### **Aviation Safety Action Program and Employee Safety Reporting**

What happens when a pilot suffers fatigue as a result of the noisy remodeling of one of the crew hotels? There's an increased chance he may screw up on the flight deck. Or, what happens when a new flight procedure is worded unclearly? He might take too long to perform it properly or perform it incorrectly. What happens when newer, faster airplanes are introduced into National Airspace System? Existing air traffic control procedures may become outdated and traffic separation may suffer. All of these conditions happen throughout a nationwide system all the time. Any one of them could cause an accident at any time with the right conditions and triggers. What if we could identify these threats to safety and correct them before they become an accident? This is what ASAP is all about.

### **Objectives**

The objectives of the Aviation Safety Action Program are to prevent accidents and incidents. The means by which we accomplish these objectives are by identifying flight safety concerns and achieving corrective action. Consequently, ASAP analyzes risks, increases education and awareness, validates program effectiveness, measures system performance and ensures accountability. As a result, increased compliance with the FARs is achieved. The scope of events that are considered under ASAP include any observation that highlights a potential flight safety concern. The actions taken in this program reflect the desire of all parties to solve problems rather than to take legal enforcement or Company disciplinary action against an employee. ASAP combines essential self-reporting elements of previous self-reporting programs and provides solutions to the identified hazards in order to prevent incidents and accidents.<sup>1</sup>

## Other Pilot Reporting Programs and Voluntary Disclosure

Events occur in the National Airspace System each day that highlight potential safety problems. Timely and accurate reporting of these events is essential to flight safety analysis and corrective action. Prior to ASAP, three programs in particular had proven the advantages of self-reporting in the United States: the NASA Aviation Safety Reporting System (ASRS), the US Air Altitude Awareness Program and the Air Carrier Voluntary Disclosure Reporting Program. Each of these programs has proven uniquely valuable in identifying common and potential safety concerns. However, their overall success has been limited by a variety of constraints.

ASRS was established in 1976 to identify potential safety problems while providing limited protections to airmen reporting under provisions of FAR Part 91.25. Since its inception, ASRS has received and processed hundreds of thousands of confidential reports. Its value as an aviation safety research database is recognized worldwide. However, due to the requirements

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<sup>&</sup>lt;sup>1</sup> The American Airlines Aviation Safety Action Partnership Manual (excerpt)

# ASAP & Employee Safety Reporting Overview

of confidentiality and jurisdiction, its ability to *correct* identifiable airline hazards is severely limited. Prior to ASAP, many events, which were reported to ASRS, did not come to the attention of the FAA or the company. Data from ASRS implied that numerous significant events were occurring in the National Airspace System that were unrecognized by the airlines. Yet typically, ASRS cannot report details of specific events back to the airlines or the FAA, and the individual airmen involved were unlikely to report them to anyone other than ASRS prior to ASAP. Therefore, the safety analyses of these events were not always available to those who could take preventative and corrective action.

The US Air Altitude Awareness Program expanded the concept of pilot reporting to corrective and preventative action. US Air and the Air Line Pilots Association (ALPA), working jointly with the FAA, developed a pilot reporting program designed to examine and reduce the number of altitude deviations occurring at US Air. The program proved highly successful, both in its analysis of the causes of these events and in reducing their frequency. The program also validated the ASRS concept of pilot self-reporting programs as enhancements to safety. The result was a proactive approach to finding solutions to a specific problem. Although highly successful, this innovative test program was limited in duration and stopped short of addressing other safety-related concerns.

Similarly, the Air Carrier Voluntary Disclosure Reporting Program has been successful in providing a framework for cooperation between the FAA and individual air carriers. Under this program, airlines have detected errors and reported both problems and comprehensive fixes to the FAA. This cooperative relationship has resolved several potentially serious safety problems. However, many significant operational events remain ineligible for report under this program due to the exclusion of individual airmen by the Advisory Circular, except under special circumstances. Extension of the spirit and application of the program to individual employees under ASAP has produced greater enhancement to safety within the National Airspace System by providing the company a clearer view of the scope and frequency of flight safety concerns.<sup>2</sup>

#### **Accident Prevention**

Recently, public attention has turned to the annual rate of aviation accidents worldwide. Although downward trends in hull losses per million cycles have been noted in certain years, other years have produced dramatic increases in accidents involving passenger injuries and/or fatalities. The worldwide aviation accident rate has not declined in recent years and is a growing concern due to the projected annual increase in the total number of flights.

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<sup>&</sup>lt;sup>2</sup> The American Airlines Aviation Safety Action Partnership Manual (excerpt)

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Historically, airlines and government aviation authorities have acquired limited knowledge of aviation safety by examining failures through accident investigation or enforcement of rules and regulations. Corrective actions in many cases are limited to individual operators and specific events. Although these responses to known flight safety concerns have had measurable success in the past, greater threats may lie outside our traditional realm of knowledge. Our challenge is to access previously unidentified areas of concern that can lead to accidents. If the global aviation accident rate is to be significantly reduced, we must continue to develop enhanced prevention strategies that identify risks and accomplish corrective actions.

ASAP prevents accidents and incidents through the following essential steps:

- Identifying hazards (most critical)
- Analyzing risks
- Accomplishing corrective actions (most important)
- Validating and verifying effectiveness
- Educating and increasing employee awareness
- Measuring overall system performance
- Ensuring a continuing system of accountability

The program objectives are served only after all steps have been accomplished. However, hazard identification and corrective action are the most critical and important steps in achieving accident prevention.<sup>3</sup>

### **Corrective Action Based Incentives and Sole-Source Reporting**

The key ingredient to risk identification and corrective action is to provide incentive for individuals and air carriers to report those events that pose flight safety concerns. In order to ensure the benefit of self-reporting, ASAP offers certain non-punitive enforcement-related incentives to encourage individual employees and the certificate-holding airline to report incidents of inadvertent non-compliance with the FARs. ASAP is based on the principles of identification and corrective action rather than immunity. ASAP offers an alternative to traditional FAA legal enforcement and Company disciplinary action. In cases where an individual meets the criteria for participation and complies with the corrective actions recommended by the Event Review Team, (ERT), the event is closed with administrative action or no action in lieu of legal enforcement. Through ASAP, the FAA furthers its statutory authority "in a way that best tends to reduce or eliminate the possibility of recurrence of accidents in air transportation." (Title 49, United States Code Section 44701 (a) 5 & (c)).

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### I Screwed Up and Here's Why

The Aviation Safety Action Program is a formal non-liability reporting system whereby an employee can tell his company, "I made a mistake and here's why." By fully revealing all of the causal factors and contributors to a mistake, a safety analyst can think about ways to help other employees avoid the same mistake; any one of which could cause an accident. By identifying the causes of errors and controlling their causal factors, we can reduce the likelihood of an accident. But first, we need to know what happened and under what conditions it happened.

#### You Can't Fix What You Don't See

Before ASAP, too many employees were most likely to hide mistakes from management because of their perceived negative management reaction. Unfortunately, too often, this puts management in a situation of not knowing a problem exists. If you don't know a problem exists, you have no chance of fixing it. The first airline to formally introduce an ASAP Program provided an astonishing look into reality verses perception. The airline's FAA Certificate Management Office was aware of 55 pilot altitude deviations occurring in ASAP's first year. ASAP revealed that there were 550!

With ASAP, the sole objective is to learn as much as possible about why a mistake was made and to devise corrections to reduce the likelihood of that mistake occurring again. The correction may be simply training, an improved or better written procedure, a new procedure, a different way of conducting an operation, a re-design of physical spaces or anything that helps. ASAP fosters a spirit of cooperation and its success can be measured in a simple count of the same mistakes occurring in the future.

### **ASAP Management**

I was the Flight Safety Manager in charge of ASAP when it was first started at my airline. After a lot of work with my company management and the FAA, upon launch the ASAP reports starting flowing in; in small measure at first. We listed and tracked these reports with a simple Microsoft Excel worksheet. Soon, we began collecting and categorizing causal factors of errors in order to determine the scope of their occurrence; also using Excel spreadsheets. Later we began collecting human factor data because of the common human factor threads we could see in similar mistakes being made. Then we began categorizing errors and the phase of flight operations under which they were occurring. Then we began extracting data to present in regular reports to the FAA and company management. As the program became more well known and trusted by our employees, the number of reports increased. The program was so successful that we were soon drowning in data. Up to half of our productive work days were being taken up with manually extracting categorized data for reports to management and the FAA, not to mention manually tracking errors and the proposed corrections that would reduce the likelihood of them occurring.

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### **Database Software to the Rescue**

If you have ever evaluated software to try to determine if it can provide you with what you need, I don't have to tell you that it's a lot of work. And, if you have had the unfortunate experience of having a software salesman promise you the moon only to find out his product didn't work as promised; you are in good company. Here's one simple piece of advice to avoid a lot of wasted time and effort: don't ask if a software program will perform a function, ask to see it perform the function; in a working program, in real time. Ask to see a department set up. Ask to see a user created with various security and access levels. Ask to see an ASAP report filed as if you were an employee. Ask to see a report analyzed by a safety analyst. Ask to see a panel created to analyze and create a mitigation strategy. Ask to see that mitigation requested by a recipient. Ask to see a recipient's response. Ask to see how notification emails are automated and how reports are created. Then, and only then, buy it with a 100% money-back guarantee.

Get your head out of the data with a good software tool that allows you more time for managing your program. Don't waste a lot of your time manually extracting data for reports. Have them at your fingertips, updated automatically in real time and ready for printing at will. Don't hire more safety analysts to handle increased data demands. Handle your data without manual intervention. Don't hire more analysts to study and report on monitoring data for your mitigations. Have your software monitor data sets and give you alerts when your preset control limits are exceeded. Your life will be a lot easier and your upper management and your FAA inspectors will be confident in your safety program management.

## Non-Liability Reporting a Requirement of SMS

SMS, as defined by ICAO and the FAA requires the inclusion of a non-liability safety reporting program.

#### **EMPLOYEE GROUPS**

ASAP can be set up for any distinct employee group and a general reporting system for all company employees more commonly known as an Employee Safety Reporting System can be should be set up for everyone. Pilots, flight attendants, dispatchers, mechanics, production workers or any organized group can participate in their own program for their own internal management or safety department management oversight. A good Safety Management System (SMS) provides all employees a vehicle whereby they can report unsafe conditions or safety issues for management attention.

For more information on how your company can quickly gain these advantages, please <u>email</u> one of our Senior Consultants to find out more. Use this link or the email link below.

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