

A Civil Discourse on Noise and Safety

By Mike Hirschberg, Executive Director

Helicopters don't get the respect they deserve from the public for the many critical and valuable civilian and humanitarian services they perform. Instead, they are often perceived as dangerous or unsafe, fueled by media sensationalism of accidents and Hollywood's overuse of helicopters as incendiary props in action movies. For example, Japanese citizens in Okinawa are loudly protesting U.S. plans to replace CH-47 Sea Knights stationed there with the V-22 Osprey. Because of media coverage of three recent accidents and past journalistic hysteria, 5,000 Okinawans turned out to protest what they believed to be an "unsafe" and "noisy" aircraft, despite the fact that the tiltrotor has had a much better safety record than the CH-46 over the past decade, and can fly trajectories that would be much quieter than a conventional helicopter.

Rotorcraft, with the flexibility to operate from small sites and loiter close to areas of interest, uniquely offer the capability for servicing offshore platforms, medevac/EMS, airborne law enforcement, VIP travel and air tours, to name just a few important missions. As an Angel of Mercy, the helicopter has saved an estimated three million lives on battlefields and highways, and from natural and manmade disasters.

Yet public reaction is often that helicopters should rescue people far away, where the noise won't bother me when I'm in my back yard (never mind the neighbor's lawn mower and leaf blower, which are much noisier). Operations for electronic news gathering, air tourism, leisure and VIP flights are even less tolerable for some



members of the public and in particular the "Not In My Back Yard" (NIMBY) complainers, despite the great strides being made in reducing helicopter noise through improved technology and operational use.

A small but vocal minority believe that the solution is legislation to restrict or even eliminate altogether the helicopter operations that annoy them. U.S. Senator Charles Schumer (D-NY) has repeatedly tried to legislate helicopter flight paths by forcing restrictions that would prioritize noise over safety. Another Congressman's stated aspiration is to prevent helicopters from any operations flying over his district. While this might eliminate noise and safety concerns, it would also preclude the helicopter from performing the useful – and often critical – functions that provide immense benefits to his constituents.

Senator Lamar Alexander (R-TN) has now proposed legislature that would eliminate the U.S. Federal Aviation Administration's (FAA) control of aircraft flights over national parks and tribal lands, giving control of large sections of the American National Airspace System to the U.S. National Park Service. This potential change in regulation – done in the name of reducing noise from the air tour industry and "despoiling" nature's tranquility – could have a devastating impact on helicopter tourism in U.S. National Parks and increase the danger of air operations around these locations without the FAA's control.

Legislation and additional regulations of helicopter flightpaths are not the answer. When AHS worked with the FAA and Helicopter Association International (HAI) to initiate the International Helicopter Safety Team (IHST), the FAA specifically took the tack

of “no new regulations are required,” focusing on data analysis and education to foster voluntary changes in the air operations industry. Other cooperative initiatives, such as HAI’s “Fly Neighborly” operational procedures, have also been successful. Instead of laws that create a safety issue by removing control of airspace from the FAA, the Park Service should work with the operators to develop more “Neighborly” flight paths and encourage the adoption of more advanced technologies that facilitate lower noise impacts.

The vertical flight community has made great strides in noise reduction over the past several decades. Innovations like “Fly Neighborly,” reduced tip speeds and shrouded tail rotors have each made important contributions. Research by DLR, ONERA, NLR, JAXA, NASA, DARPA and other agencies and industry worldwide continue to define solutions to annoyance noise for civil operations. Even so, it is clear that the sound of helicopters is often perceived differently and in a negative manner by some

members of the public, even when the absolute noise levels are relatively low. AHS and others did work in the 1970s and early 1980s to try to determine the aspects of helicopter noise that creates negative community reactions and responses to helicopter operations. Since that time, few studies have been made to understand the underlying technical issues, but some have suggested that non-acoustic factors – often called virtual noise – are equally important when addressing the public’s reaction to helicopters. These aspects should be reexamined.

Safety improvement has been taken up even more aggressively by industry and governments around the world. Since AHS and HAI initiated IHST in 2006, helicopter accidents have fallen significantly, with a 40% reduction in the accident rate in North America and Europe.

Attempts to legislate solutions to noise and safety concerns are ill-conceived and uninformed approaches to satisfy a small, vocal community, and will likely result in more harm than good

to the very communities that are complaining. Legislators should be consulting with AHS and HAI as the subject matter experts in vertical flight technology and operations, respectively, for solutions to their constituents’ complaints and concerns. In addition, the vertical flight community needs to mobilize to make sure that both sides of the debate are known. By providing data and statistics, AHS and HAI can facilitate a rational and civil discourse on noise and safety.

Tell your elected officials that rotorcraft have critical roles in our society and that there is a need to understand underlying technical issues and resolve them. Uncoordinated and uninformed restrictions, with potentially adverse impacts on safety, are the wrong approach!

Go to the AHS Advocacy page at www.vtol.org/advocacy to learn how you can get involved.



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