

**The EHEST has adopted the IHST Charter.**

As the EHEST was launched in 2006, the goal target is moved by year:  
“Reduce the helicopter accident rate by 80 percent by **2017**”.

**International Helicopter Safety Team (IHST)  
Charter – Draft 12/20/05**

**I. Preamble**

**Vision**

Achieve the highest levels of safety in the international helicopter communities by focusing on appropriate initiatives prioritized to result in the greatest improvement in helicopter safety.

**Mission**

Provide government, industry and operator leadership to develop and focus implementation of an integrated, data-driven strategy to improve helicopter safety worldwide, both military and civil, and focus the implementation of this strategy.

**Goal**

Reduce the helicopter accident rate by 80 percent by 2016.

**Strategic Approach**

Create an International Helicopter Safety Team (IHST) that will implement the vision and goal.

Manage and maintain an effective and responsive infrastructure. This infrastructure will ensure that IHST has the processes in place to provide consistent, effective leadership to the important task of improving helicopter safety.

Enable a data-driven approach to safety, IHST will charter joint government, industry and operator teams to analyze accidents in key safety areas, conduct causal analyses and recommend intervention strategies.

Implement selected intervention strategies, IHST will charter joint government, industry and operator teams to analyze and develop detailed implementation steps for the identified strategies. The teams will also develop metrics for tracking the success of such strategies.

Promote international aviation community partnerships, IHST will work with the International Civil Aviation Organization (ICAO), the Federal Aviation Administration (FAA), Transport Canada (TC) and other international organizations. IHST members will represent IHST work at international meetings and conferences.

Maintain processes that support IHST work activities.

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## II. IHST Charter

### **Charter (Draft 12-20-05) International Helicopter Safety Team (IHST)**

*(This is a draft of a charter for the International Helicopter Safety Team, which includes a description of IHST Roles and Responsibilities and draft charters for the Joint Helicopter Safety Analysis Team and the Joint Helicopter Safety Implementation Team. It is based, largely, on the current charter for the highly successful Commercial Aircraft Safety Team (CAST) which deals with safety in the context of FAR Part 121 commercial airlines, though this IHST charter has been considerably simplified and modified as needed to address the specific needs of the rotorcraft community.)*

#### **BACKGROUND**

The White House Commission on Safety and Security in 1997 set a goal of an 80 percent reduction in the fatal accident rate within 10 years and identified the need for strong government-industry partnerships to support the aviation system of the future. Additionally, the White House Commission encouraged expanded cooperative efforts to enhance aviation safety. The National Civil Aviation Review Commission (NCARC) followed up with a strong recommendation that the FAA and industry work together to develop a comprehensive integrated strategic safety plan to implement the many existing safety recommendations. The Commission recommended that performance measures and milestones be developed to assess progress in meeting the safety goal. Further, the Commission advocated periodically reviewing priorities and monitoring progress made in achieving the overall safety goal.

The FAA, NASA and industry Commercial Aviation Safety Strategy Team (CASST) groups determined that each of their organizations had complementary ongoing work to enhance the safety of commercial aviation. Each group used accident data to determine top safety focus areas. They intended to use the data to develop an understanding of the best actions or interventions to take to prevent future accidents before they occur. The FAA and the industry CASST formed the Joint Safety Analysis Steering Committee (JSASC) as the organizational body that would work together in these aviation safety areas. The scope of the work was to collaborate on identifying the top safety areas through the analysis of past accident and incident data, charter joint teams of experts to develop methods to fully understand the chain of events leading to accidents, identify high-leverage interventions to address these safety areas and remain focused on implementing these critical few high leverage interventions in the identified areas. The JSASC expanded its membership to include NASA, the DoD, and the Joint Aviation Authorities, as well as the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA) and the National Air Traffic Controllers Association (NATCA) under the umbrella of a new organization that became the Commercial Aviation Safety Team (CAST) for Part 121 Commercial Air Carriers.

NASA created an Aviation Safety Investment Strategy Team (ASIST) whose focus was needed research required to improve aircraft safety as part of the effort to achieve the National Aviation Safety Goal. NASA then formed the Helicopter Accident Analysis Team (HAAT) to address helicopter safety. Team members included NASA, the FAA, NTSB, other government agencies, as well as helicopter operators and manufacturers. HAAT's study, unfortunately, had to be limited to 34 fatal civil helicopter accident reports to be analyzed. Due to the report selection process and the small percentage of helicopter accidents analyzed, the HAAT study

of 1998 could not be used to determine the frequency and relative value of the Safety Investment Areas (SIAs).

To determine if the National Safety Goal of five-fold reduction, e.g., 80 percent reduction, in accident rates for civil helicopters was possible, Bell Helicopter in 1998 conducted an analysis of civil helicopter accidents during the 1990-1994 period. The study managers demanded that the SIAs must be cost effective and applicable to all types of existing helicopters. Also, they expanded the safety metrics to include accident rate, fatal accident rate, and individual occupant risk of fatal injury. The study concluded that an 80 percent reduction in these metrics is an achievable goal for all types of civil helicopters.

Recognizing the need for a similar initiative focused on improving helicopter safety and reducing the helicopter accident rate, AHS International and its AHS Montreal/Ottawa Chapter hosted an International Helicopter Safety Symposia 2005 in Montreal on September 26-29, 2005. Sponsors included Bell Helicopter Textron, Sikorsky Aircraft Corp., The Boeing Company, AgustaWestland and Eurocopter. A number of organizations partnered with AHS International in hosting the meeting, including the FAA, ICAO, Transport Canada, European Helicopter Association (EHA), Helicopter Association International (HAI), Association of Air Medical Services (AAMS), Transportation Safety Board of Canada, Flight Safety Foundation Inc., US Naval Safety Center and Naval Air Systems Command, and the U.S. Army Combat Readiness Center.

Attendees at IHSS 2005 agreed upon the need to reduce the helicopter accident rate by 80 percent within 10 years. To achieve that goal, they also agreed to create a separate process through the creation of an independent committee and process modeled after CAST to be known as the International Helicopter Safety Team (IHST).

### **GOAL**

Enhance the safety of helicopter operations worldwide by reducing the helicopter accident rate by 80 percent by 2016.

### **STRATEGIC APPROACH**

#### **PROCESS**

The IHST will maintain an infrastructure to ensure a high level of commitment, collaboration, and responsibility with government, operators and industry. IHST decision-making will be accomplished, whenever possible, by consensus agreement.

#### **TASKS**

The IHST will operate through well-defined leadership from all team members. This leadership will ensure the generation of standard tasks and products, communication and advocacy of plans and interventions, and follow-through with adopted intervention strategies. The IHST will perform the following tasks:

- Agree on top safety focus areas;
- Provide a clear definition of the vision statement and establish precise reduction targets
- Revise the IHST Charter, if required, provided two-thirds of the IHST members endorse any such revision(s);
- Establish safety metrics and annual status reporting;

- Charter Joint Helicopter Safety Analysis Team(s) (JHSAT) and Joint Helicopter Safety Implementation Team(s) (JHSIT), as necessary;
- Review and approve the recommendations of the JHSAT(s) and JHSIT(s);
- Review, approve and monitor the implementation plan of the JHSAT(s) and JHSIT(s); and
- Monitor and refocus activity based on effectiveness of interventions.

## **PRODUCTS**

The IHST will initiate, approve and ensure delivery of the following products:

- IHST Action Plan;
- Periodic International Helicopter Safety Symposia;
- JHSAT(s) and charters. JHSAT reports and recommendations will be developed for each accident category (these products will include in-depth causal analysis of the safety area, evaluation of the potential interventions, a set of proposed interventions that have the highest leveraged payoffs, recommended metrics by which interventions might best be evaluated, and a summary of methodology used and lessons learned); JHSAT will track and report progress toward the goal on an annual basis;
- JHSIT(s) Reports and Recommendations; these products include implementation strategies, accountable parties; and metrics for IHST-approved interventions and will be reported annually;
- JHSIT Implementation Plans; and
- Ongoing assessments of effectiveness and update plans based on effectiveness of strategies.

## **RESOURCES**

Resources (including funding for an executive secretariat) will be provided by member organizations within reasonable budgetary constraints. Each IHST member shall be responsible for providing personnel as well as organizational time, travel, and effort. The IHST will adopt processes which maximize utilization of pre-existing helicopter safety initiatives.

## **MEMBERSHIP**

IHST shall be led by two co-chairs, one selected by IHST members from industry and operators and one selected from government. Initially, the industry/operator co-chair will serve a two-year term and the government co-chair will serve a three-year term. Thereafter each co-chair will serve for a two-year term. The terms of the co-chairs will be staggered. The industry/operator co-chair role shall rotate between manufacturers and operators, with an operator or operator representative serving initially in this role.

In addition, the IHST shall have an Executive Committee consisting of the two co-chairs plus three additional members selected from the IHST membership. One member of the Executive Committee shall be a representative of a country other than the United States.

IHST shall be composed of a variety of member organizations, including representatives of major helicopter airframe manufacturers, operators and operator representatives, engine manufacturers, systems and systems integrators, simulation manufacturers and agencies and organizations representing the government regulatory and government accident investigation communities. Examples shall include, but not be limited to, AHS International, Helicopter Association International

(HAI); Helicopter Safety Advisory Committee (HSAC); Association of Air Medical Services (AAMS); Professional Helicopter Pilots Association (PHPA); Tour Operators Program of Safety (TOPS); Shell Aircraft International, AgustaWestland; Bell Helicopter Textron Inc., The Boeing Company, Eurocopter, GE Aircraft Engines; Honeywell; Pratt & Whitney; Sikorsky Aircraft Corp; Turbomeca, European Aviation Safety Authority (EASA), US Department of Defense (DoD), National Aeronautics and Space Administration (NASA), National Transportation Safety Board (NTSB); Transport Canada, Transportation Safety Board of Canada (TSB), other major international organizations, such as the International Civil Aviation Organization, and operators, and US Federal Aviation Administration (FAA).

Each member organization will identify one principal and one alternate representative to IHST. IHST representatives (principal and alternate) shall accept the responsibility to communicate and coordinate with their respective organizations or constituencies. IHST members should have sufficient authority to speak for and make commitments on behalf of their respective organization (following appropriate coordination).

Requests by other organizations seeking IHST membership shall be referred through the IHST co-chairs for full IHST approval. Observer organizations are encouraged to participate fully in all IHST discussions and deliberations.

#### **NUMBER AND FREQUENCY OF MEETINGS**

IHST meetings will be held periodically approximately four times each year as activity warrants. Ideally meetings will be held in conjunction with major events such as the HAI Heli-Expo, the AHS Annual Forum, the EHA annual meeting, and periodic IHSS meetings.

#### **EFFECTIVE DATE AND DURATION**

The IHST is formally established as of January 1, 2006. The IHST membership will validate the continuing need for team activities every two years.

### III. IHST Roles and Responsibilities Defined

#### **International Helicopter Safety Team (IHST) Roles and Responsibilities (Draft 12-20-05)**

##### **Co-Chairs**

IHST will select or elect two co-chairs, one representing the industry / operator community and one representing government. The co-chairs will:

- Co-chair IHST meetings.
- Establish an agenda for all meetings and publish minutes of each meeting.
- Keep focus on high-priority items. Ensure the agenda meets criteria to improve safety.
- Provide leadership for ongoing products and accomplishments.
- Identify and manage the required administrative support.
- Promote consensus among the group members.
- Be responsible for the IHST performing the tasks and delivering the products described in the IHST Charter.

In addition, a *five* member Executive Committee selected by the IHST consisting of both IHST co-chairs, and three additional IHST members, representing government, manufacturers and operators will lead the group.

##### **Secretariat**

The IHST will approve a Secretariat that will support the co-chairs and Executive Committee by providing administrative support to the IHST. During the initial two years, AHS International will provide Secretariat support. The Secretariat will:

- Coordinate meeting logistics with meeting host.
- Ensure meeting agenda/documentation and summaries are provided to members no later than two weeks prior to and two weeks after each meeting.
- Maintain and support an IHST Internet website.
- Ensure meeting summaries, notices and related documents are posted on the IHST website.
- Control assignment and administration of IHST website access.

##### **IHST Technical Director**

When and if required, the IHST may appoint an IHST Technical Director to track and facilitate action items and report the status of each action item to the co-chairs.

## **Member(s)**

Each IHST member will designate an alternate representative. If designated representation changes, replacements must be submitted to the IHST for review and approval. (Other individuals and observers may attend meetings in the capacity of reporting or discussing on IHST actions, or as part of providing direct administrative support to IHST members.)

IHST members will:

- Come to meetings prepared, having reviewed pre-meeting materials and ready to engage and make decisions.
- Complete assigned tasks.
- Maintain communications and linkage with parent organization.
- Deliberate and raise issues.
- Actively support IHST decisions and enlist parent organization support.
- Be prepared to commit personal time and energy to IHST priorities.
- Be prepared to commit time and resources of parent organization.
- Share respective parent organization inputs with other members.
- Ensure duplication of effort is minimized or eliminated.
- Use approved IHST presentation to represent IHST objectives or products to external organizations.
- Stay focused on IHST goals and objectives.
- Recognize and monitor the actions of each subgroup or subteam.

## **Observers**

Observers will be identified by the IHST. They provide board and varying perspectives that will enhance the quality and effectiveness of IHST actions. Observers will:

- Participate in IHST discussions and deliberations.
- Participate in IHST-chartered teams and subteams.
- Maintain communication and linkage with parent organization.
- Share respective parent organization inputs with IHST.

## **Joint Helicopter Safety Analysis Team (JHSAT)**

The JHSAT will be jointly chaired by at least one person selected from the industry and operator communities and one person selected from government. Activities will be conducted in accord with the Charter. Team membership will be determined by recommendations made by IHST membership and team co-chairs. JHSAT will:

- Conduct / review / approve detailed accident report analysis and identify causal factors.
- Identify roadblocks and impediments to achieving IHST goals.
- Investigate and recommend improvements and develop mitigation strategies to allow goal achievement and periodic status measurements.
- Carry out rigorous cost analysis of implementation.
- Draft action plans to determine intervention strategies and milestones for IHST approval.
- Provide periodic status reports to IHST as directed by IHST members.
- Develop an analysis process consistent with helicopter accident data quality and limitations.

- Develop reports to IHST providing accident report analysis, possible intervention strategies, and an evaluation of the effectiveness of each strategy, and recommended metrics.
- Monitor and report civil helicopter fleet safety changes / progress annually until 2016.
- JHSAT will combine any and all JHSAT subcommittee inputs into the JHSAT summary report to the IHST.
- Refocus JHSAT process as IHST members determine, e.g., analyze real flight and operational data and incident data in addition to accident data.<sup>12</sup> Make provisions for an independent peer technical review.
- 13. Follow tasks, priorities and time frames as assigned by IHST.

### **Joint Helicopter Safety Implementation Team (JHSIT)**

The Joint Helicopter Safety Implementation Team (JHSIT) will be chartered by IHST to accomplish IHST-approved implementation strategies. Activities will be conducted in accord with the charter. Membership will be determined by the IHST. JHSIT will:

- Develop and prioritize implementation strategies; bring back to IHST for approval.
- Carry out a rigorous cost-benefit analysis based on cost-of-mitigation strategies developed by JHSAT.
- Develop Action Plans based on a rigorous cost-benefit analysis for implementation strategies to achieve IHST goals.
- Comply with assignment and objectives outlined in charter.
- Coordinate implementation of IHST-adopted strategies with responsible organizations.
- Identify each intervention strategy and lead organization for individual intervention and overall project coordination for each intervention project.
- Report to IHST on progress of all JHSIT activities.
- Develop and track performance measures using Level of Plan Compliance, Predicted Effectiveness, and Risk Management indicators for each project.
- Determine progress in meeting major milestones and effectiveness of interventions.
- JHSIT will combine any and all JHSIT subcommittee inputs into the JHSIT summary reports to the IHST.

#### IV. JHSAT Charter (Example)

##### Joint Helicopter Safety Analysis Team (JHSAT) Charter (Draft 12-20-05)

1. **Purpose:** To analyze accident report data and identify potential intervention strategies in order to reduce civil helicopter accident rates by 80 percent by 2016 and monitor progress toward that goal. Identify impediments to achieving this goal and recommend solutions.
2. **Background:** Government, Operators and Industry have agreed to work together to identify and implement a data-driven, benefit-focused, safety enhancement program designed to continuously improve helicopter safety. To this end, the International Helicopter Safety Team (IHST) has been created. The IHST has further agreed that cooperatively and selectively pursuing the safety intervention strategies to maximize the safety benefit to helicopter occupants through a focused application of industry and government resources. To achieve this goal, the IHST has agreed to charter a working group to be known as the Joint Helicopter Safety Analysis Team (JHSAT).
3. **Tasks:**
  - (a) The team shall identify and document potential intervention strategies and evaluate the effectiveness of each strategy. The team shall define its assumptions based on the amount and extent of data considered, e.g., fleet size, time frame, accidents, incidents, safety trends, risk analysis studies, etc. The team will develop a process for evaluating and rating the interventions that is consistent with helicopter industry data quality.
  - (b) The team shall acquire available data, including prior studies and analyses.
  - (c) The team shall identify roadblocks and impediments to meeting the IHST goal and make recommendations for improvement and analyze the cost of implementation.
  - (d) The process shall include a technical review. Results of the technical review will be presented to IHST and documented in reports.
  - (e) Accident data shall be monitored to evaluate effects and progress of safety intervention and documented in annual reports.
  - (f) Potential intervention strategies will be identified and analyzed by the JHSAT for the purpose of determining implementation feasibility and overall effectiveness and identification of prospective intervention strategies for implementation.
  - (g) The JHSAT shall present those prospective interventions to the IHST for review and approval.
4. **Products:** The deliverables shall include reports to the IHST providing a summary of data analysis, possible intervention strategies, costs of implementation and an evaluation of the effectiveness of each strategy. The effects of interventions on accident frequencies shall be reported each year. Reports shall also include a listing of roadblocks and impediments to data acquisition and adequate evaluations and recommendations for improvement.
5. **Membership:** The team will include representatives with the appropriate technical or operational background provided by industry and government.
6. **Resources:** The participating organizations agree to provide the financial, logistic and personnel resources to carry out this charter.

## V. JHSIT Charter (Example)

### Charter for Joint Safety Implementation (JHSIT) Team (Draft 12-20-05)

1. **Purpose:** To develop implementation strategies and action plans and, following approval by the IHST, coordinate and manage the implementation of the strategies and plans.
2. **Background:** Industry, Operators and government, through the International Helicopter Safety Team (IHST), have jointly agreed to pursue a data-driven approach to identify high-priority safety initiatives. Industry and government have further agreed that cooperatively and selectively pursuing implementation of the high-leveraged safety intervention strategies will maximize safety benefits. Implementation of some intervention strategies may require action, which may be international in scope.  
Intervention strategies identified by the JHSAT for the purpose of determining implementation feasibility and overall effectiveness shall be submitted to the IHST for review and approval. Once IHST has approved individual interventions, the JHSIT shall refine the interventions and provide the following tasks.
3. **Tasks:**
  - (a) For those IHST-approved interventions identified for implementation, develop an implementation plan and associated metrics to track progress.
  - (b) The implementation plan will contain implementation strategies with rationale, cost benefit analysis, identification of responsible parties, metrics for tracking success (or lack thereof) of the strategies and a list of major implementation milestones and a means to monitor success in meeting these milestones. The metrics shall be a combination of output, e.g., develop a checklist by date X, and results-oriented information, e.g., achieve an X-percent reduction in accidents caused by the subject cause. The implementation plan should include a communications strategy aimed at gaining "stakeholder" buy-in and acceptance.
  - (c) For implementation strategies that are international in scope, the JHSIT implementation plan should consider how best to utilize the assistance of ICAO, EASA, Transport Canada or other international organizations and agencies and appropriate international certificating authorities.
  - (d) The JHSIT will present this detailed implementation plan to the IHST for review and approval.
  - (e) As directed by the IHST, the JHSIT will make periodic progress reports on implementation status to IHST members.
4. **Products:** The deliverables include reports to IHST on an initial implementation plan, a detailed implementation plan, and progress reports to IHST documenting progress on implementation and on established metrics.
5. **Membership:** JHSIT team members shall include "senior" representatives from those "stakeholders" who will be affected by the intervention strategies and those who may be responsible for implementation of those strategies.
6. **Resources:** IHST participating organizations agree to provide appropriate financial, logistical, and personnel resources necessary to carry out this charter and approved implementation strategies.