Time to Shout a Little Louder About Rotorcraft Safety

By Lee Roskop (IHST team member)

The trend in U.S. rotorcraft accidents in 2012 reinforced the message that the International Helicopter Safety Team (IHST), the government, and the rotorcraft industry groups have communicated for years: too many helicopter accidents occur in three industry sectors - - personal/private, instructional/training, and aerial application.

These three sectors accounted for more than half the 39 fatalities and about 60 percent of the 148 total U.S. registered rotorcraft accidents in 2012, far outdistancing the number of accidents that occurred in other sectors. In raw numbers, 21 people lost their lives among the 89 accidents in these three sectors last year.

This trend is not new. IHST's analysis of U.S. rotorcraft accidents in 2000, 2001, and 2006 collectively points to personal/private, instructional/training, and aerial application as the industry sectors responsible for the highest numbers of U.S. rotorcraft accidents.

Perhaps more disturbing is that the FAA estimates that these three sectors account for a low percentage of the overall U.S. rotorcraft hours flown. That equates to an accident rate per hour flown being much higher than that of other industry sectors.

The accident trend continues even though the IHST, the FAA, other government groups, and the rotorcraft industry have reinforced the message that pilots and operators need to take steps to ensure safer flights. IHST has provided detailed safety recommendations and policies, pilot safety checklists, accident statistics and information, and alerts about accident trends.

For some, a perception may exist that helicopters working in emergency medical services (EMS), air tours, and offshore operations are responsible for the most accidents. That perception is understandable because of the media interest and public scrutiny those industries often receive when an accident occurs. Yet, in 2012, the combined total of accidents in EMS, air tours, and offshore industry sectors was less than half of the number of accidents from personal/private operations alone.

The positive news is that the helicopters we fly, regardless of the manufacturer, continue to perform remarkably well. In 2012, accidents were rarely caused by the failure of a rotorcraft system or part. This fact is consistent with IHST observations during the past decade.

Unfortunately, this just reaffirms the uncomfortable reality that pilot lapses in judgment and decision-making lead to most accidents. Examples of such lapses in 2012 included:

- selecting flight profiles at altitudes below what was necessary (typically below 100 feet AGL),
- exceeding the aircraft performance envelope by operating the aircraft over published weight limits,
- landing with a tailwind resulting in loss of control,

- inadequate power margin during high density altitude operations,
- and electing to proceed VFR into weather that was predominantly instrumental meteorological conditions (IMC).

IHST, a government-industry led organization, has reached out to combat this trend through safety leaflets, fact sheets, news releases and other communications to industry trade magazines, helicopter websites, and social media feeds such as Facebook and Twitter.

This leads to inevitable questions. If the message is out there, are the right people reading it? And if they are reading it, is any meaningful change occurring as to how they fly helicopters? The high accident numbers in these industry sectors suggest that efforts made to date just have not had enough of an impact.

In response to this, the IHST is focusing at the grassroots level with the creation of brief safety leaflets on key helicopter safety topics. They will be distributed at locations where helicopter pilots receive new and recurrent training. The Robinson Helicopter Co. and the Bristow Academy are the first IHST members to integrate IHST safety materials into their instruction efforts. More IHST members will join the grassroots effort later in 2013.

How can we make 2013 better for the private, instructional and aerial application sectors? How can we reach more individual operators to make sure they get to share another birthday, anniversary, or vacation with their loved ones? The data and analysis from 2012 paint a clear picture of the problem. But if nothing changes, it is just another year worth of numbers.

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