include:

- Increased situational awareness;
- Better communication;
- Increase in mission effectiveness;
- And, a higher level of safety.

While aircrews are at the pointed end of the spear, organization management has the responsibility to minimize the likelihood of having a mishap. Their responsibilities include providing standardized training for equipment operation and crew performance. Safety is a reflection of the effectiveness of your organizations management. Furthermore, a test of leadership is management's ability to recognize the need for training, and take action before rather than after a mishap.

Training is the dominant ingredient in mishap prevention. We must be vigilant to remind ourselves that, *safety always takes priority over the mission, and training is the key to operating more safely.* By the way – When was the last time you attended a class on crew resource management?? Maybe it's time.

END

Keith Johnson is a former Lieutenant / pilot with LAPD 's Air Support Division where he was assigned for 20 years. He has more than 4,000 hours of flight-time, and currently works as an aviation safety and accident prevention consultant.

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> Please Fly Safe and Neighborly ! WWW.PHPA.ORG