ADM is all about learning how to gather information, analyze it, and make decisions. It helps the pilot accurately assess and manage risk and make accurate and timely decisions. Although the flight is coordinated by a single person, the use of available resources, such as air traffic control (ATC) and flight service stations (FSS)/automated flight service stations (AFSS), replicates the principles of CRM.

References on SRM and ADM include:

- FAA-H-8083-2, Risk Management Handbook.
- Aeronautical Information Manual (AIM).
- Advisory Circular (AC) 60-22, Aeronautical Decision Making, which provides background information about ADM training in the general aviation (GA) environment.
- FAA-H-8083-25, Pilot's Handbook of Aeronautical Knowledge.

## **Aeronautical Decision-Making (ADM)**

Making good choices sounds easy enough. However, there are a multitude of factors that come into play when these choices, and subsequent decisions, are made in the aeronautical world. Many tools are available for pilots to become more self aware and assess the options available, along with the impact of their decision. Yet, with all the available resources, accident rates are not being reduced. Poor decisions continue to be made, frequently resulting in lives being lost and/or aircraft damaged or destroyed. The Risk Management Handbook discusses ADM and SRM in detail and should be thoroughly read and understood. While progress is continually being made in the advancement of pilot training methods, aircraft equipment and systems, and services for pilots, accidents still occur. Historically, the term "pilot error" has been used to describe the causes of these accidents. Pilot error means an action or decision made by the pilot was the cause of, or a contributing factor that led to, the accident. This definition also includes the pilot's failure to make a decision or take action. From a broader perspective, the phrase "human factors related" more aptly describes these accidents since it is usually not a single decision that leads to an accident, but a chain of events triggered by a number of factors. [Figure 14-1]

The poor judgment chain, sometimes referred to as the "error chain," is a term used to describe this concept of contributing factors in a human factors related accident. Breaking one link in the chain is often the only event necessary to change the outcome of the sequence of events. The following is an example of the type of scenario illustrating the poor judgment chain.

## Scenario

An emergency medical services (EMS) helicopter pilot is nearing the end of his shift when he receives a request for a patient pickup at a roadside vehicle accident. The pilot has started to feel the onset of a cold; his thoughts are on getting home and getting a good night's sleep. After receiving the request, the pilot checks the accident location and required flightpath to determine if he has time to complete the flight to the scene, then on to the hospital before his shift expires. The pilot checks the weather and determines that, although thunderstorms are approaching, the flight can be completed prior to their arrival.



**Figure 14-1.** The pilot has a limited capacity of doing work and handling tasks, meaning there is a point at which the tasking exceeds the pilot's capability. When this happens, either tasks are not done properly or some are not done at all.