International Helicopter Safety Team

Media Fact Book
2014

The International Helicopter Safety Team

The International Helicopter Safety Team (IHST) promotes safety and works to reduce accidents. The organization was formed in 2005 to lead a government and industry cooperative effort to address factors that were affecting an unacceptable helicopter accident rate. The group's vision is an international civil helicopter community with zero accidents with a goal to reduce the international civil helicopter accident rate by 80 percent by 2016.

This effort is co-chaired by a government member, the U.S. Federal Aviation Administration, and by an industry member, Helicopter Association International. Other major industry participants include AgustaWestland, the American Helicopter Society International, Bell Helicopter, The Boeing Co., Bristow Group, CHC Helicopter, Eurocopter, the European Aviation Safety Agency, the Helicopter Association of Canada, Robinson Helicopter, Shell Aircraft, and Sikorsky Aircraft Corporation.

IHST members also establish international partnerships in countries with significant helicopter operations and work to encourage the overseas industries to carry out accident analysis and develop safety interventions. Worldwide partners now supporting the work of the IHST include government and industry participants from the United States, Canada, Brazil, Japan, Australia, India, Russia, and multiple countries in Europe, Central Asia, and the Middle East.

More information about the IHST, its reports, its safety tools, and presentations from its 2011 safety symposium can be obtained at its web site at www.IHST.org and its Facebook page.

IHST | International Helicopter Safety Team
Our Vision: An International Civil Helicopter Community With Zero Accidents

HELICOPTER FACTS

Contact: Tony Molinaro
tony.molinaro@faa.gov or (847) 294-7427

IHST Analysis Finds that Private Flights and Instructional Flying Produce the Highest Number of Helicopter Accidents

In order to carry out the mission of the International Helicopter Safety Team, the U.S. Joint Helicopter Safety Analysis Team (JHSAT) was tasked with analyzing National Transportation Safety Board accident reports and providing recommendations leading to improved safety and accident prevention. The U.S. JHSAT analyzed 523 accidents from three years of U.S. data (2000, 2001, and 2006) and completed a compendium report on the combined information. The baseline data shows that personal flying and instructional activities rise to near the top of both accident lists organized by industry type and activity.

Percentage Share of Accidents by Industry Type

1.	Personal/Private	18.5 percent
2.	Instructional/Training	17.6 percent
3.	Aerial Application	10.3 percent
4.	Emergency Medical Services	7.6 percent
5.	Commercial	7.5 percent
6.	Law Enforcement	6.5 percent
7.	Air Tour/Sightseeing	5.9 percent
8.	Business	4.8 percent
9.	Aerial Observation	4.2 percent
10.	Offshore	4.2 percent
11.	Firefighting	3.6 percent
12.	Logging	2.7 percent
13.	External Load	2.7 percent
14.	Utilities Patrol/Construction	2.1 percent
15.	Electronic News Gathering	1.7 percent

Percentage Share of Accidents by Activity

1.	Instructional/Training	22.8 percent
2.	Positioning/RTB	13.2 percent
3.	Personal/Private	12.4 percent
4.	Passenger/Cargo	9.8 percent
5.	Aerial Application	9.0 percent
6.	External Load	7.6 percent
7.	Aerial Observation	6.1 percent
8	Air Tour/Sightseeing	5.0 percent
9.	Ferry	4.0 percent
10.	Maintenance/Test Flight	2.5 percent
11.	Law Enforcement	2.5 percent
12.	Animal Control/Hunting	1.7 percent
13.	Emergency Medical Serv.	1.1 percent
14.	Electronic News Gathering	1.0 percent
15.	Utilities Patrol	1.0 percent
16.	Search and Rescue	0.4 percent

More information about the IHST, its reports, its safety tools, and its new safety training leaflets can be obtained at its web site: (www.IHST.org).

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The Top 10 Ways You Can Prevent Helicopter Accidents

The International Helicopter Safety Team (IHST), a worldwide organization leading a multi-year effort to reduce the civil helicopter accident rate, has developed 10 key recommendations aimed at reducing accidents and injuries. These proposals can help owners, pilots, instructors, mechanics, and all members of the helicopter community.

1. Install cockpit recording devices.
2. Improve Autorotation Training.
3. Add Advanced Maneuvers to Simulator Training.
4. Emphasize Critical Issues Awareness in Training.
5. Enhance Aircraft Performance & Limitations Training.
6. Strengthen Emergency Procedures Training.
7. Implement a Personal Risk Management Program.
8. Establish a Mission Specific Risk Management Program.
9. Follow and Confirm Compliance of ICA Procedures.
10. Implement a Strong Quality Assurance Maintenance Program.

EQUIPMENT

Install cockpit recording devices. Develop and install flight data monitoring equipment to record the actions of the flight crew. Data can be used as local immediate feedback to trainers, operators and flight crews. The data also could aid in the event of accident investigation to support a more complete analysis and future safety recommendations.

TRAINING

Improve Autorotation Training. Improve autorotation training in both primary and advanced flight training and develop simulator programs to improve autorotation skills.

Add Advanced Maneuvers to Simulator Training. Incorporate simulator programs into training program that would include dynamic rollover, emergency procedures training, ground resonance, quick stop maneuvers, targeting approach procedures and practice in pinnacle approaches, unimproved landing areas, and elevated platforms.

Emphasize Critical Issues Awareness in Training. Establish training programs that train and evaluate proficiency of critical issues such as systems failures, impending weather concerns, effects of density altitude, and wind and surface conditions that could be critical to safe flight.

Enhance Aircraft Performance & Limitations Training. Operators should provide robust training and continual evaluation of their pilots on aircraft performance. This training should include the effects of density altitude, gross weight and flight manual limitations.

Strengthen Emergency Procedures Training. Encourage the use of emergency procedures trainers with the emphasis on Loss of System, Recognition and Recovery training.

SAFETY MANAGEMENT

Implement a Personal Risk Management Program. Encourage the implementation and use of a personal risk management program and also utilize the IMSAFE personal checklist.

Establish a Mission Specific Risk Management Program. A formal Safety Management System (SMS) requires training for specific missions, the establishment and enforcement of standard operating procedures, provisions and training of personnel to use risk assessment tools, and most importantly, changing the safety culture to ensure that all personnel put "Safety' first.

MAINTENANCE

Follow and Confirm Compliance of ICA Procedures. Ensure that maintainers and operators are aware of the importance of following the manufacturer's maintenance manuals and practices.

Implement a Strong Quality Assurance Maintenance Program. Encourage operators and maintainers to implement a robust Quality Assurance program that ensures the use of manufacturers maintenance manuals, service bulletins, and procedures.

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How Helicopter Pilots Die

The International Helicopter Safety Team (IHST) is focused on reducing all helicopter accidents and it envisions an international civil helicopter community that experiences zero accidents. To reach this goal, the IHST is focused on educating all operators and pilots about how civil helicopter accidents occur and how they can be prevented.

Any type of accident is unfortunate, but an accident that results in a fatality is especially tragic. Analyzing multiple years of accident data, IHST safety experts have determined what type of operational occurrence contributes the most to helicopter accident fatalities. The data shows that Loss of Control figures into one out of every five fatal accidents with Visibility issues (Visual Meteorological Conditions into Instrument Meteorological Conditions, darkness, fog, glare, etc.) not far behind. Taken together, Loss of Control and Visibility problems contribute to one-third of all fatal helicopter accidents.

Most Predominant Occurrences During Fatal Helicopter Accidents

1. Loss of Control
2. Visibility issues
3. Fire *(post-impact)*
4. Wire Strike
5. System Component Failure

Other Frequent Occurrences During Fatal Helicopter Accidents

- Autorotation *(in practice & emergency)*
- Controlled Flight Into Terrain
- Fuel issue
- Abrupt Maneuver
- Icing

With the right safety attitude, and taking the initiative to apply risk reduction to the known risk, more helicopter pilots will be able to enjoy helicopter flights and stay alive.

Hazardous Attitude	Safety Attitude
Anti-Authority - *"Don't tell me what to do."*	**Follow the safety rules. They are usually right.**
Impulsive - *"Do something--quickly."*	**Not so fast. Think first.**
Invulnerability - *"It won't happen to me."*	**It could happen to me.**
Macho - *"I can do this,"*	**Taking chances is foolish.**
Resignation - *"What's the use?"*	**I'm not helpless. I can make a difference.**

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