ABOUT US

OUR VISION
The USHST’s vision is a civil US registered helicopter community with zero fatal accidents.

OUR MISSION
Through data-driven accident and flight safety data analyses, our mission is to understand the US helicopter community’s safety issues and use that understanding to promote the development and implementation of voluntary, consensus-based risk mitigations.
OUR GOAL
Reduce Fatal Accident Rate

Current Goal
Reduce the US helicopter 5-year average fatal accident rate to 0.55 by 2025.
(per 100,000 flight hours over 5 years)

Action-Oriented
Through 16 data-driven safety enhancements aimed at reducing fatal accidents.
**USHST Steering Committee**

- **Industry Co-Chair**: Nick Mayhew – CAE  
  - Spencer Mallett – Airbus  
  - Tim Tucker – Robinson Helicopter Co.  
  - Christopher Lowenstein – Sikorsky  
  - Tony Randall – Bell

- **Government Co-Chair**: Karen Gattis - FAA  
  - Jorge Castillo – FAA  
  - Dawn Groh – ERAU  
  - Chris Hill – HAI

- **Non-Voting Advisors**  
  - Manny Figlia – Grandview Aviation  
  - Chihoon (Chich) Shin – NTSB  
  - Van McKinney – NTSB

**USHST Support Teams**

- **Safety Analysis Team**  
  - Industry: Mona Polson – Bell  
  - Govt: Lee Roskop – FAA

- **Outreach Team**  
  - Industry: Chris Young – CY Consulting  
  - Govt: James Sutherland – FAA

- **Communications Team**  
  - Industry: Rob Volmer – HAI  
  - Govt: Tony Molinaro – FAA

- **Coordination Team**  
  - Industry: Cooper Largent – Paradise Heli.  
  - Govt: Eddie Miller – FAA

**Functional Groups**

- **Personal/Private**  
  - Lead: Arvid Albanese, Albanese Group

- **Commercial**  
  - Lead: Vacant

- **Helicopter Air Ambulance**  
  - Lead: Jason Quisling  
  - Air Methods

- **Aerial Application**  
  - Lead: Josh Kogut  
  - FL Keys Mosquito Control

**USHST Steering Committee**

- **ASIAS Collaboration**
  - **Issue Analysis Team**  
    - Industry: Ed Stockhausen – Metro  
    - Govt: John Wallberg – FAA

- **Work Groups**  
  - Activated as needed

**H-SE SC Champions**

- **Outreach H-SEs**  
  - Completed

- **Policy H-SEs**  
  - Tucker: 30

- **Tech/Equip H-SEs**  
  - Mayhew: 81  
  - Castillo: 82  
  - Groh: 91

- **Training H-SEs**  
  - Figlia: 116  
  - Tucker: 124  
  - Mallet: 125  
  - Lowenstein: 127A

Oct 22, 2021
Global Industry & Government Collaboration

Representative membership – several other entities are active members
Objective state
Open Exchange of Timely, Relevant, and Harmonized Global VTOL Safety Data

Note: The presence or absence of logos does not imply formal endorsement of the VAST by any entity.
U.S. Rotorcraft 5-Yr Average Fatal Accident Rate

Flight Hours Source
- 2011, 2021 from FAA's Aerospace Forecast FY2021-2041

Baseline 5 Year Avg of 0.55 for 20-24

GOAL

Rate per 100,000 flight hours:
- 2020: 0.8
- 2019: 0.81
- 2018: 0.77
- 2017: 0.76
- 2016: 0.74
- 2015: 0.74
- 2014: 0.67
- 2013: 0.67
- 2012: 0.66
- 2011: 0.62
- 2010: 0.65
- 2009: 0.7
- 2008: 0.73

05-09 06-10 07-11* 08-12 09-13 10-14 11*-15 12-16 13-17 14-18 15-19 16-20 17-21
U.S. Rotorcraft Accidents & Fatal Accident Counts

Accidents per Year

Fatal Accidents per Year

Calendar Year

2020
Fatal Accidents by Priority Occurrence Category
(104 fatal accidents)

- Narrow our focus and prioritize our resources: Address the **left** side of the chart.
- Top 3 Occurrence Categories = 50% of 104 fatal accidents.
- Safety enhancements should address the Top 3 **first**.
  - LOC-I = Loss of Control – Inflight
  - UIMC = Unintended Flight In IMC
  - LALT = Low Altitude Operations
Fatal Accidents by Industry
(104 fatal accidents)

- Top 4 Industries = 61 fatal accidents

- 52% of those 61 fatal accidents were tied to the Top 3 Occurrence Categories:
  - LOC-I = Loss of Control – Inflight
  - UIMC = Unintended Flight In IMC
  - LALT = Low Altitude Operations
Outreach H-SEs – **ALL COMPLETE!**

- Utilities and Construction Practice Guide (13A)
- Safety Culture and Professionalism (19A)
- Detection and Management of Risk Level Changes During Flight (22A)
- Helicopter Final Walk Around & Security of External Cargo (28/112)
- Hazards of Over-the-Counter Medication (130)
Policy H-SEs

- Develop Airman Certification System for Rotorcraft (30)
Technology & Equipment H-SEs

- Stability Augmentation System & Autopilot (70)
- Simulator Modeling for Outside-the-Envelope Flight Conditions (81)
- Helicopter Flight Data Monitoring (82)
- UAS in High-Risk Environments (90)
- Enhanced Helicopter Vision Systems (91)
Training H-SEs

- Make & Model Transition Training (116)
- Simulation/Education to Develop Safe Decision Making (123)
- Understanding of Basic Helicopter Aerodynamics (124)
- Pre-Flight Risk Assessment for Student Flights (125)
- Training for Recognition & Recovery of Spatial Disorientation (127A)
Through our web and social media promotional activities, we facilitate the exchange of safety materials and safety methods across the country and around the world.
Unintended Flight in Instrument Meteorological Conditions Safety Initiative

The YouTube Video
Online Training Resources (online)
Ground School, Simulator and Aircraft Training Resources
Recommended Practices

Videos
Planning Tools
Risk Management
Other Resources
Click on **RESOURCES** to view a wide variety of safety information and other related resources. This list is updated periodically.

Note: You can click on the live links listed above to go directly to that resource page.
• Click on **VIDEOS** to watch dozens of recordings provided by several global contributors.

• The USHST also has a [YouTube Channel](https://www.youtube.com) with several safety promotional videos.

**Note:** Click on thumbnails to view that video.
Click on RELEASES to view dozens of USHST press releases summarizing key developments and activities affecting the rotorcraft industry dating back to 2014.
Click on **REPORTS** to view a historical library of USHST safety reports and related analyses from 2014 through present day.
Join the Safety Effort

Click on **FOLLOW USHST** to learn how you can become part of our team and help contribute to one of over a dozen helicopter safety enhancements or promote our team and output products.

**How You Can Help the USHST**

- Join a Safety Enhancement team
- Distribute our thumb drives
- Link our web site link on your home page
Follow USHST on Social Media
Track industry safety enhancements, trends and news

USHST on Facebook
USHST on LinkedIn
@SafeHelicopters
@USHST
Outreach – Face-to-Face & Virtual Presentations

- Deliver safety enhancement focused workshops at HAI HELI-EXPO, NAAA Convention, CHC Safety Summit, Global Vertical Aviation Safety Conference, etc.
- Provide this presentation for delivery at industry events to support education.
- COVID-19 has not deterred us. Every two months, we host webinars focusing on safety enhancements.
Outreach – Delivery of Safety Materials

Industry Events

• HAI HELI-EXPO
• National Agricultural Aviation Association Convention
• Global Vertical Aviation Safety Conference
• Helicopter Air Medical Safety Conference
• Air Medical Transport Conference
• Helicopter FAASTeam Seminars
• Rotors n’ Ribs Indiana

Did You Know that we distributed over 3,000 USB drives in 2019 to members of the helicopter industry? This provided a total of 450,000 safety documents, slide shows, and videos to pilots, mechanics, instructors, and operators.

Industry Groups

• Helicopter Association International
• NAAA, NBAA, etc.
• FAASTeam
• Helicopter Safety Alliance
• Robinson Helicopters, etc.
• Air Medical Operators Association
• Airborne Public Safety Association
• Embry-Riddle, other aviation schools