



## AIA and the Commercial Aviation Safety Team

### Introduction

The Aerospace Industries Association is a proud member of the Commercial Aviation Safety Team (CAST) and strongly applauds the achievement in improving the safety of U.S. commercial aviation and saving lives.

Comprised of industry and government safety experts, the CAST team came together in a unique industry government partnership in 1997 and set a goal to significantly reduce the U.S. commercial aviation fatal accident rate by 80 percent over the next 10 years. This goal, when originally set, was deemed as quite a stretch. In fact, many felt it was impossible. 2006 closed as the safest year in aviation history, the team is well on its way to reaching this goal.

### Background

CAST was formed in the late 1990s after the White House Commission on Aviation Safety and Security report was released in 1997 challenging government and industry to reduce the accident rate 80 percent over the next 10 years. Also, the National Civil Aviation Review Commission recognized the need for industry and government to work together on a focused, consensus safety agenda. With these reports providing the framework, CAST was formed meeting the challenge head on.

Over the past 10 years the team worked relentlessly to analyze data from approximately 500 accidents and thousands of safety incidents worldwide. From that extensive analysis the team devised critical safety enhancements. The safety enhancements work to greatly reduce accident risk and ultimately save lives.

To date, CAST has completed more than half of the most promising safety enhancements identified to reduce the leading causes of commercial aviation accidents in the United States. One of the first enhancements adopted by CAST was the voluntary implementation of Enhanced Ground Proximity Warning Systems (EGPWS) on commercial airliners. CAST's studies shows that Controlled Flight Into Terrain, or CFIT, accidents were the leading cause of death in airline accidents for decades.

Following the CAST Joint Safety Analysis Team and Joint Safety Implementation Team studies, CAST members committed and began incorporating EGPWS technology on all aircraft well in advance of the FAA issuing a requirement to do so. Guided by GPS technology EGPWS gives pilots a computerized map that shows oncoming obstacles in red. It works by preventing pilots from flying into terrain or water such as mountains, hills, trees and the ocean. These types of proactive safety enhancements help detect problems and correct them before they create accidents. They also set the stage for fully eliminating the major categories of accidents.

A cooperative government industry effort, CAST includes safety experts from the FAA, NASA, and the Defense Department. Industry representatives include the Aerospace Industries Association (AIA), Air Line Pilots Association (ALPA), Allied Pilots Association (APA), Air Transport Association (ATA), Flight Safety Foundation (FSF), National Air Traffic Controllers Association (NATCA), National Air Carriers Association (NACA) and Regional Airline Association (RAA). Large aircraft manufacturers take part in CAST as well as engine manufacturers

Even though CAST has focused primarily on the US aviation system, throughout its history CAST has reached out internationally to help improve aviation safety around the world. This is evidenced by the large

number of international organizations who have been members and observers of CAST, including the European Aviation Safety Agency (EASA), Joint Aviation Authorities (JAA), International Civil Aviation Organization (ICAO), and Transport Canada Civil Aviation (TCCA). Other international participants include the International Federation of Air Line Pilots' Association (IFALPA), Air Transport Association of Canada (ATAC), Association of Asia Pacific Airlines (AAPA), and International Air Transport Association (IATA). CAST's impact and leadership can be seen by the resulting formation and actions of many cooperative regional safety alliances, modeled after CAST and working to incorporate CAST results and by the international acceptance of its principles in the newly released ICAO global safety roadmap.

In addition to being a beacon for commercial aviation-related safety professionals throughout the world, CAST has served as a model for the helicopter community as well. Using CAST and the CAST process as a model of success, government and industry leaders chartered the International Helicopter Safety Team (IHSS) in January 2006 to reduce the worldwide military and civil helicopter accident rate by 80 percent by 2016. Members include helicopter operators, airframe manufacturers, and regulators such as the FAA, Transport Canada, ICAO, and EASA.

### Summary

The CAST team and their organizations boldly stepped out nearly 10 years ago and launched an activity that has forever improved aviation and changed the way the world views aviation safety and proactive safety management. Through some of the toughest challenges ever to face the aviation community, the group has maintained a rock-solid commitment to cooperatively identify the most effective improvements that can be made to the aviation system, and then voluntarily implement these enhancements. As a result, it can easily be argued that hundreds, if not thousands, of lives have been saved over the past decade.

CAST is the preeminent industry government organization to improve aviation safety in the United States. CAST's international outreach activities will also undoubtedly continue to improve global aviation safety over the next decade. AIA supports CAST's commitment to making commercial aviation safer than ever – for people in the United States and around the world.