



FLIGHT SAFETY FOUNDATION

Airport Operations

Vol. 25 No. 5

For Everyone Concerned with the Safety of Flight

September–October 1999

Aircraft Operators Need Strategies To Respond to an Aircraft Accident

Lessons learned from disaster-response workshop apply to any organization in the aviation industry that has responsibilities after an aircraft accident. Aircraft accidents occur rarely, but aviation regulators, investigative agencies, news media, and families of passengers and crewmembers expect that aircraft operators and airports will respond appropriately.

—
FSF Editorial Staff

Each hour after notification of an aircraft accident involves bewildering decisions, unfamiliar actions and lasting consequences for the aircraft operator's personnel. There is a strong temptation to say, "Nothing could have prepared us for this."

Yet specialists in disaster-response preparedness, aircraft-evacuation training and accident investigation have a different perspective. They believe that reasonable planning for worst-case scenarios makes a significant difference in an organization's competence to respond to an accident. Moreover, the process of planning often sharpens corporate focus on prevention of accidents and readiness for other types of emergencies.

Careful planning in advance helps to dispel the initial disorientation that might follow an accident, and enables the aircraft operator to provide the best response possible under the circumstances.

Several presenters at the Disaster Response Planning Workshop for Business Aviation in June 1999 said that aircraft operators that invest the most resources in safety programs — and work



diligently to prevent aircraft accidents — typically take disaster-response planning just as seriously.

The VanAllen Group of Atlanta, Georgia, U.S., conducted the two-day workshop tailored to corporate flight departments, regional airlines, on-demand air taxi operators and other aviation organizations. Flight Safety Foundation (FSF) has recognized a need for disaster-response planning among corporate aircraft operators and joined with The VanAllen Group in 1995 to present this workshop.

James Burin, FSF director of technical programs, in opening the workshop said, "We want to prepare you as much as possible for what you never want to happen."

Peter v. Agur Jr., president of The VanAllen Group, and other workshop presenters said that disaster-response planning has become more sophisticated in the 1990s as more academic studies of disaster response have been conducted, knowledge of human psychological response and physiological response to critical-incident stress has increased, and families of people injured or killed in aircraft accidents have demanded a compassionate and comprehensive response from aircraft

operators. (See “U.S. Law Prescribes Airline Assistance to Families After Aircraft Accident” on page 3).

Among 30 workshop participants, two indicated by a show of hands that they had not developed a disaster-response plan, five indicated that they were completing a plan or updating a plan, and the remainder indicated that their organizations already had a completed plan. Several participants had attended the workshop previously, from one year to six years earlier. One participant said that rapid growth and changes within her company made it necessary to update the plan extensively.

Among occupational titles represented at the workshop were flight captain; standards captain; aviation director; director of flight operations; flight engineer; airport engineer; safety and standardization officer; emergency action plan administrator; industrial security director; vice president of marketing/corporate communications; and managers of flight operations, transportation service, emergency preparedness, safety, loss prevention and regulatory compliance. Three participants were lawyers.

Agur said that some aircraft operators have misconceptions about what will occur after an aircraft accident. In the United States, for example, there is no requirement for the U.S. Federal Aviation Administration (FAA) to notify the operator of an aircraft in a timely way that an accident has occurred, said Agur. Neither the U.S. National Transportation Safety Board (NTSB) nor FAA will assist the aircraft operator in responding to news media inquiries about an accident, he said. Nevertheless, the news media — by monitoring emergency radio frequencies with scanners and maintaining reliable news sources — are likely to hear the initial notification of an aircraft accident and to respond immediately.

“We’re all so safe — disaster planning too often is not seen as a big issue,” said Agur. “But someone typically has a sense of high need for a disaster-response plan. That person becomes a banner carrier. Helping families and communities after an aircraft accident has become very important in the past 10 years to 15 years. I encourage you to focus on what you can control. That’s the best advice you can take home from this workshop.”

Sometimes the toughest challenge for proponents of a disaster-response plan is convincing a chief executive officer (CEO) to support its development. Strong belief that an aircraft accident could not possibly occur might be a significant barrier.

Agur said that any strategy to convince corporate leadership of the need for a disaster-response plan should begin with the recognition that some senior executives might have difficulty analyzing the need rationally. Visualizing the aftermath of a corporate aircraft accident engages their deepest personal beliefs about aviation safety and personal risk. Nevertheless, arguments may be more effective if they are framed in terms of logically extending the organization’s excellent aviation-safety program.

One workshop participant said that flight-department staff members who have taken realistic courses in aircraft evacuation and accident survival approach disaster preparedness from a different frame of reference than senior executives.

Agur said that the flight department manager must think in these terms: “Corporate [headquarters] has the resources our passengers and our families would need.”

When other plans already exist — such as business-continuation plans, corporate-security plans or overall disaster plans — the best strategy for building support may be for a corporate flight department to say, “We fully intend to dovetail with the current corporate plan,” and then to emphasize the unique aviation issues involved, said Agur.

Business-continuation plans, for example, might seem to preempt planning by the flight department, but the need for sufficient aviation-specific detail should be emphasized. Becoming a partner with the corporate security department, human resources, risk management and other intercompany groups can help assure that aviation-specific issues will be included in plans. In some organizations, disaster-response plans prepared for aircraft accidents become models for the other plans.

The final disaster-response plan should be distributed so that those who will need it will have copies available at home and at work. The plan also should contain a process for reviewing the plan’s effectiveness if the plan ever should be used.

“The approach should be, ‘We could do this even better if we did certain things differently,’” said Agur.

Experiences Vary Among Workshop Participants

There was no single reason why the participants were drawn to the workshop. A few years ago, however, some of the corporate flight departments that were represented had disaster-response plans that consisted of only a one-page checklist of names and telephone numbers. One participant said that his company’s disaster-planning effort had not progressed as well as anticipated.

“Don’t feel bad, a lot of us were there a few years ago,” said other participants.

Some participants represented companies that had experienced an aircraft accident or had known people at other companies that had experienced an aircraft accident. They said that they later had implemented not only safety improvements for accident prevention, but also continuous improvements in aviation record keeping, management of flight operations offices and maintenance operations, and training.

Participants said that some flight crewmembers and cabin attendants take a “hands-on” interest in disaster-response plans,

U.S. Law Prescribes Airline Assistance to Families After Aircraft Accident

The Aviation Disaster Family Assistance Act of 1996¹ and a 1997 amendment² (regarding foreign air carrier accidents) require the U.S. National Transportation Safety Board (NTSB) and some airlines to provide services after an aircraft accident.

(NTSB published a *Federal Family Assistance Plan for Aviation Disasters* in July 1999 describing how, under this law, NTSB coordinates and integrates federal resources with local governments, state governments, airlines and other organizations "to meet the needs of aviation-disaster victims and their families." In September 1999, an agreement was announced between NTSB and the Air Transport Association of America (ATA), the trade organization of the principal U.S. airlines, under which, "For the first time, air carriers have volunteered to pay for extraordinary expenses for crash-victim recovery and identification and emergency response." NTSB said that under the agreement, "ATA carriers will reimburse and/or pay for the logistical and transportation expenses for families who may wish to travel to the accident site. The air carriers have agreed to reimburse local officials for expenses associated with victim recovery and identification, including DNA analysis if necessary [DNA analysis includes various methods for extracting, studying and comparing samples of deoxyribonucleic acid (DNA), the genetic material of cells]. The airlines also will reimburse most extraordinary expenses for emergency response." Family-assistance activities are separate from investigative activities, said NTSB.)

Although the law's requirements apply to airlines holding a certificate of public convenience and necessity, other aircraft operators that are developing disaster-response plans might find the following excerpts a useful guide to the expectations of families of passengers (defined in the law to include employees of the airline):

- "As soon as practicable after being notified of an aircraft accident within the United States involving an air carrier or foreign air carrier and resulting in a major loss of life, the chairman of the [NTSB] shall (1) designate and publicize the name and phone number of a director of family support services who shall be an employee of the [NTSB] and shall be responsible for acting as a point of contact within the federal government for the families of passengers involved in the accident and a liaison between the air carrier or foreign air carrier and the families; and (2) designate an independent nonprofit organization, with experience in disasters and post-trauma communication with families, which shall have primary responsibility for coordinating the emotional care and support of the families of passengers involved in the accident;
- "The [NTSB] shall have primary federal responsibility for facilitating the recovery and identification of fatally injured passengers involved in an accident ... ;
- "The organization designated for an accident ... shall have the following responsibilities with respect to the families of passengers involved in the accident:
 - To provide mental health and counseling services, in coordination with the disaster-response team of the air carrier or foreign air carrier involved;
 - To take such actions as may be necessary to provide an environment in which the families may grieve in private;
 - To meet with the families who have traveled to the location of the accident, to contact the families unable to travel to such location and to contact all affected families periodically thereafter until such time as the organization, in consultation with the director of family support services designated for the accident ... determines that further assistance is no longer needed;
 - To communicate with the families as to the roles of the organization, government agencies and the air carrier or foreign air carrier involved with respect to the accident and the post-accident activities; and,
 - To arrange a suitable memorial service, in consultation with the families;
- "It shall be the responsibility of the director of family-support services designated for an accident ... to request, as soon as practicable, from the air carrier or foreign air carrier involved in the accident a list, which is based on the best available information at the time of the request, of the names of the passengers that were aboard the aircraft involved in the accident;
- "The organization designated for an accident ... may request from the air carrier or foreign air carrier involved in the accident [the list of passenger names];
- "The director of family-support services and the organization may not release to any person information on [the list of passenger names] but may provide information on the list about a passenger to the family of the passenger to the extent that the director of family-support services or the organization considers appropriate;
- "The [NTSB] shall, to the maximum extent practicable, ensure that the families of passengers involved in the accident (1) are briefed, prior to any public briefing, about the accident, its causes and any other findings from the investigation; and (2) are individually informed of and allowed to attend any public hearings and meetings of the [NTSB] about the accident; and,
- "A plan ... shall include, at a minimum, the following:
 - A plan for publicizing a reliable, toll-free telephone number, and for providing staff to handle calls from the families of the passengers;
 - A process for notifying the families of the passengers, before providing any public notice of the names of the passengers, either by utilizing the services of the organization designated for the accident ... or the services of other suitably trained individuals;

- An assurance that the notice ... will be provided to the family of a passenger as soon as the air carrier has verified that the passenger was aboard the aircraft (whether or not the names of all of the passengers have been verified) and, to the extent practicable, in person;
- An assurance that the air carrier will provide to the director of family-support services designated for the accident ... and to the organization designated for the accident ... immediately upon request, a list (which is based on the best available information at the time of the request) of the names of the passengers aboard the aircraft (whether or not such names have been verified), and will periodically update the list;
- An assurance that the family of each passenger will be consulted about the disposition of all remains and personal effects of the passenger within the control of the air carrier;
- An assurance that if requested by the family of a passenger, any possession of the passenger within the control of the air carrier (regardless of its condition) will be returned to the family unless the possession is needed for the accident investigation or any criminal investigation;
- An assurance that any unclaimed possession of a passenger within the control of the air carrier will be retained by the air carrier for at least 18 months;
- An assurance that the family of each passenger will be consulted about construction by the air carrier of any monument to the passengers, including any inscription on the monument;
- An assurance that the treatment of the families of nonrevenue passengers (and any other victim of the accident) will be the same as the treatment of the families of revenue passengers;
- An assurance that the air carrier will work with any organization designated ... on an ongoing basis to ensure that families of passengers receive an appropriate level of services and assistance following each accident;
- An assurance that the air carrier will provide reasonable compensation to any organization designated ... for services provided by the organization;
- An assurance that the air carrier will assist the family of a passenger in traveling to the location of the accident and provide for the physical care of the family while the family is staying at such location; and,
- An assurance that the air carrier will commit sufficient resources to carry out the plan.”♦

— FSF Editorial Staff

References

1. *Aviation Disaster Family Assistance Act of 1996*, Public Law 104–264, 104th Congress (9 October 1996), Title VII, Sections 701–705.
2. *Foreign Air Carrier Family Support Act*, Public Law 105–148, 105th Congress (16 December 1997).

but that other personnel are satisfied with knowing that a plan has been developed. Some participants said that they were concerned that an excellent safety record could foster complacency about preparing for an accident. Others said that they believed that inconsistencies — among local plans or between corporate-level planning and planning by flight departments — might make their responses less effective than intended.

Some participants said that previous disaster-response preparation might not be sufficiently uniform or comprehensive enough for aircraft issues or media relations. Others said that they were in the process of harmonizing plans in different regions of the world.

One airport manager, for example, said that he had learned important lessons from an accident involving a cargo aircraft, in which the airport became responsible for nearly all aspects of the disaster response. Airport managers should not assume that small operators will have resources comparable to airlines for responding appropriately to an aircraft accident, he said.

Another participant said that leaders of a global corporation that has made comprehensive plans for executive security (to prevent kidnapping, for example) and for industrial accidents tended to rank the risk of an aircraft accident so low that corporate preparations might be insufficient.

Another said that his company’s 50-page corporate disaster plan — covering all modes of transportation — formerly devoted only a few pages to aviation accidents. The plan has been upgraded with aviation-specific additions based on discussions at an earlier workshop presented by The VanAllen Group.

With a growing overlap of information among documents in corporate flight departments — from International Standards Organization (ISO) 9002 certification manuals to FAA repair station certification manuals — the challenge for some flight departments is to comply with appropriate requirements and to link relevant information in one practical disaster-response plan.

A major concern is that in the event of an aircraft accident, the company personnel might not read and use a synopsis longer

than 25 pages; a focused checklist of no more than 12 pages was recommended to guide a disaster-response team's essential actions during the first few hours after an aircraft accident. Wallet-size checklists might be appropriate for individual team members.

Agur said that the most effective disaster-response plans contain at least the following elements:

- Essential procedures, contact information and checklists for the initial response. (Contact information for everyone involved in the disaster-response plan should be updated at least once a year.);
- Assignment of roles and responsibilities, identification of resources and setting of financial policies;
- A detailed plan to organize complex resources and to use them on a short-term basis, medium-term basis and long-term basis;
- Establishing and managing all lines of communication; and,
- Training staff and arranging for professional advice in highly specialized areas, such as contact with families, news media and accident investigators.

The workshop described the use of many documents, including a checklist for verifying that an accident occurred, a master disaster-response checklist, checklists for people who assume predetermined roles in executing a disaster-response plan, a communication log, a passenger/crew status report, a death-certificate-information form, a medical-examination-and-treatment refusal form, an emergency-message-tracking form, a next of kin-notification form, a survivor-condition form, a victim and response-participant locator form, and process-flow diagrams.

Planning for Worst-case Scenario Clarifies Issues

The workshop provides recommendations for staffing, equipping and maintaining an emergency-operations center, including provisions for telephone service, ensuring the ability to place calls regardless of incoming-call volume, and if possible, the ability to automatically broadcast a recorded voice message within minutes to preprogrammed telephone numbers.

The workshop led participants through the visualization of a sequence of events that began at the moment of a hypothetical corporate-aircraft accident, focusing on the nature of the sudden, unexpected resource demands and accompanying confusion. A disaster-response plan conceived to account for

the most difficult circumstances imaginable is preferable to one that anticipates only the most typical flight operations or an accident at the home airport.

The group's consensus was that the most difficult scenario for a corporate flight operation would involve the following elements:

- A combination of survivors and fatalities in the aircraft accident;
- People present on the aircraft who are not shown on the flight manifest;
- Clients, family members and children on the aircraft;
- The CEO and other senior executives on the aircraft;
- High-profile guests on the aircraft, such as elected officials or other public figures;
- An off-airport accident site in difficult terrain or water at a remote location;
- A departure point for the aircraft other than its home base;
- An intended destination outside the home-base country;
- Difficulty in obtaining logistical support because of time differences, language differences and problems maintaining the flow of information;
- Passengers and family members who speak languages other than the language of the crew and corporate passengers; and,
- Customs regarding deaths, communication protocols, health care and family relationships that are unfamiliar to the aircraft operator.

A disaster-response plan helps an organization to gain control of the situation as quickly as possible without overlooking critical details. The manual for the workshop takes a chronological approach to matching resources with needs, according to predetermined priorities. Specific disaster-response roles are defined, and each role has a detailed checklist and prescribed duties to be accomplished — in time frames ranging from minutes to weeks after an aircraft accident occurs.

Effective Communication Sets Foundation for Response

Timely, accurate and appropriate communication before an accident and after an accident establishes a foundation for effective standard operating procedures (SOPs) and disaster-response activities. Although communication is important at all stages, the workshop emphasized the following issues:

Agur said, "It's imperative to have a proactive flight-following system; [operators] need to know where an aircraft is at all

times.” Among the systems in use are personal computer software that shows the progress of an en route aircraft; exchange of airborne flight-information service messages after landing; and routinely making a satellite-telephone call or cellular-telephone call before every departure and within 15 minutes to 20 minutes after every landing.

“Calling the company five minutes before landing is not adequate,” said Agur. “You need to cover the entire period of risk [in the communication section of the SOP].”

In one example, the flight crew normally did not notify the aircraft operator on arrival. As a result, the aircraft operator was informed about an accident by a pilot’s relative who saw a television news report.

To be prepared for an accident, aircraft operators must have a system in place for emergency communication anytime — for example, using trained corporate security staff or professional answering-service operators to take calls outside normal business hours — because few corporate flight departments have telephone switchboards that are staffed at nights or on weekends or holidays.

At a minimum, any recorded message after hours should provide information on whom to call in an emergency and whom to call for routine inquiries. A police officer, firefighter, physician, reporter or other professional who is calling about an aircraft accident should not reach a dead end in attempts to communicate with the company.

The VanAllen Group provides general recommendations for interacting appropriately with the news media following an aircraft accident; specialized books, articles and workshops for media relations in a crisis also are available. (See “When an Airline’s Reputation Is at Stake ...” on page 7.)

Agur said that senior management does not want to be surprised by developments or by the content of external communication. Short but complete briefings with scheduled updates are effective after an aircraft accident.

All communications, decisions and actions should be documented as they occur in a written log by people dedicated to this task around the clock. The ideal people to perform this task are those who have broad personal knowledge of the aircraft operator’s organization, staff and functions.

Agur said that human relations become critically important in the hours, weeks and months after an aircraft accident. Adequate resources must be provided to meet this need. Typically, in accidents involving many passengers, the aircraft operator can obtain assistance from a telephone company to quickly establish toll-free numbers to reach a temporary call center that has a staff trained to communicate with family members and other affected people. If possible, such a call center should be established near — but not inside — the

emergency-operations center because background voices and commotion might be overheard by callers.

Christa Chastain, manager of emergency preparedness at American Trans Air, said that in the airline’s phone-home program, employees would place calls to tell family members, coworkers and friends that they were not involved in the accident, and to remind them not to use the toll-free number established for the families of passengers involved in the accident.

SOPs should prescribe how information about an accident will be communicated to other flight crews, ground crews, maintenance personnel involved with the accident aircraft and passengers at the accident aircraft’s next pick-up point. Agur said that such information should not be communicated to company personnel while they are en route.

The aircraft operator’s SOPs should include a stand-down (temporary cessation) of corporate flight operations for a few days with contingency plans, said Agur. Some companies have reached mutual-assistance agreements with the flight departments of other operators for emergency travel during a stand-down.

Agur said that careful thought also should be given in advance to messages that will be given to flight departments concerning resumption of normal operations.

“There could be anxiety that the flight department will be shut down permanently,” said Agur, and such questions must be answered clearly.

The disaster-response plan also should include details of how and when manufacturers of the airframe, engines, avionics and other components will be contacted about the accident. Timely exchange of information might help prevent another accident.

Accurate Manifests Help Operators Respond After Accident

Agur said that many accidents have revealed flight-manifest-related problems that could have been avoided. Thus, confirming the flight manifest before departure is one of the most important steps a flight crew can take to enable aircraft operators to meet their responsibilities after an accident.

Agur said, “Don’t let a crew move an aircraft without an accurate manifest.”

One solution to inaccurate flight manifests is to leave a voice recording of the flight-manifest information at a secure voice mail mailbox, which can be accessed by a few authorized staff members via a toll-free telephone number. SOPs typically require the operator’s staff to listen to these security-sensitive messages every three days, then erase the messages.

When an Airline's Reputation Is at Stake ...

Airline executives dread the moment. In the early hours of the morning, the telephone rings. A voice on the line says, "Sorry to disturb you at home. I'm calling from Reuters news agency. We have a report that one of your airplanes has crashed. Could you please confirm the details for us?"

The first call after an aircraft accident preferably would come from the airline's operations-control center. There would be time to gather facts and to assess the situation. But in the new era of instant global communication, the news media often will know about an aircraft accident as fast as, if not faster than, the airline — and certainly before every member of the airline's senior management team can be fully briefed and mobilized.

For example, a local TV station had a reporter and camera crew on the scene in Peggy's Cove, Nova Scotia, (the nearest village) less than 20 minutes after the Swissair Flight 111 accident occurred in September 1998. Many executives from Swissair and Delta Air Lines (which also had ticket-holders on the flight) learned about the accident from live TV reports.

How well the airline succeeds in gaining the initiative — and emerging from the subsequent media scrutiny with its reputation and credibility intact — largely will depend on the time and resources the airline has devoted to preparing and rehearsing for this kind of situation.

The days are over when an airline could respond simply by releasing a press statement to local news media from headquarters hours, or even days, after an aircraft accident or incident. Satellite communications networks and global 24-hour TV news channels can carry, within minutes, live reports and pictures from the scene of a major accident from almost anywhere on the planet. "Global presence" means global vulnerability: An airline must be prepared to face the onslaught of news media questions wherever in the world an aircraft accident occurs — however far from home base.

The following hypothetical scenario shows the complexity of responding to the news media about an aircraft accident, especially because of changing airline relationships and the 24-hour news cycle.

The first details are sketchy. Initial reports say that the aircraft was a "jumbo jet" en route to Australia. The aircraft reportedly went down with the apparent loss of everyone on board. A distress call was received from the flight crew, and the aircraft disappeared from radar somewhere over the South China Sea, northeast of Java. Rescue services have been mobilized, but no sign of any wreckage or survivors has been found. Cable News Network is broadcasting eyewitness reports from Indonesian fishermen who report that they "heard an explosion in the sky."

At first, you believe that the news media must have received erroneous information. After all, your airline no longer serves Australia. Also, your fleet has no aircraft commonly called "jumbo jets." Yet, the Reuters reporter insists that the flight was operated by the airline you represent and demands that you provide official confirmation — fast.

The most prudent course of action would be to write down the reporter's preliminary details and to promise to call the reporter after contacting headquarters. At this point, however, you are told by operations-control management that contact with an aircraft indeed has been lost and that the aircraft was carrying a flight number and ticket-holders of the airline you represent. The aircraft was operated by another carrier — your Asian partner in GlobalAlliance (a fictitious name for a code-sharing partnership). The Asian airline took over the Australian routes as a code-share operation when GlobalAlliance was launched six months ago.

The responsibilities quickly become more complicated. You consider the possibility that the Asian partner may have wet-leased the aircraft to provide additional capacity for the peak summer season. The aircraft was operating with your Asian partner's livery [aircraft paint scheme] and cabin crew, but with technical crew provided by a lessor in the United States. The flight also carried the codes [flight numbers] and passengers of two other GlobalAlliance partners — one from the United States and one from Northern Europe — and a cabin crewmember from each partner was on board.

This event could escalate rapidly into a major international crisis for your airline, for the other carriers involved and for the newly established GlobalAlliance. Nevertheless, no comprehensive plan exists for delivering even the most basic information to the news media, let alone for coordinating a joint communications strategy among the airlines involved.

Moreover, there is no contact information at hand to reach your counterparts at the other GlobalAlliance airlines. Many strategic and logistical questions require immediate answers:

- Who will speak to the press?
- What information will they provide?
- Who, if anyone, will speak on behalf of GlobalAlliance?
- What messages would help to maintain public confidence in the integrity of your airline, and in the GlobalAlliance brand, for which millions of advertising dollars have been invested?
- Will your airline conduct a press briefing? If so, what verified information can you provide? Will representatives of the other GlobalAlliance partners be present? Will they speak?
- What information is the Asian partner releasing now? Have they released the names of your passengers to the news media, and are the names correct? Have your counterparts waited for your airline to notify next-of-kin (not always required in some Asian countries)? Has the partner published a passenger-information number or media-information number, and if so, do you know what information is being released? and,

- Which investigating authority is in charge, and what legal restrictions has this authority imposed on the release of information about this accident?

This scenario is hypothetical, but not far-fetched. One European airline, for example, now operates a domestic service that carries 13 different flight numbers. For this type of airline, many media-relations questions arise. Have the code-sharing partners sat down together to consider their communication strategy in the event of an aircraft accident on that sector? Do the partner airlines have the name and telephone number of the operating carrier's corporate communications director?

Current conventions for communication after an aircraft accident have been straightforward. That is, in the event of an accident or incident, the aircraft operator would be responsible for release of information to the news media. Other parties involved would discuss only issues that are specific to their own airlines, such as how many of their passengers were on the aircraft and the measures being taken to help victims and their relatives. The partners would not release information pertaining to the aircraft or the crew.

But in the hypothetical scenario, responsibility for releasing this information to the news media would have remained with the lessor of the aircraft, which technically would be the "operating carrier." The lessor's interests, resources and priorities, however, probably would be very different than those of the GlobalAlliance partners.

Every major airline accident involves human drama, conflict and contradiction — story elements on which the news media thrive. Even among the best-prepared carriers, the potential for confusion is immense, and competent professionals can be overwhelmed by the urgent demands for information placed upon them in a disaster-response situation.

The airline industry is not unique in its vulnerability to crises but is exposed to a variety of unique events that can lead to a crisis, and influence public confidence. In the case of an explosion at an oil refinery, for example, motorists probably would not think twice about buying the company's gasoline the following day. The same cannot be said of airline accidents, let alone other unique risk events such as a hijacking, bomb threat, near midair collision, pilot strike or citation for violation of maintenance standards.

A crisis can be defined as a situation that may affect long-term public confidence in a company or that may prevent a company from continuing to operate normally. Thus, airlines must understand how events might escalate into crises. Crises often develop when the following factors are present:

- The event reveals a fundamental weakness in the company or its products;
- The event tends to confirm or reinforce previous negative public perceptions. For example, the ValuJet Flight 592

accident in May 1996 appeared to confirm public suspicions about safety standards among low-fare airlines;

- The event causes the news media or regulatory authorities to focus extraordinary attention on one airline; or,
- The company's initial public responses antagonize the news media or other important audiences.

A recent example of the last factor — and most easily preventable factor — involved the July 1996 TWA Flight 800 accident, in which initial public comments resulted in news-media portrayal of the airline as uncaring and unresponsive to the feelings of the victims' families. Such news stories might have been dismissed as a short-lived media exaggeration, but the public outcry that such reports generated led directly to the introduction of the Aviation Disaster Family Assistance Act of 1996 in the United States (a 1997 U.S. law included foreign carriers). This law added significant financial cost and logistical work for airlines operating to, from and within the United States.

Effective crisis communications is not about persuading the news media to correct inaccuracies or making sure that photographers and TV camera operators can't see the airline's logo on the tail of a wrecked aircraft. The objective is to protect the airline's brand investment and reputation during a time when both assets face serious threat. In short, crisis-communications planning should be regarded as an essential part of an airline's liability insurance: an investment for which there may not be a quantifiable return — until an aircraft accident occurs.

A reputation takes years to establish, but a reputation can be damaged or destroyed in moments. According to one survey, 80 percent of all companies that experience a major crisis — but have no prior plan to respond — go out of business or are taken over within five years.

With foresight and preparation, an airline or other aircraft operator can use the hours spent under the news media spotlight to show the watching world its defining values and qualities. As the two Chinese characters for "crisis" (*wei ji*) indicate, such a situation is a "threat" and an "opportunity."♦

— John Bailey

About the Author

John Bailey is director of IATA Crisis Communications, a consultancy service for the air transport industry that was established by the International Air Transport Association (IATA) in September 1998. The consultancy offers a number of services to airlines, which include preparing the Crisis Communications Manual, conducting crisis-communication audits, and providing training seminars on how to respond to the news media in crisis situations.

The system allows current information to be retrieved quickly from any telephone if an aircraft accident occurs. Other systems involve leaving recorded messages that only specify differences between actual aircraft occupants and names on the copy of the flight manifest left on the ground.

Typically, in an airline environment, SOPs require a careful accounting of passengers at all times — that is, reconciliation of the tickets with the head count on a flight. Workshop participants said, however, that some SOPs might not detect a passenger who has boarded fraudulently — for example, with a boarding pass issued to another person. Such actions could make accounting for people aboard an aircraft much more difficult after an accident. Disaster-response plans should consider such possibilities, they said.

Agur said that aircraft-accident preparedness also includes maintaining accurate, up-to-date next of kin-notification information for crewmembers and passengers. An aircraft operator that uses contracted cabin attendants, for example, should have procedures for gathering emergency-contact information for these personnel. Many crewmembers and regular passengers have strong preferences concerning whom they want notified first in case of injury or death. The aircraft operator must take steps to know these preferences.

Response Should Not Depend On Specific Individual

Agur said that assigning any one person the role of “disaster-response expert” would be a mistake for an aircraft operator because the person might be unavailable at the time of an aircraft accident. The preferable alternative is to create a core leadership team of three people or four people, and two tiers or three tiers of alternate people.

The minutes and hours after an aircraft accident in the United States might involve the following factors:

- Nearest aircraft rescue and fire fighting (ARFF) services and other local authorities usually are notified by FAA. (Flight operations typically are conducted under instrument flight rules in a radar environment in contact with air traffic control.);
- Injured persons are taken to one or more hospitals;
- Bodies of crewmembers, passengers or people killed on the ground might be kept at the accident site temporarily for investigative purposes; and,
- Accurate details about the flight and flight manifest must be provided to identify every person on board.

Agur said that an aircraft operator executing the type of disaster-response plan presented in the workshop would take steps similar to the following scenario:

The accident site could be expected to have a damaged aircraft (possibly disintegrated), hazardous parts and debris, and contamination of the area with aviation fuel, oil, battery acid, blood and other substances subject to environmental, health and safety regulations. The accident will be investigated as a possible crime, as an environmental event, and as an event that may involve occupational health and safety issues or regulations.

The checklist recommended by Agur for use in the first minutes after notification of an aircraft accident provides steps to verify basic facts and the identities of those involved in emergency communications.

“Initial reports are never correct” because of assumptions, untrained observers and confusing information from multiple witnesses, said Agur.

Verification that an aircraft accident has occurred typically triggers an immediate gathering of the core leadership team (with members delegating their normal activities to others) at the place designated as the emergency-operations center.

This team has the authority to rapidly make policy decisions and logistical decisions, to disburse funds and to tap other resources of the organization. Agur said that he recommends that the core leadership team not include the CEO or president because — although such senior executives will be involved in decisions and ultimately will be responsible for company actions — they can be most effective by maintaining a high-level strategic position detached from details and the ability to act as the final arbiter of conflicting viewpoints presented by executives who are involved directly.

Nevertheless, the core leadership team often includes executives from flight operations, human resources (particularly people knowledgeable about the details of employee-assistance programs), legal, finance, insurance/risk management, government relations and internal/external communications.

Workshop presenters provided detailed recommendations on verifying, categorizing and tracking information at the emergency-operations center using checklists and forms.

Agur said that a small on-site team — not fewer than two members — should be dispatched immediately to the accident site with carefully defined responsibilities as a key point of contact for the leadership team. The disaster-response plan should specify, for example, who from flight operations and who from maintenance should go to the accident site, so that efforts are focused on implementing processes rather than making basic decisions about roles. The on-site team should refer news-media inquiries to the designated representatives at the emergency-operations center or another designated location, possibly near the accident site but not in view of the accident site.

The on-site team should have an on-site emergency kit and personal kits prepared in advance. The on-site emergency kit should contain items needed by all on-site team members to perform their duties at a remote location. The personal kit should contain clothing appropriate for a wide range of weather conditions, personal-care products, essential documents and other items ready for immediate travel. Agur said that such kits should not display any printed names, artwork or logos that would identify an organization.

The operator's on-site team members will not necessarily go inside the police tape surrounding the accident site. Many times, however, team members' readiness to do this is helpful to identify personnel or equipment, to recover documents, and to perform other tasks in support of rescuers and investigators. Thus, on-site team members should have appropriate immunizations, a certificate of training in universal precautions and safety equipment to prevent direct contact with blood-borne pathogens.

Preparation also should include orientation about the serious emotional risks of visiting the accident site, and the resources for coping with critical-incident stress.

Working with the emergency-operations-center leaders, the on-site team should ensure first that injured people receive medical care in the most appropriate medical facility. The on-site team should verify that the medical needs of every person involved in an accident have been assessed, or that the person has signed a release form refusing medical assessment.

Sometimes, initial trauma care at one medical facility should be followed by care at a specialty center for treatment of conditions such as burns, head injuries or spinal injuries. Professional knowledge of community medical facilities, with guidance by a consulting physician, is important in coordinating specialty care. Insurance companies can help identify in advance consultant physicians who can advise the company. Some medical organizations also provide standby medical advice and transportation on a subscription basis.

Agur said that injured persons normally should not be transported in company aircraft for medical treatment because such transportation requires highly specialized knowledge, personnel and equipment, and because of legal liabilities that the aircraft operator might incur.

If deaths have occurred, the local medical examiner's office typically will coordinate with the aircraft operator's lead family liaison about the release to the public of names of crewmembers and/or passengers killed in an aircraft accident. The medical examiner also may need assistance directly from family members and company personnel to identify deceased crewmembers or passengers. Personal items recovered from an accident site later should be inventoried and processed by a firm that has expertise in cleaning and delivering such items to survivors, family members or others.

The aircraft operator should be prepared to provide a family-liaison team. Team members should be trained by professionals to help establish support systems for families affected by an aircraft accident — and to meet families' needs after the initial accident notification. Normally, family-liaison-team members are not the people who initially deliver news to families. Rather, they typically accompany the family to an accident site, if desired, assist in funeral arrangements and attend to families' routine needs.

Agur said that family-liaison-team members also make travel arrangements and should understand the special systems and policies that airlines use during such emergencies. Typically, for example, passengers will be bumped from a flight if necessary to accommodate people who must travel to an aircraft accident site.

"You don't want anything you do to compound the tragedy," said Agur. For example, he said that the aircraft operator should provide a family-liaison-team member to accompany the casket of a deceased crewmember or deceased passenger during transport on airlines, or assist a family member to make such a flight.

Each family-liaison-team member acts as a communication bridge between the operator and the family, and must be trained to maintain a professional distance — that is, to remain within appropriate boundaries in personal relationships during a highly emotional situation.

Police will treat the site of an aircraft accident as a crime scene from the standpoint of protection of evidence, access and documentation with notes, measurements, photography and videotaping. Control of the scene transfers to the NTSB at the appropriate time and NTSB expects the aircraft operator to assume responsibility for accident-site security from the police.

When ARFF operations end, police officers normally are removed from the accident site and as the investigation begins, the aircraft operator — in conjunction with the insurance company — should ensure that the accident site remains guarded at all times, said Agur. Agur said that off-duty, uniformed police officers should be employed because of their training and authority to prevent unauthorized access.

The emergency-response center normally will be decommissioned after two days, and core-leadership-team members will continue their duties in the normal work environment, said Agur.

Workshop Tells How to Update, Test Disaster-response Plans

Disaster-response orientations, tabletop simulations and functional exercises enable an aircraft operator to test the effectiveness of a disaster-response plan — and to identify problems — with varying

degrees of realism and cost. In a tabletop exercise, core-team leaders typically would practice skills, procedures and decision making in a conference room. In a functional exercise, a larger number of people typically would report to a mock accident site or other duty stations to conduct the simulation with remote direction from the core-team leaders. Employees of the aircraft operator who have military backgrounds in safety and disaster response can be helpful in developing plans, identifying resources and creating simulations.

Agur said, “Rehearsal of the disaster-response plan is the final step — not an optional step — in the preparation process. You’re not done because you’ve written a plan or assigned people to roles. You need to exercise the plan.”

Edward W. Eaton of Nsafe, a consulting company that conducts disaster simulations for aircraft operators, said, “The written plan is about 40 percent of being ready. Next you have to get people ready to go ‘hands on.’”

Tabletop simulations typically are created by people who are knowledgeable about disaster preparation, but do not respond to the scenario, said Eaton. Typically, two or three people conduct the scenario as an emergency-response team, and another person functions as an observer and recorder of what is learned during the exercise.

Eaton said that in a functional exercise, the focus is on simulating psychological pressure on decision makers and learning how to coordinate functions and interdependencies. Often, a tabletop exercise and a functional exercise are alternated so that there is one practice opportunity each year, he said.

Training should be conducted in a realistic manner that teaches individuals to focus on the critical priorities. Sometimes the behavior of participants during simulations is surprising.

Agur said that during one practice exercise, a team leader stopped en route to the emergency-operations center to buy coffee and doughnuts for the other participants, wasting minutes that would be critical in a real aircraft accident.

U.S. Accident-investigation Process Prescribes Roles for Interested Parties

In about 98 percent of U.S. aircraft accidents, air traffic control is the first organization to become aware of the accident, said Frank Del Gandio, manager of the Recommendation and Safety Analysis Division of the FAA Office of Accident Investigation in Washington, D.C., U.S.

Del Gandio and Agur said that up to 25 people with investigative roles typically arrive at a corporate-jet accident site within the first six hours to 24 hours. Nevertheless, the total number of investigation participants might range from fewer than 10 for a simple field investigation to more than 100 for a commercial air

transport aircraft. Participants represent all organizations that have been granted party status by NTSB, and typically include investigators, pilots, engineers and maintenance specialists representing FAA; NTSB; the aircraft operator; manufacturers of airframes and engines; unions representing air traffic controllers, pilots, maintenance technicians and flight attendants; and airport representatives. (NTSB’s investigator in charge designates “parties” to provide technical assistance in the investigation under the provisions of 49 Code of Federal Regulations Chapter VIII Section 831.11 “Parties to the Investigation.” Each party representative signs a statement agreeing to comply with assigned duties, requirements and limitations.)

Del Gandio said, “There is initial confusion — and sometimes conflicts of interest — but the situation settles down and becomes organized. FAA keeps [one inspector’s] on-scene investigation separate from another inspector’s investigation [of possible regulatory violations].” FAA will send an inspector as soon as possible to confiscate and secure records from the aircraft operator.

Control of the scene typically will transfer from a command center established by police and/or ARFF commanders to NTSB at an appropriate time, depending on the status of rescue efforts.

Del Gandio said that NTSB has primacy among investigating agencies after an aircraft accident. Thus, FAA’s investigation is separate from and parallel to the NTSB investigation, he said. FAA inspectors (who are trained investigators) go to the scene of 88 percent of aircraft accidents in the United States, while NTSB sends investigators to the scene of about 21 percent of aircraft accidents. NTSB investigates all U.S. aircraft accidents, but uses reports from the FAA inspectors when NTSB personnel do not go to the accident site.

Del Gandio said that only FAA can respond to some problems that might occur because of the accident — such as closing an airport and redirecting flights — or that might be discovered during the early stages of the investigation — such as ordering inspections of similar aircraft or revising an air traffic control procedure. Other local, state and federal authorities might conduct parallel investigations of criminal activity — which includes, for example, whether a pilot was operating an aircraft under the influence of alcohol or controlled substances.

Philip Powell, acting field chief in the Office of Aviation Safety, NTSB Southeast Field Office, said, “We expect the aircraft operator to be a party [to the NTSB investigation]. You have information that we need to get. You know how you are operating, you need to be there. You have skills and knowledge that will expedite the investigation. Once you become a party, you are part of the follow-through to a conclusion. You also will have input to the final report on the accident.”

Del Gandio said that FAA and NTSB investigators prefer that an aircraft operator’s director of flight operations, chief pilot,

director of safety or director of maintenance serve as the coordinator of party representatives (party coordinator) after the aircraft operator receives NTSB party status. Some investigations of corporate-aircraft accidents are completed within two days, he said. Thus, immediate availability of a party coordinator who has the requisite authority — and at least two flight operations staff members and two maintenance staff members — is preferred.

Del Gandio said, “Party coordinators need to have the wherewithal to get information from the company for NTSB and FAA investigators. They need to be able to say to others in the company, ‘We need it now — period.’”

Agur said that he recommends that, depending on the number of corporate aircraft and size of staff, large corporate operators using multiple aircraft should keep the director of flight operations free to advise corporate leaders and direct overall flight operations while delegating authority to a chief pilot to act as party coordinator at the accident site — for at least the first 24 hours after the accident.

“The [party coordinator] becomes NTSB’s point of contact with the operator,” said Powell. “If you are offered party status, don’t turn it down. Take it. Be there. As a coordinator, you can be next to the [NTSB investigator in charge (IIC)]; your job is to know what is happening at all times.”

Party status is granted based on ability to provide technical assistance, but does not necessarily give the people who have that status the right to all information. Access to some evidence in the investigation — audio playback from the cockpit voice recorder, for example — is restricted by NTSB rules and applicable laws.

“We expect [aircraft operators] to do preplanning and to be prepared to assist NTSB,” said Powell. NTSB and FAA representatives will explain what is required if the aircraft operator’s party coordinator is a novice, but advance preparation about roles, responsibilities, protocols and what happens is preferable, he said.

“Prepare as much as possible so that every eventuality has a solution,” said Powell. “Practice once in awhile. People who have problems [after an accident] are those who are not prepared.”

Powell said that NTSB’s investigative procedure with respect to crewmembers involved in an accident is to wait until they are ready to be interviewed, recognizing their need for time to recover.

“The only barometer [controlling timing of an interview] is the attending physician’s opinion of whether [the crewmember] is able to respond,” said Powell. “The person must feel able to respond.”

“Typically, I will ask [a crewmember] to write out a statement, then use [this statement] as a guide to my interview. We respect

the person’s desire for legal representation. During the interview, we will point out differences in the testimony and other factual evidence. We encourage [all] parties to be present at this interview and to ask questions.”

NTSB has subpoena power to obtain testimony if anyone is uncooperative in the investigation, but NTSB rarely needs to use this power, said Powell. The subpoena power also gives NTSB access to all documents associated with an aircraft accident.

Regarding regulatory enforcement following an accident, Del Gandio said that the inspector responsible for FAA’s investigation will adjudicate alleged regulatory violations based on personal assessment of the situation, including the cooperation of the people involved and whether responses have been truthful in the investigator’s judgment.

“The [FAA] interview will take a different tone if [a crewmember] refuses to be interviewed; if the person refuses, [his or her FAA] certificate could be revoked,” said Del Gandio.

All Private Investigative Efforts Should Be Directed by Counsel

Workshop participants wanted to know whether a parallel investigation — that is, private investigative efforts that are simultaneous with the NTSB and FAA investigations — might reveal broad organizational or managerial areas in which improvements are needed, or otherwise might help the aircraft operator to apply findings quickly.

Knowing that in the United States, typical aircraft-accident investigations by the NTSB require months — and a final NTSB report might not be available for a year or more — some aircraft operators, working through their insurance companies and lawyers, engage independent investigators and consultants to conduct a parallel investigation.

Agur said that a parallel investigation might help the operator, airframe manufacturer, engine manufacturer and others to take appropriate actions for safety prior to NTSB’s official determination of probable cause and contributing factors. Independent investigators will not be eligible for NTSB party status, however.

Kevin McCabe, a lawyer with the firm of Lord, Bissell and Brook, said that private investigators or consultants only should be employed directly by legal counsel, not the aircraft operator, to preserve attorney-client privilege when internally discussing the preliminary facts and safety implications of the accident.

Factual information from a parallel investigation will be accessible to FAA and NTSB investigators unless the attorney-

client privilege has been established — for example, before a subpoena is issued by NTSB. Dissemination of preliminary information by all NTSB party representatives is controlled carefully by NTSB rules.

Participants asked Powell and Del Gandio whether an aircraft operator should develop an internal accident report for management before the official NTSB accident report is published. Powell said that aircraft operators should be cautious about writing internal reports because of limitations on communication by parties to an NTSB investigation before release of the final report. Nevertheless, he said that NTSB supports rapid correction by the aircraft operator of any safety problems identified during the investigation.

“You can write whatever you want about the accident after [NTSB’s] report [is issued,]” said Powell. Organizations, including those that have NTSB party status, have the opportunity to comment on the final report on the accident and also may provide separate submissions to the NTSB docket, which is not published but is accessible to the public.

In the United States, NTSB retains custody of the wreckage until the investigation is complete. The owner then will receive a written release of wreckage. Typically, the insurance company will arrange for long-term secure storage of the wreckage pending resolution of legal claims.

Agur said, “Before any item is tested to destruction, the company’s representatives should be present.”

The workshop also provided advice on the disposition of data plates that identify airframes, engines and large items of avionics equipment. Wreckage sometimes is purchased primarily to acquire these data plates and to remanufacture an aircraft from parts under the guise of conducting major repairs, said the presenters.

McCabe said, “You don’t want the wreckage going back into service.”

Edward R. Williams, vice president and engineering director of flight operations for Associated Aviation Underwriters, said, “Insurance companies do not want to be a part of that stream of commerce. We want the aircraft-registration number and related serial numbers out of existence when an aircraft has been destroyed.”

McCabe said that because documentation of procedures, certification, training and similar matters are important in any investigation, a legal review of related documents should be performed periodically by a lawyer, and that manuals should be updated continually to represent current operations in a manner that shows the operator’s practice of meeting and exceeding industry standards, and of keeping records up to date.

Lawyers, Insurance Companies Provide Immediate Services

McCabe said that before a disaster-response plan is adopted, the plan should be reviewed by a lawyer who understands how aircraft accidents are investigated and litigated.

He said that disaster-response plans commonly are weak in two areas: preparation for document-gathering after an accident and “too many things assigned to too few people.”

Disaster-response plans should specify not only roles, but also how people are assigned to these roles, because the names of people will change over time, said McCabe. One important action for legal purposes is to document all events such as phone calls and decisions in a logbook during the days after an aircraft accident. A person who cannot remember in reasonable detail what occurred will not appear to be a professionally competent witness in court, he said. Records are an effective — and permissible — aid to memory.

Legal counsel should brief disaster-response-team members on what they can do and what they cannot do from a legal standpoint. Decisions should be made in advance about who will speak for the company and who will be the operator’s coordinator to NTSB during an accident investigation.

“Some lawyers just prevent you from making mistakes,” said McCabe. “You will need lawyers who create solutions. You may receive [the complaint in] your first lawsuit as little as 48 hours after an accident; it will infuriate you.” The appropriate response is simply to provide the documents to legal counsel and not to be concerned about the details or nature of allegations at this early stage, he said.

Legal counsel should brief management about the findings of private investigators and consultants in an attorney-client relationship, said McCabe. Legal counsel also can prepare general information for internal use about the findings of an investigation.

For operators that conduct international flights, advance knowledge of the available aviation legal counsel is helpful.

Agur said that in some countries, local authorities’ standard practice is to arrest crewmembers. The FAA has no legal authority internationally, but many U.S. embassies have an FAA representative on site, he said. The U.S. Department of State provides information, including workshops, to help airlines during aircraft accidents outside the United States. Several aviation organizations — such as the Air Line Pilots Association, International; International Air Transport Association; and the International Civil Aviation Organization — also have developed networks of resources worldwide.

Operators of international flights at least should compile emergency information for typical destinations, customs stops

and en route refueling locations. Information should include time-zone information, a method for obtaining 24-hour emergency language interpretation (spoken) and language translation (written), telephone instructions and fax instructions. Operators also should have a directory of everyone who might be called upon during an emergency in these locations — including medical consultants, legal advisers, security specialists, diplomatic resources and crisis interventionists. A network of international accident-investigation consultants also should be on call.

Presenters at the workshop said that insurance companies can provide an aircraft operator with the expertise, resources and experience necessary after an aircraft accident.

Williams said that the standard practice in the aircraft-insurance industry is to send insurance-company representatives to assist the aircraft operator immediately.

“We’re in the business of helping a company get through the first three days to five days following an accident,” said Williams. “We are co-responsible, and we can be a tremendous resource. We have done this many times, and we can help an operator avoid some of the possible pitfalls. The insurance company must defend the company in any and all lawsuits, and will appoint legal counsel quickly.”

Emergency-contact information for insurance brokers and insurance underwriters should be readily accessible and part of the disaster-response plan, said Williams. The aviation insurance company should be contacted without delay if the broker cannot be reached immediately during the initial notification process.

Worker’s compensation insurance companies and comprehensive general-liability insurance companies also should be notified of an aircraft accident — even if their coverage apparently would not apply to aircraft accidents, said Williams. This notification enables these companies to analyze the liabilities involved and to respond according to insurance-policy terms.

Flight Department Should Focus on Narrow Scope of Responsibilities

The aircraft operator will be expected to respond effectively to an aircraft accident by aviation regulators, investigative agencies, news media and the families of passengers and crewmembers. The following interest groups represent the minimum that should be considered in a disaster-response plan:

- ARFF and law enforcement authorities;
- Airport authorities;
- Crew and passengers;

- NTSB or equivalent;
- FAA or equivalent;
- Families of passengers, crewmembers and people affected on the ground;
- News media;
- Insurance companies;
- Senior management and employees;
- Airframe/powerplant manufacturers, vendors and similar organizations;
- Lawyers; and
- International governments.

Given these demands, a flight department that experiences an aircraft accident has a unique role. The disaster-response plan should specify what the flight department will do — for example, which pilots will be assigned to the on-site team — and what the flight department will not do — for example, notify passenger families or direct the disaster response.

This plan ensures that the flight department — after the stand-down — will be free to respond to contingencies and to continue operations safely by applying staff members’ specialized knowledge and skills.

All personnel involved in maintaining aircraft documents must be provided with training and legal advice on their responsibilities for preserving, securing and preventing any loss, theft or alteration of documents after an accident under NTSB Part 830 (or other applicable regulations outside the United States) and the aircraft operator’s SOPs. A lawyer should advise the flight department’s staff periodically on how to store documents to ensure legal proof of the chain of custody. Such SOPs typically require a sign-out logbook.

McCabe said, “If documents disappear, the jury will be instructed by the judge to presume that the [missing document] was adverse to the company and that’s why it disappeared. The court will not give that instruction [to a jury] if an explanation can be provided.”

Identify and Treat Critical-incident Stress

Sound planning — with advice from disaster-response specialists — helps to prepare an aircraft operator to respond to the effects of critical-incident stress, to prioritize services for employees and to maintain safe flight operations through knowledge of relevant human factors.

Diane Domit, a crisis-intervention specialist with Crisis Management International, said during the workshop that counseling helps to accomplish “normalization” of events for individuals. Individual counseling and small-group counseling are helpful in detecting effects such as hypersensitivity and irrational perceptions that people were at fault. People who were not directly involved sometimes personalize events and show symptoms of post-traumatic stress syndrome (PTSD), said Domit.

Being involved directly in an aircraft accident is emotionally easier in some ways than arriving at the scene of an aircraft accident, she said. The people most at risk for PTSD in an aviation accident are first responders who are not trained, said Domit.

Workshop participants wanted to know whether training for various roles involved in executing a disaster-response plan prepares people fully for the actual experience.

Domit said, “You can’t be trained to be tough enough for anything. You can’t prepare fully for what you might see.” But training prepares people better than no training, she said.

Thus, disaster-response plans should be specific concerning which company representatives might be asked to go to an accident scene as part of the on-site team — and possibly to go behind the police tape. Not only the people present at the accident scene, but also family-liaison-team members who interact directly with survivors, families and others are at risk for emotional problems.

Domit also said that the practice of holding a crew incommunicado — that is, completely isolated from other people — prior to meeting with accident investigators or the crewmembers’ families is considered inappropriate by specialists in critical-incident-stress recovery.

“Pilots should not be left alone or isolated from support; this can lead to long-term problems,” said Domit. “It can be very abusive not to let someone talk about the experience.” Nevertheless, companies legitimately may request and expect that the crew will restrict the people with whom they discuss the accident.

Crewmembers also should be told how the accident will be investigated and what support they will receive during the process, said Domit. Professional pilots might never lose their public poise after involvement in an aircraft accident, but then might need professional help. They might not ask for help because of concerns about fitness for duty, said Domit.

McCabe said, “Flight crewmembers have a sense of responsibility after an accident and may speak inaccurately about what happened. The tendency is for [crewmembers] to make statements that are legally risky out of guilt about what happened.”

A statement by a crewmember — such as “It’s all my fault.” — might not be remembered until five years or six years later when it surfaces as a legal “statement against interest” in litigation related to the accident, said McCabe. Thus, employees should be trained to follow company policy on making statements after an accident, the role of legal counsel and the risks of inappropriate communication.

Workshop participants wanted to know whether disaster-response training might be too stressful for some employees. They said that employees sometimes had resigned from their jobs when asked to attend training for their role in a disaster-response plan. Domit said that there is a need to be sensitive to individuals’ willingness to participate actively in the response and to acknowledge those who might not be able to perform the duties outlined in the plan.

Domit said that professional counselors also advise that a person who has experienced personal loss or trauma in the preceding 12 months to 18 months be exempted from performing disaster-response duties if possible.

Selection of every person who will deliver news to a family is considered extremely important in helping the family recover from the emotional trauma. Thus, the aircraft operator’s notification team members must be thoroughly familiar with policies, answers to factual questions, SOPs and making emergency travel arrangements. They also must maintain close contact with the emergency-operations-center leaders regarding accuracy and timing of the release of information.

Chastain said, “We have included in our training all staff who could be called on to assist families in an emergency. It doesn’t make a difference that a [family-liaison team member] is not an expert in aviation.” Selection, orientation and training may identify a person, for example, who is a specialist in accounts payable and also demonstrates the interpersonal skills and sensitivity to be an excellent family-liaison-team member.

Domit said that advance training of nonemployee volunteers and retirees as staff extenders and family-liaison-team members has been done successfully by some aircraft operators. No family liaison is expected to provide the equivalent of professional psychological support, however.

Domit said that flight-department staff should not be involved in contacting families, however, other than families with personal ties to the flight department.

“Psychological first aid” was recommended for all employees — including critical-incident debriefing (sometimes called defusing) within 12 hours for those directly involved in responding to an aircraft accident. Domit said that counselors and other mental health professionals can help assess people’s needs and help prevent them from becoming “secondary victims” of the aircraft accident.

Thus, the aircraft operator's SOPs should require mandatory attendance at individual and/or group debriefings for participants in a disaster response. Counselors conduct assessments of all the participants and their needs during this process, said Domit. Experience shows that people otherwise might not volunteer to receive counseling or additional services, and the operator could have difficulty requesting or requiring that only selected individuals receive such assistance.

Nearly all the workshop participants indicated that they have employee-assistance programs. Domit said, however, that it is important to know whether any given program provides crisis counseling, or whether other resources would be needed in case of an aircraft accident.

In summary, the development of a comprehensive disaster-response plan is time consuming, but the process can be accelerated significantly by adapting a template, then periodically refining the result.

Domit said that at an appropriate time, the aircraft accident should have a symbolic point of closure for the aircraft operator — perhaps a public event that helps employees come together to accept what has happened, to acknowledge their loss in healthy ways, and to continue their lives. The legal process that follows might require four years to five years. ♦

Further Reading From FSF Publications

Castro, Raoul. "Training the Entire Flight Department." *Flight Safety Digest* Volume 9 (February 1990).

Coarsey-Rader, Carolyn V. "Survivors of U.S. Airline Accidents Shed Light on Post-accident Trauma." *Flight Safety Digest* Volume 12 (October 1993).

Edwards, Mary. "Post Traumatic Stress Disorder (PTSD) Can Linger Long After a Disaster." *Cabin Crew Safety* Volume 27 (March–April 1992).

Foushee, H. Clayton. "Preparing for the Unexpected: A Psychologist's Case for Improved Training." *Flight Safety Digest* Volume 9 (March 1990).

FSF Editorial Staff; DeMary, Richard. "Sudden Impact — A Flight Attendant's Story of Courage and Survival." *Cabin Crew Safety* Volume 30 (March–June, 1995).

Koch, David H. "Passenger's Account of Escape from Burning Boeing 737 Highlights Cabin Safety Issues." *Cabin Crew Safety* Volume 28 (May–June 1993).

Ratcliff, John H. "Disaster Preparation for Corporate Operators." *Accident Prevention* Volume 47 (October 1990).

Visit our World Wide Web site at <http://www.flightsafety.org>

AIRPORT OPERATIONS

Copyright © 1999 FLIGHT SAFETY FOUNDATION INC. ISSN 1057-5537

Suggestions and opinions expressed in FSF publications belong to the author(s) and are not necessarily endorsed by Flight Safety Foundation. Content is not intended to take the place of information in company policy handbooks and equipment manuals, or to supersede government regulations.

Staff: Roger Rozelle, director of publications; Mark Lacagnina, senior editor; Wayne Rosenkrans, senior editor; Linda Werfelman, senior editor; John D. Green, copyeditor; Karen K. Ehrlich, production coordinator; Ann L. Mullikin, production designer; Susan D. Reed, production specialist; and David A. Grzelecki, librarian, Jerry Lederer Aviation Safety Library.

Subscriptions: US\$60 (U.S.-Canada-Mexico), US\$65 Air Mail (all other countries), six issues yearly. • Include old and new addresses when requesting address change. • Flight Safety Foundation, Suite 300, 601 Madison Street, Alexandria, VA 22314 U.S. • Telephone: +1(703) 739-6700 • Fax: +1(703) 739-6708

We Encourage Reprints

Articles in this publication, in the interest of aviation safety, may be reprinted in whole or in part, in all media, but may not be offered for sale or used commercially without the express written permission of Flight Safety Foundation's director of publications. All reprints must credit Flight Safety Foundation, *Airport Operations*, the specific article(s) and the author(s). Please send two copies of the reprinted material to the director of publications. These reprint restrictions also apply to all prior and current articles and information in all Flight Safety Foundation publications.

What's Your Input?

In keeping with FSF's independent and nonpartisan mission to disseminate objective safety information, Foundation publications solicit credible contributions that foster thought-provoking discussion of aviation safety issues. If you have an article proposal, a completed manuscript or a technical paper that may be appropriate for *Airport Operations*, please contact the director of publications. Reasonable care will be taken in handling a manuscript, but Flight Safety Foundation assumes no responsibility for submitted material. The publications staff reserves the right to edit all published submissions. The Foundation buys all rights to manuscripts and payment is made to authors upon publication. Contact the Publications Department for more information.