

Helicopter Safety Convictions and Culture

One of the more challenging proposed safety enhancements being pursued by the U.S. Helicopter Safety Team (USHST) focuses on safety culture and professionalism within the civil helicopter community. The USHST has initially tasked itself with developing a definition of an effective safety culture that is more applicable and relatable to the day-to-day work of frontline helicopter professionals. To follow up this definition, the USHST also plans to promote an understanding of this application-based definition to all members of the helicopter industry.

In general, safety culture is explained as the attitudes, beliefs, perceptions and values that individuals share in relation to safety in their operations. The goal of this USHST safety enhancement is the broadening of an effective culture that embraces more-tangible concepts for operators, pilots and mechanics. It seeks to promote an effective safety culture beyond just another executive level philosophy or a “binder on the shelf” program. It needs to be an ingrained daily pattern of behavior for the frontline workforce in the helicopter community and relatable to the day-to-day tasks that comprise the job function of helicopter professionals.

Defining the Concept

Safety in the aviation world can be defined in many ways. From a laissez-faire point of view, safety essentially means:

- a lack of accidents,
- an absence of injuries,
- and a general environment where things don't go wrong.

However, from the proactive standpoint, this fortunate environment does not exist for any consistent amount of time unless certain safety-related active principles are put in place and specific safety attitudes are fostered and strengthened.

Whether we are strengthening a single person's safety attitude, bolstering a team's safety actions, or nurturing an entire safety culture, focusing every member of an aviation team at every level on clear and tangible convictions is a central goal. These convictions can be adapted to support safe operations at multiple levels in the industry - for managers and pilots within a company's helicopter operation, for private helicopter pilots, or for helicopter maintenance technicians. Here are convictions that should be central in the workplace.

Safety Convictions for Private Helicopter Pilots and Maintenance Technicians

- *Flight decisions and maintenance decisions need to be determined by safe actions.*
- *Never carry out any unsafe actions or unprofessional behaviors.*

- Openly discuss safety issues and challenges with other pilots and mechanics.
- Share safety expertise and information with other pilots and mechanics.
- Continually look for new safety knowledge and information.
- Find ways to invest in and use technology that improves safety.

Safety Convictions for Pilots Within a Helicopter Operation

- Your safety must be the overriding priority of your managers.
- ***Your flight decisions need to be determined by safe actions.***
- ***You cannot accept unsafe or unprofessional behavior in your operation.***
- Pilots need to openly discuss safety issues and challenges with each other.
- Leaders in your work area should constantly share safety expertise and information.
- Your operation must find ways to invest in technology that can improve safety.

It is not possible to write a “one-size-fits-all” definition for safety culture, but these straightforward and practical convictions can be constantly stressed within proactive initiatives that strengthen safety culture on an individual and a team level.

First Initiative: Go Local

To help this along, the USHST is developing a “Go Local” road initiative that focuses on these two convictions:

- Flight decisions and maintenance decisions need to be determined by safe actions.
- Never carry out any unsafe actions or unprofessional behaviors.

In essence, positive outcomes come from decision-making that is based on safe actions.

We are proposing the creation of a presentation given by local or regional safety experts to helicopter pilots in various U.S. cities (with a strong emphasis on private pilots and operators with very small fleets). The presentation would dissect specific accidents and near accidents using visual means such as news footage video, accident investigation photos and diagrams, NTSB animated simulations, and news photos of the crew and passengers. Along with summarizing the facts of the accident, we would also discuss the human aspect of the tragedy: the value of the lives that were lost, the grieving loved ones and co-workers, the long-term business damages, etc.

We would highlight decision-making throughout the entire presentation, stopping to take a closer look at decisions made or not made along the way by good pilots as the accident scenario unfolded and asking the audience for comments and feedback. We will aim “to tell the story” of the accident in both emotional and factual terms and emphasize that every decision needs a safety aspect and even very good pilots can fly into very bad situations when safety isn’t at the top of their minds as choices are being made.

Second Initiative: Safety Feedback

We also are contemplating a second initiative centered on “Safety Feedback” and linked to the three following convictions:

- Your safety must be the overriding priority of your managers.
- Pilots need to openly discuss safety issues and challenges with each other.
- Leaders in your work area should constantly share safety expertise and information.

In many helicopter operations, safety information goes down the line from owners and managers to the frontline pilots and mechanics, but a consistent system is needed for safety information to go back up the line. Often, the information doesn’t flow because of fear that “mistakes” will result in reprisals that will stall a career.

A system based on the Just Culture model should be developed on a scale that reaches across the industry so that safety issues or unsafe actions can be identified and preemptively fixed. More to come on this idea.

Appendix 1 “Go Local” Initiative

Our first safety culture initiative focuses on the convictions highlighted *in bold*.

Safety Convictions for Private Helicopter Pilots and Maintenance Technicians:
Flight decisions and maintenance decisions need to be determined by safe actions.
Never carry out any unsafe actions or unprofessional behaviors.

Safety Convictions for Pilots Within a Helicopter Operation:
Your flight decisions need to be determined by safe actions.
You cannot accept unsafe or unprofessional behavior in your operation.

In essence, positive outcomes come from decision-making that is based on safe actions.

We are proposing the development of a “canned” presentation that would be given by local or regional safety experts in various U.S. cities to helicopter pilots, with a strong emphasis on private pilots and operators with very small fleets. The presentation would dissect actual accidents and near accidents using visual means such as news footage video, accident investigation photos and diagrams, NTSB animated simulations, and news photos of the crew and passengers.

Along with summarizing the facts of the accident, we would also discuss the human aspect of the tragedy: the value of the lives that were lost, the grieving loved ones and co-workers, the long-term business damages, etc.

We would highlight decision-making throughout the entire presentation, stopping to take a closer look at decisions made or not made along the way by good pilots as the accident scenario unfolded and asking the audience for comments and feedback.

We plan to gather materials for close examination of a March 30, 2013, accident involving a Eurocopter AS350 helicopter operated by the Alaska Department of Public Safety near Talkeetna, Alaska.

We will probably also take secondary looks at an Air Methods accident near Mosby, Missouri, on Aug. 26, 2011, and a New Mexico State Police accident near Sana Fe on June 9, 2009. In addition, we will discuss the actions of a Santa Barbara County Air Support Unit that worked on rescues during recent California mudslide emergencies.

All the materials for the complete presentation would be made available for a helicopter safety professional to use as part of a local workshop for pilots and operators. The initiative would kick off in the United States on a trial basis until it is refined, then spread to other countries using local accident examples. U.S. cities could include: Seattle, Los Angeles, Phoenix, Dallas, Orlando and Philadelphia. Additional countries may include: Canada, Mexico, Brazil, Australia, New Zealand, England, France and Italy.

The initial presentations also do not need to be stand-alone events. We could partner with planned gatherings put together by the HAI Safety Committee, the FAA’s FAASTeam, or the Helicopter Safety Alliance.