Helicopter Association International and Safety

Safety is a core value for Helicopter Association International (HAI), and HAI staff and leadership advocate for safety both within the helicopter industry and to external stakeholders such as businesses that hire or contract for helicopter services. HAI partners with other organizations, including the Federal Aviation Administration, the National Transportation Safety Board, and the European Union Aviation Safety, and regional safety teams, to reach its vision of zero accidents, and HAI staff and leadership are active volunteers for industry safety at the local, national, and international level.

Within the helicopter industry, HAI does the following:

- Produces programs, tools, and resources to improve operational safety
- Provides safety education and recognition materials, events, and opportunities for helicopter pilots, operators, and maintenance technicians
- Supports the work of HAI staff and volunteers to resolve safety issues by collaborating with the international helicopter industry
- Promotes safety as an essential step in building a sustainable, viable industry.

HAI's Safety Programs and Tools

HAI Accreditation Program of Safety (HAI-APS)

The <u>HAI Accreditation Program of Safety (HAI-APS)</u> helps operators improve their safety culture, as well as identify the hazards and mitigate the risks inherent in their helicopter mission profiles. Participating operators are required to implement a safety management system (SMS), as well as adopt practices recommended for their specific mission.

HAI Land & LIVE Program

The <u>HAI Land & LIVE Program</u> encourages the use of precautionary landings by helicopter pilots when flight conditions begin to deteriorate for any reason. The program educates pilots about their ability and responsibility to ensure flight safety and provides techniques for making a safe off-site landing. Operators learn how they can support their pilots in good aeronautical decision-making and can proactively pledge to support their decision to Land & LIVE.

HAI Aviation Reporting Program (HARP)

The <u>HAI Aviation Reporting Program (HARP)</u> is a free aviation safety reporting portal that promptly redirects users to the most appropriate reporting source for accidents, drone events, near-midair collisions, laser events, wildlife strikes, or other aviation hazards. By providing pilots with a convenient single portal for reporting in-flight accidents and hazards, HAI enhances their ability to report these issues and thereby provide more data to agencies and organizations that oversee aviation safety.

Maintenance Malfunction Information Reporting (MMIR)

HAI and the FAA joined forces to provide the aviation industry with the <u>Maintenance</u> <u>Malfunction Information Report (MMIR)</u> to simplify the time-consuming process of submitting numerous FAA and warranty claim forms related to potential maintenance safety issues. Since its development in the 1980s, 476 operators and 766 individual users have submitted 136,800 reports through the application. HAI is working with the FAA to assess industry gaps and upgrade the tool to properly address current and future safety issues.

Helicopter Flight-Data Monitoring Research

Modern aviation safety is data-driven, and HAI has partnered with the FAA to advance datagathering in the helicopter industry through the <u>Rotorcraft Aviation Safety Information Analysis</u> <u>and Sharing (R-ASIAS)</u> program. Data from participating operators is de-identified by HAI and then shared with researchers who mine the data for additional insights on operational safety.

Flight and Maintenance Risk Assessment Tool (FRAT)

HAI provides a web-based tool that allows members to customize their own <u>risk assessment</u> program for flight and maintenance activities. Since its inception, 609 operators and 857 individual users have submitted 29,687 reports through the application.

HAI has partnered with a commercial provider, NGFT Solutions, to extend the scope and accessibility of its legacy flight risk assessment (FRAT) program into an expansive suite of free, customizable safety tools optimized for mobile and offline use. A transition to the new application is planned for the second quarter of 2021. Additional details are available at <u>NGFT.com</u>.

Aviation Safety Action Program (ASAP)

A robust hazard reporting program is considered essential to improving safety, and small helicopter operators with limited resources sometimes struggle to field these programs. HAI has partnered with the Air Charter Safety Foundation (ACSF) to provide HAI members with an Aviation Safety Action Program (ASAP) that provides third-party support for the reporting of aviation hazards and events. This program will be introduced to members by March of 2021.

HAI Safety Education and Promotion

HAI Spotlight on Safety (SOS)

HAI's <u>Spotlight on Safety (SOS) promotion campaign</u> provides relevant safety tips and stories contained in videos and posters that are designed to be easily accessible by operators, pilots, and maintenance technicians.

HAI Safety Awards

The <u>HAI Safety Awards program</u> recognizes helicopter operators, pilots, and maintenance professionals who demonstrate a commitment to safety while successfully sustaining accidentand violation-free operations during the preceding calendar year. HAI also annually recognizes industry professionals with the Salute to Excellence Safety Award for their outstanding contributions in the promotion of safety and safety awareness through the international helicopter community.

Rotor Safety Challenge

HAI organizes a program of 50+ free safety education sessions each year during HAI HELI-EXPO, the association's annual conference. Many sessions are approved by the FAA for WINGS and AMT continuing education credits.

HAI@Work Webinars

Each week, HAI conducts an <u>HAI@Work Webinar</u> for an audience of helicopter industry professionals. Safety topics, such as regaining pilot proficiency or the benefits of flight-data monitoring, are a popular subject. All past webinars are available on HAI's website and <u>YouTube</u> <u>Channel</u>.

HAI Media

In addition to stories on safety-enhancing practices such as simulator training, HAI's quarterly magazine, <u>ROTOR</u>, carries several regular features devoted to industry safety, including accident reports, accident reviews and analyses, and columns devoted to training and pilot and workplace safety. <u>ROTOR Daily</u>, HAI's e-newsletter, provides readers with information about safety training and events and regulatory alerts and bulletins from civil aviation regulators.

HAI Working Group Activities

Part of HAI's mission is to address the problems and issues that confront its members, a vital function of any association. Much of this effort is conducted through HAI's working groups. These groups are staffed and led by HAI members who are subject-matter experts willing to share their knowledge and experience in support of the industry.

HAI Utilities, Patrol and Construction (UPAC) Safety Guide

Developed by the HAI Utilities, Patrol, and Construction (UPAC) Working Group, the <u>HAI UPAC</u> <u>Safety Guide for Operators</u> offers information and best practices on managing risk for individuals and companies involved in power-line construction, utility patrol and inspection, and related maintenance operations. It also provides guidance to utilities in selecting qualified contractors for these highly technical operations. The guide is regarded as authoritative in the UPAC sector and has been referenced by the FAA as a source of helpful guidance.

HAI Safety Working Group Outreach at HAI HELI-EXPO

Each year, the HAI Safety Working Group develops a host of safety-related activities and events for the thousands of pilots, operators, and maintenance technicians who attend the association's annual conference, HAI HELI-EXPO. The HAI Safety Working Group works with the National Transportation Safety Board to kick off the conference each year with a Safety Symposium. It also produces a Safety Town Hall, Safety Directors Forum, and other safetyrelated events. Working group members also plan and host a slate of safety-related activities and resources for attendees, such as offering flight simulator time, at the HAI Safety Zone.

HAI Industry Representation with Civil Aviation Regulators

HAI staff members regularly represent the helicopter industry in front of civil aviation regulators such as the FAA, and its staff members serve on the following national and international rulemaking and advisory committees that address drone integration, occupant protection, and pilot duty times, among other aviation issues:

- FAA Advisory Committees and Groups
 - Aviation Rulemaking Advisory Committee
 - Drone Advisory Committee
 - National Parks Overflights Advisory Group
 - Safety Oversight and Certification Advisory Group
- FAA Aviation Rulemaking Committees (ARCs)
 - Airspace Access Priorities ARC (completed)
 - Flight Standards Transparency, Performance, Accountability, Efficiency ARC (ongoing)
 - Micro UAS ARC (completed)
 - Part 101 ARC (completed)
 - Part 135 Pilot Rest and Duty Rules ARC (ongoing)
 - UAS ID and Tracking ARC (completed)
- FAA Aviation Rulemaking Advisory Committee Working Groups (WGs)
 - Bird Strike WG (completed)
 - Designated Pilot Examiner WG (ongoing)
 - Rotorcraft Occupant Protection WG (completed)
 - Training Standardization WG (ongoing)
- Radio Technical Commission for Aeronautics (RTCA) Special Committees (SCs)
 - SC-237, Working Group 110, Helicopter Terrain Awareness Warning Systems
 - SC-239, Interference to Radio Altimeters from Certain 5G Networks
 - SC-241, Guidance for Cockpit and Cabin Cleaning
- International Civil Aviation Organization (ICAO)
 - Aerodrome Design and Operations Panel
 - Heliport Design Working Group
 - Flight Operations Panel and Helicopter Subgroup
 - Instrument Flight Procedures Panel and Helicopter Working Group

HAI Leadership and Support for Worldwide Safety Teams

Vertical Aviation Safety Team (VAST)

HAI was a founding member of the <u>International Helicopter Safety Foundation (IHSF)</u>, a group previously working to improve safety across the global helicopter industry. The IHSF is currently rebranding and reorganizing as the Vertical Aviation Safety Team to enable it to better coordinate and share safety data and programs with industry stakeholders around the world. HAI provides assistance and support to this multinational partnership, and several staff members serve on VAST Working Groups.

US Helicopter Safety Team (USHST)

The HAI leadership team and staff serve in leadership and support roles on the <u>US Helicopter</u> <u>Safety Team</u> (USHST), which is the regional safety team of volunteers who are actively engaged in improving US helicopter safety. The USHST has for several years been working to create helicopter safety enhancements (H-SE), which are data-driven, comprehensive solutions to safety issues in the helicopter industry. A list of completed H-SEs is below, several of which are directly related to National Transportation Safety Board recommendations:

- <u>H-SE 19a: Safety Culture and Professionalism</u>
- <u>H-SE 22a: Detection and Management of Risk Level Changes During Flight by Pilots and</u> <u>Nonflying Crew</u>
- H-SE 28: Helicopter Final Walk Around / Security of External Cargo
- H-SE 30: Develop/Publish Airman Certification System for Rotorcraft Helicopter Series
- H-SE 70: Stability Augmentation System (SAS) / Autopilot
- H-SE 81: Improve Simulator Modeling for Outside-the-Envelope Flight Conditions
- <u>H-SE 82: Helicopter Flight Data Monitoring</u>
- H-SE 90: Use of UAS or OPA in High Risk Environments/Operations
- <u>H-SE 91: Enhanced Helicopter Vision Systems</u>
- <u>H-SE 116: Improve Make/Model Transition Training</u>
- <u>H-SE 123: Increased Simulation/Education to Develop Safe Decision Making</u>
- H-SE 124: Improve Understanding of Basic Helicopter Aerodynamics
- H-SE 125: Pre-Flight Risk Assessment for Student Flights
- H-SE 127a: Training for Recognition/Recovery of Spatial Disorientation
- H-SE 130: Education and Simulation of Over-the-Counter Medication