NBAA
SAFETY MANAGER CERTIFICATE

FIRESIDE PARTNERS
VIGILANT • READY • RESPONSIVE

Aviation Emergency Response Planning

The First Hour

A Guidebook for the Frontline

TABLE OF CONTENTS

PREFACE **3**

INITIAL CONSIDERATIONS **4**

Objectives: 4

Assumptions: 4

ERP FRONTLINE MILESTONES **6**

Awareness 6

Confirmation 8

Beyond Confirmation 10

CALL TO ACTION **11**

SUMMARY **12**

PREFACE

This guidebook provides your Frontline aviation personnel with the necessary information,procedures, and confidence to ensure that your organization's training and Plan maximizes the potential for a rapid, appropriate, and effective response.

Much confusion, subjectivity, and lack of clarity may surround aviation emergency response planning and execution. Emergency Response Plans are often underdeveloped, unrealistic, or, in some instances, do not exist at all. Aviation accidents are, thankfully, rare events, but they do occur. When they do, their impact on people and organizational brand strength is significant. The immediate and potentially adverse long-lasting effects of an accident dictate the absolute necessity for an effective,rapid, and compassionate response.

This guidebook addresses critical actions to be taken in the acute phase of a response. These actions must be accounted for in an Aviation Emergency Response Plan (ERP). Theguidebook does not address all scenarios but is intended to provide a starting point for discussion and review of your ERP.

This guidebook provides value to anyone in your flight department, but focus is on the scheduler/dispatcher. These professionals often obtain awareness of an aviation accident through flight following or receiving a call about an accident. In addition, the Scheduler/Dispatcher has intimate knowledge of the flight schedule, and unlike flight crews, Schedulers and Dispatchers are usually not on the road. As such, they are consistently available resources. For these reasons, Schedulers/Dispatchers or any other internal personnel who could receive initial awareness of an aviation accident together comprise of the "ERP Frontline."

If your ERP Frontline is aware of the Plan objectives and has the training and tools neededto respond effectively and appropriately, your organization is in a much better position to react successfully.

This guidebook should not be mistaken for a policy document, a listing of industry requirements, or a legal treatise. Where specific language and references from official sources are provided, they are cited appropriately.

INITIAL CONSIDERATIONS

Before addressing specific tasks, Frontline personnel should understand your primaryobjectives and assumptions surrounding any effective response.

Objectives:

As you develop or review your ERP objectives, you will find that anything you put down willgenerally fall under one of these three broad categories.

- ✓ **Take Care of People (People):**
  We define "taking care of people" as supporting the best interests or wills of thosedirectly impacted by an aviation accident, their families, the organization's employees, and stakeholders.
- ✓ **Comply with regulation / support the investigation (Participation):**
  When discussing post-accident regulations, 49 CFR, Part 830, and 49 CFR, Part 831,are not the only relevant documents, but these two regulations comprise the majority of ERP regulatory concerns.
- ✓ **Communicate Effectively (Perception):**
  This involves communication with family members, employees, stakeholders, and the media/general public.

Assumptions:

Once your ERP objectives are set and understood, consider and discuss the basicassumptions regarding any response:

- ✓ **Time is an essential and precious commodity:**
  The speed at which affected families want information, the urgency of the efforts to protect life and property, and the near immediacy of the media response maketime a very limited resource.
- ✓ **Collection, analysis, and dissemination of data is a significant component of the acute phase of the response:**
  The first few hours of a response comprise a significant amount of activity focusedon collecting and verifying data. What is the status of those on board?
  What resources does our organization have to use in support of the response?What do we know about the accident itself?
- ✓ **The Plan must be flexible:**
  Your Plan should provide an appropriate response for a realistic yet serious scenario. Indeed, the actual value of a plan is its flexibility and application tomultiple types of events.

Some examples of where a flexible Plan can help:

- A significant departure from normal aviation operations requirescommunication inside and outside the organization
- A potential negative impact upon the Company brand name results from anunplanned event
- A possible negative impact upon the well-being of your employees
- A potential negative impact upon the well-being of your customers orstakeholders

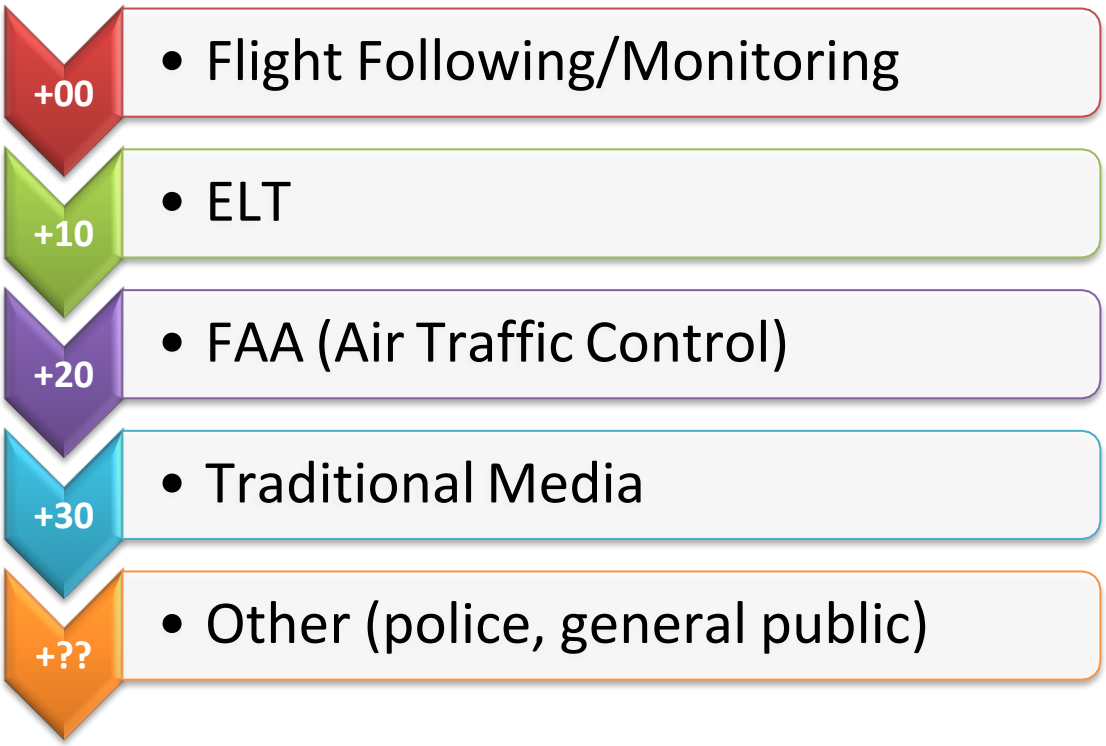
✓ **The execution of the initial phase of the response significantly influences overallsuccess:**
Initial actions do not comprise all of the components of an appropriate aviation emergency response. The way these initial actions are completed does, however, provide a foundation for an effective response. Here is a pictorial representation ofa complete response.

ERP FRONTLINE MILESTONES

Awareness

The **first milestone following an aviation accident (or any significant event) is awareness**. Awareness (realization that an accident has occurred) by the first responders, awareness bythe controlling agencies (such as the FAA) and awareness by you, the aircraft operator.

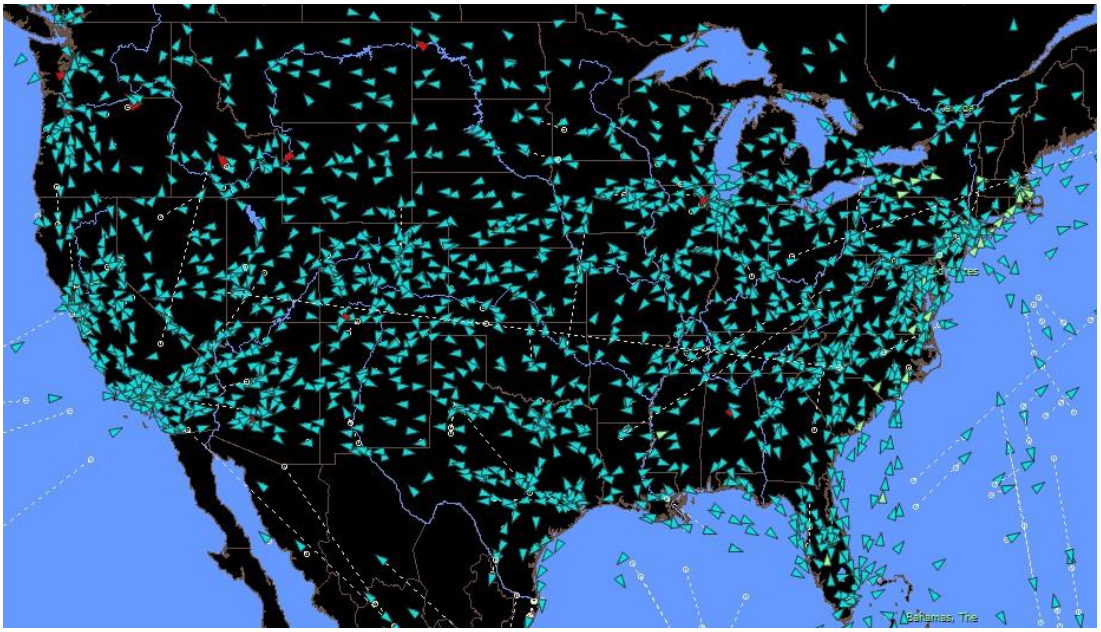
Operators are notified of an accident in one or more ways. Here is a shortlist. The numbers highlighted to the left of the list item reflect the number of minutes that may typically pass between the occurrence and awareness.



The aviation ERP and respective activities cannot begin until your organization becomes *aware* of an accident. This is one area of the response where you, the aircraft operator, cancontrol the time it takes to respond. There are many areas within an aviation emergency response where you cannot control the speed of events. This is not the case here.

- ✓ **Flight Following:**
  If time is a crucial resource, then rapid awareness of an event is the goal. No other source of information can provide you with rapid information like active flight monitoring. For some aviation accidents, awareness by the operator could *precede* the accident by several minutes

Flight monitoring is much more than "on-times" and blips representing your flightson a screen. Flight following is the near-continuous Situational Awareness of your aircraft. Domestically, updated flight data appears every sixty (60) seconds.
Internationally data refresh rates vary, but using data from 3rd party datalink providers; your aircraft can be viewed by your organization 24/7/365 anywhere inthe world. For accidents that happen off of the airport, using applications for effective monitoring of all flight movements for irregularities should be a fundamental component of your flight department.



- ✓ **Emergency Locator Transmitter (ELT)**:
  Despite the robustness of the data coming from flight monitoring applications, theyremain blind to most accidents that occur on the ground (for example, an aircraft departing the active runway after landing at the intended airport).

  The ELT is designed to be manually activated or triggered by G-forces. ELT activations are initially monitored by the National Oceanic and Atmospheric Administration (NOAA). Upon activation over land, the US Air Force Rescue Coordination Center at Tyndall Air Force Base in Panama City, Florida, will receive notification from NOAA and contact the phone number associated with the ELT registration.

  The physical severity of the accident may be significant enough to disable the ELT. Still, if it does activate, official notification of the accident to the aircraft operator is usually rapid.

- ✓ **Federal Aviation Administration:**
  Awareness of a significant aviation accident often comes to many aircraft operatorsthrough the FAA.

  If there is a suspected aviation accident, the local Air Traffic Controller responsible for the aircraft will dispatch first responders. Following this action, the local ATC facility will contact the Air Traffic Control System Command Center (ATCSCC) in northern Virginia. The ATCSCC will look up the phone number listed onthe aircraft's Flight Plan. This is how the aircraft operator will first be alerted to a potential accident. And that is why that telephone number is critical.

  If you depend upon the FAA as your source of awareness, you may find a significant delay between the occurrence and your notification. While this is often a relatively reliable source of information, it would be hard to justify using this as a primary source of awareness when there is other timelier sources of information at your disposal.

- ✓ **Traditional Media:**
  We have all seen first-hand how the media responds to dramatic events such as aviation accidents and other types of large-scale disasters. The media will move quickly and not wait for you to become aware of an aviation accident beforereporting on it.

  Suppose two of our three main response objectives involve taking care of people and effective communications. In that case, your Company and the families should not find outabout an aviation accident FIRST through the media. If they do, this indicates a potential breakdown in Situational Awareness, at least perceptually.

- ✓ **Other:**
  Police officers and the general public may provide you with first notification. Yourinitial awareness of an event by these unexpected sources can create significant problems. The time between the accident and your understanding of it is usually significantly delayed. In addition, these sources of information typically call into more generic company phone numbers. This can create logistical and perceptualissues for your Frontline call takers.

Confirmation

In aviation, many single points of data may erroneously indicate an aviation accident. Whatever the source of awareness, the **confirmation of the aviation accident is a critical component of a successful aviation response.**

Here are examples of activities to assist with confirmation. This list is not all-inclusive butoffers objective and consistently available sources of information:

- ✓ **Compare the reported location of the accident versus the expected location ofthe aircraft:**
  For example, USAF Search and Rescue contacts you with a potential ELT activationof your aircraft near Kansas City. Is your aircraft scheduled to be in the vicinity of Kansas City near the accident time? If so, this is the first indication that the reportmay be accurate.

- ✓ **Contact the crew via direct calls or messages to the cockpit as well as the crews'mobile phones:**
  It seems like an obvious step; however, it may be overlooked in the tense first few minutes of response.

- ✓ **Contact the local Air Traffic Controller for additional information:**
  As discussed earlier in this guidebook, the local Air Traffic Controller will often know of an aviation accident before groups such as the ATCSCC. As a result, thelocal controller is a critical source of information.

- ✓ **Monitor First Responder Radio Traffic for reports of an aviation accident:** Reports via first responder radio frequencies in the vicinity of the report of anaccident provide a high confidence confirmation of an accident.

- ✓ **Contact the destination Fixed Base Operator (FBO):**
  Often, a call to the destination FBO to ensure your aircraft is parked safely on the ramp is prudent. Even when the aircraft is not at the FBO, the FBO personnel mayhave helpful local information to gather data.

- ✓ **Monitor Media:**
  Reports via the media should never be considered "confirmed" as the informationmay be from unofficial sources. That being said, data such as pictures of the accident may help provide information that, after confirmation, may be of value.

There is no single definition of "confirmation" from accident to accident and organization to organization. You should define what system or confirmation method you will use as an essential part of your Plan. Remember, you can and should lean on your Service Providers to have the aforementioned capabilities and *get the information directly to you*. Your ability to rapidly "confirm" the event within the Flight Department and provide that confirmation *credibly* to your corporate resources (Human Resources and Communications, for example) ensures that all response resources within your organization are initiating their activities rapidly.

Beyond Confirmation

Some of the more significant activities are as follows:

- ✓ **Activate Response Teams:**
  Until this point, the Frontline has had the full response on its shoulders. Oncethe aviation accident is confirmed, additional resources can be utilized.

- ✓ **Secure the Trip Sheet:**
  Ensuring you know who is on the aircraft is a critical component of the humanitarian response. After confirmation, securing the trip sheet and confirming the accuracy (checking to see if there are any last-minute changes) is one of the highest priorities.

- ✓ **Initiate response logs/forms:**
  As discussed earlier, there will be a significant amount of data coming from multiple sources. Recording the information and your activities will reduceconfusion as more resources from your Company start to assist in the response.

  In addition to an Accident Verification Form in your aviation ERP (which often addresses awareness of the event), a table or graph similar to the following might also be a valuable inclusion into your aviation ERP. This can help you quickly and confidently recap what steps youhave taken to confirm the accident is real:

ACTION	YES	NO	UNKNOWN
1. Flight Following/Flight Plan indicates aircraft operating in the suspected area			
2. Contact with the crew is UNSUCCESSFUL			
Contact your 24/7Emergency Response Service Provider (if applicable)			
3. Contact local ATC about reported accidents			
4. Contact First Responders			
5. Contact Closest Airport for additional information			
6. Contact international handler if appropriate			

(Note: Seek as many sources of confirmation as possible. Not just of an aircraft accident – but that it was YOUR aircraft. Often paint schemes and registration numbers are not visible depending upon factors like post-crash fires, the force of impact, etc.)

- ✓ **Prepare for inbound calls from multiple sources:**
  At some point, shortly after you become aware of an event, your co-workers and the general public may also become aware of the event. That, coupled with potentially numerous calls from outside sources such as the NTSB, FAA, First Responders, Media, and Families, can create both a logistical and liability challenge. A plan for what to say and who should say it is a critical component of an aviation ERP.

CALL TO ACTION

We sincerely hope this guidebook provided you with several items for consideration and a better sense of some of the critical components in an effective response duringthe first hour.

Take the following specific actions right now to ensure your Plan, your people, and your tools are appropriate and effective.

- ✓ **Ensure you are directly, or through a service provider, aware of your aircraftlocation at all times anywhere in the world:**
  Verify the flight data you receive is robust enough to indicate anomalies in the flight (diverting, holding, deviation from Plan, etc.). There are resources in theindustry to help you.

- ✓ **Verify the telephone numbers associated with your Flight Plans and ELT:**
  To be effective, the number needs to ring to a telephone that will be answered24/7/365 by someone familiar with the flight operation and authorized to confirm or provide essential information.

- ✓ **Front line call takers (those who are identified on the Flight Plan or ELT phone numberor who answer published phone numbers on your organization's website) should know**:

- What questions to ask inbound callers
- What information/call routing should be provided to callers who areemployees, family members, or media
- Where commonly used logs/forms are held and their correct use

- ✓ **Have a plan for other airborne aircraft:**
  There is no one size fits all approach when dealing with other aircraft airborne in the wake of an aviation accident. Like other areas of emergency response, the timeto have discussions on methodology and protocol is NOW. Consider when and howyou will communicate with other airborne crews when one of your aircraft is involved in an accident. Make a list of items to check which may indicate a systemic problem in the fleet (similar sources of fuel or similar recent maintenance, etc.)

- ✓ **Ensure all ERP Frontline team members are trained:**
  Emphasize their responsibilities, tools at their disposal, internal and externalprotocols for communication, and associated contact lists. Where gaps exist, mitigate them with additional internal or external resources.

- ✓ **Look for ways to utilize your aviation ERP for events less severity than acatastrophic accident:**
  Look at events with a humanitarian or brand protection component that canbenefit from your aviation ERP methodology.

SUMMARY

Your aviation ERP provides your Company's *intent* after an aviation accident. Refining and testing your Plan and training your response resources is what transforms the intent into *action*. If your ERP Frontline is aware of the Plan objectives and has the training and tools needed to effectively and appropriately respond, your organization is in a much better position to respond successfully.

Integrating the suggestions within this guidebook is an important step toward developing amethodology to receive *Awareness* of an accident, *Confirm* that it is real, and *Activate* the initial ERP processes.

Thank you for your work and dedication to effective emergency response planning. Nocompany wants or expects to use its aviation ERP, but responsible companies plan nonetheless.