

PROFESSIONAL HELICOPTER PILOTS ASSOCIATION

Office and Professional Employees International Union
AFL-CIO

Recommendations to Congress on Helicopter Emergency Medical Services (HEMS) Operations

April 17, 2009

The Professional Helicopter Pilots Association (PHPA) has a membership of over 4,000 helicopter pilots around the United States and Canada, over 1,500 of which are active HEMS pilots.

While there is no inexpensive easy fix to the issue of HEMS safety, solutions to well known problems do exist. If helicopter safety in the United States is to approach the level of airline safety, the model has only to be copied. Equipment, training and support systems must be brought up to the levels that have resulted in such visible improvements to airline safety over the past several decades. Airline equivalent safety records have been obtained in other countries, most notably Canada, where there has not been a fatal HEMS accident in over three decades.

PHPA recognizes that there is significant financial cost to any change in current equipment provisions or practices; and every effort has been made to temper our desire for immediate improvements with the practical realities of the HEMS business. Yet there is a cost in maintaining the status quo, and we believe that cost, one measured in lives lost and confidence destroyed in the system, to be far higher. Furthermore, responsible operators trying to do right by voluntarily adopting safer aircraft and practices are placed at a competitive disadvantage by those looking for ways to operate at the margins.

The general public usually does not have a choice in selecting the equipment or the operator that will transport them, or a member of their family, in a situation requiring a HEMS flight. Where choice over matters of health and welfare are restricted, government has traditionally stepped in to insure that an adequate level of safety is provided. Even when choice is available, in matters of public transportation the government has always taken an active role in establishing minimum equipment requirements and safe operating practices, and modified those requirements as necessary to address changes within the industry.

It is our contention that relying on voluntary compliance for essential equipment and practices will only result in a continuation of the status quo.

The recommendations below address both immediate requirements and long term goals. They represent the combined concerns of professional career pilots who want the tools to go along with the responsibility for insuring that every flight is brought to a safe and successful conclusion.

I. AIRCRAFT RELIABILITY:

1. Maintenance:

Recommendations – PHPA is currently monitoring the efforts of the International Helicopter Safety Team (IHST) to see if their recommendations in the maintenance field are sufficient to warrant the confidence of our membership.

II. PILOT RELIABILITY:

1. Training:

Recommendations – Total pilot flight hours and experience outside the HEMS segment do not represent the best measure of a pilots' suitability for this work. The amount of pre-employment training that should be provided depends to a large degree on whether or not the new employee will be immediately flying HEMS flights as a single pilot, or as part of a crew under the tutelage of an experienced HEMS pilot. Since there are presently very few two-pilot HEMS operations in the United States, PHPA believes that better guidelines for new HEMS pilot training are needed to ensure that solo pilots are properly prepared for the job. These guidelines should be developed considering the amount of single pilot experience, night experience, and experience in aircraft type along with other appropriate factors so as to arrive at a template for training based on the individual pilots' needs, as opposed to "cookie cutter" training programs that vary from operator to operator.

Beyond new employee training, better guidance for routine refresher training in perishable skills is needed. Such training should go beyond simple emergency procedure training and use realistic HEMS scenarios that have specific training objectives. These training flights would ideally be performed several times per year in the same type aircraft and location that the pilot normally flies. However, due to the high cost of such training, similar training conducted in a modern, high fidelity flight simulator representing the type of aircraft normally flown and programmed to the pilots' home location would be an acceptable substitute.

2. Crew Rest:

Recommendation - Incorporate recent white paper on the subject as the basis for an industry wide standard which includes training on dealing with fatigue in the HEMS community.

3. Safety Motivation:

Recommendation - Require all operators institute a Safety Management System that goes beyond documents and lip service and makes safety the top priority of the

organization. Establish an ISO-9000 equivalent structure to set standards and certify that operators have true “buy-in” at the Senior Executive level. This could be accomplished by industry with insurance company negotiated benefits for those found to be in compliance, and regulatory penalties for those who are not.

SUPPORT SYSTEMS:

Primary Support Systems

1. Night Vision Goggles or Night Vision Imaging System:

Recommendation - Require one of these systems be onboard and functioning in each aircraft in the current HEMS fleet as quickly as equipment can be purchased, aircraft modified and crews trained. Restrict noncompliant aircraft to day-only flight beyond mandatory implementation date of 24 months.

2. Helicopter - Terrain Awareness and Warning System (H-TAWS):

Recommendation - Require installation in the current HEMS fleet within 36 months, with equipment based on the FAA’s recently published TSO. Require on all HEMS aircraft purchased for replacement or expansion.

3. Wire-strike Protection System:

Recommendation - Require installation in the current HEMS fleet where systems exist for individual models. Require on all HEMS aircraft purchased for replacement or expansion.

4. Color Moving Map GPS:

Recommendation - Require installation in current HEMS fleet within 18 months.

5. Flight Data Recorder / HUMS:

Recommendation - Require installation in current HEMS fleet within 48 months to include cockpit voice recorder and instrument monitoring through video (as a minimum) where full flight parameter monitoring on legacy aircraft is not practical. Data developed should be used pre-accident for refresher training as part of a FOQA program.

6. IFR Certified Aircraft

Recommendation - Require replacement or expansion aircraft to meet full IFR certification. Within 60 months, restrict non-compliant VFR aircraft to day-only flight.

7. Two Pilot Crews:

Recommendation - A two pilot crew is likely the single most effective tool available to reduce human error accidents. It should be the standard for most operations, particularly those conducted at night into unprepared landing sites. While not a substitute for a second pilot, a functioning auto-pilot should be required for all single pilot HEMS flights.

8. Multi Engine:

Recommendation - Require replacement or expansion HEMS aircraft to meet ICAO Category A, Class 1 or 2 requirements.

Secondary Support Systems

1. ASAP & FOQA Programs:

Recommendation - PPHA supports the implementation of non-punitive ASAP & FOQA programs that encourage pilot participation and reporting of safety related issues. A well designed and managed program can provide pilots with invaluable feedback to improve overall safety performance.

2. Weather Reporting:

Recommendation - The FAA and the National Weather Service should secure increased funding to place fully capable automated weather observation platforms in locally identified problem weather areas shown to impact safe HEMS operations. Information from these sites should be available to pilots both pre-flight, and during flight.

3. ADS-B

Recommendation – The FAA has been very slow in developing and funding the implementation of this system. It is particularly useful to low flying helicopters and will help provide separation between other air traffic as well as improve communications. Congress should insure adequate funding is available for this system and provide oversight on the FAA to insure the program moves along at a reasonable pace.

4. Flight Dispatching / Customer Interference:

Recommendation – Any pressure applied to a pilot to accept a flight, whether overtly or covertly applied, will continue to have a negative impact on safety. The FAA must be more aggressive in ensuring that the operational control vested with the HEMS certificate holder is not in any way violated or undermined.