The culmination of several important events in the aviation community in the last decade paved the way for formation of the International Helicopter Safety Team (IHST) and agreement that positive steps must be taken to improve helicopter safety. The IHST was formed in September 2005, and decided to form two sub-committees to evaluate accidents, make recommendations to reduce accidents by 80% by 2016. The IHST Executive Committee formed the Joint Helicopter Safety Analysis Team (JHSAT) and the Joint Helicopter Safety Implementation Team. The JHSAT was charged with analyzing helicopter accidents and making recommendations in order to achieve the objective. The JHSIT was formed to develop implementation strategies based on the JHSAT recommendations.

Not surprising that the most accidents by mission category was Instructional/Training accidents. Recommendations included better training programs for instructors and students, and the need to establish Standard Operating Procedures (SOP’s) that would reduce risk of accidents on training flights. The number-one problem identified by the study was pilot judgment and action errors. The JHSIT recommended the need for autorotation training, the use of simulators training aids to gain procedural skills coupled with knowledge of aircraft performance characteristics. Recommendations also included the use of simulators for ground and flight training for recognition and recovery from LTE, quick-stop maneuvers, dynamic rollover, approach procedures and pinnacle approach, unapproved landing areas, and elevated platforms in simulators before beginning flight instruction.

It recommended CFI training and refresher training on advanced handling techniques and procedures, enhanced CFI training for simulated emergencies; CFI judgment and decision-making training; increase CFI training on cues and low rpm, airspeed issues; improve CFI preflight briefing; CRM training and utilization; aeronautical decision-making. It emphasized the need to maintain awareness of cues critical to safe flight. It also established the need for SOP’s for autorotation training.

JHSIT recommendations included the need for recognition and response to dynamic rollover and model specific power/energy management simulator training; training on suitable landing site selection; cues for low rpm airspeed; training in recovery from settling with power (vortex ring state).

The JHSIT also recommended the need to establish CFI Safety Management (SMS) program to include transfer of control protocols while in stable flight conditions; risk assessment training; risk assessment training maneuvers; compliance with aircraft performance specifications; risk assessment for potential VFR to IMC; personal risk management; enhanced awareness of hazard and handling while on the ground; and aircraft equipment to include: in cockpit dynamic rollover alert system; short-term auto-hover recovery system; power available versus power required indicator; and installation of cockpit recording devices.

For more detailed information on the JHSAT recommendations, refer to the U.S. Joint Helicopter Safety Analysis Team: Year 2000 Report, September 2007 that is posted on the ALEA website. Click on the “Safety First” link at the bottom the home page.

The JHSAT’s report recommended as its first priority, the need to develop a Safety Management System (SMS). In response, the JHSIT created a SMS Toolkit. The Toolkit provides information on how and why it is imperative to have an SMS. Training on the use of computer software to demonstrate the Return on Investment when establishing an SMS will be available at the HAI HELI-EXPO on February 27, 8:00 a.m. to noon.

The Airborne Law Enforcement Association adopted a safety program at their annual meeting in 2004. A description of the program, including a midyear assessment is attached.

KEITH JOHNSON
Airborne Law Enforcement Association
Safety Program Manager
Keith Johnson
ALEA Safety Program Manager