



National EMS Pilots Association

Date: January 27, 2009

To:

Honorable Mark V Rosenker, Acting Chairman, National Transportation Safety Board
Honorable Kathryn O'Leary Higgins, Member, National Transportation Safety Board
Honorable Robert L. Sumwalt, Member, National Transportation Safety Board
Thomas Haueter, Director Office of Aviation Safety, National Transportation Safety Board
Jeff Guzzetti, Senior Air Safety Investigator, Deputy Director for Regional Operations, National Transportation Safety Board

Kevin Haggerty, Manager for Obstruction Evaluation Service, Federal Aviation Administration

From: Kent Johnson, President, The National EMS Pilot's Association (NEMSPA)

Subject: Obstacle Collision Avoidance System (OCAS) Recommendation for Full Approvals and Updates to the AC 70/7460-1K Obstruction Marking and Lighting Guidelines for Inclusion

The mission of the National EMS Pilot's Association (NEMSPA) is to serve the pilots involved in the air-medical transport industry, and to work to improve the quality and safety of those services.

In this letter we would state our full support of the certification of the Obstacle Collision Avoidance System (OCAS) for adoption by the FAA as a standard in the FAA Advisory Circular 70/7460-1K, *Obstruction Marking and Lighting*, and should promote its use at *High Risk* obstructions.

The OCAS system assists low flying aircraft in the identification of air obstructions, in particular, wire crossings in rivers and valleys and tall towers. The system combines lighting as well as a VHF radio transmission to the aircraft which announces the proximity of the structure. We believe the audio component has the greatest positive impact on aviation safety in all flying conditions by providing the effective alerting of an aircraft/pilot that they are on a potentially life threatening course and to take action. An added benefit is that any aircraft with a VHF radio on board benefits from this technology with no additional equipment required.

Obstacle Related Accidents

Airborne EMS operations have seen a drastic increase in fatalities and it is our duty to our members to investigate all potential solutions to air accidents. In this letter we would like to specifically address the issue of accidents related to collisions with man made obstacles, in particular power lines, wind turbine farms, television, telecom and radio towers such as the most recent and highly publicized EMS accident in Aurora, IL where a helicopter struck a radio station tower killing all four people on board.

The FAA accident/incident data shows that wire and obstruction strike accidents are the top operational cause of rotorcraft accidents for the period of 1996 to 2006, and 35% of those accidents are fatal.

The National Transportation Safety Board statistics show a total of 996 reported aviation accidents/collisions involved power lines from January 1, 1990 to October 2003. Of the 996 accidents, 301 involved at least one fatality. (This is for power lines only and does not include guide wires, towers and other elevated structures.)

Addressing the Problem

We believe that the problem needs to be addressed and that the problem deserves a better solution over the existing conventional standards. Often we tend to focus on upgrading aircraft technology as the only solution but in fact this is a shared problem between obstacle owners and local aircraft pilots. NEMSPA believes that much of the burden for obstacle detection should logically fall into the obstacle owner's purview and responsibility, much as lighting and additional marking is now. OCAS appears to provide a true "win-win" solution.

NEMSPA believes there are two main issues that can be addressed to increase the safety standards with respect to the avoidance of obstacle collisions from a ground based perspective. First, the marking of an air obstacle is the ultimate responsibility of the obstacle owner. In many cases, the FAA only provides a "recommendation" as to the appropriate marking. The obstacle owner is then free to choose to implement the recommendation (or not). There are still many utility companies who choose not to follow FAA recommendations and the FAA does not have any enforcement authority in this area.

And secondly, the stated level of technology per the FAA Advisory Circular 70/7460-1K *Obstruction Marking and Lighting*, which describes the standards for marking and lighting structures includes technology that is decades old and in external studies has proven ineffective. The OCAS technology exceeded all testing requirements per the FAA evaluation in August of 2005 and has still not been included in AC 70/7460 (more than three years later), thus leaving proactive utility companies wanting to install OCAS hesitant to adopt the new system until included in the AC.

Recommended Actions

NEMSPA recommends the following:

- 1- The FAA should expedite its inclusion of OCAS like systems into the Advisory Circular 70/7460 in an expeditious manner. The updates should include both the visual and audio components of the solution. NEMSPA views the audio component as having the most critical life saving capability.
- 2- The FAA should provide stricter enforcement requirements in the marking of some obstructions. The first step may be to determine the criteria for a *High Risk* crossing/tower and then provide mandatory standards for this category of obstruction.