CHAPTER 1

Plane Crashes and Public Policy

During the week of July 14, 1996, a drunk driver in Indiana died when his car went off the road.[1] A truck driver in Ohio died when he lost control of his big rig.[2] Two sisters and two children were killed in a crash en route to a vacation Bible school.[3] That week 842 people died in motor vehicle accidents, yet none of the accidents was covered by the national media.[4] That same week 230 people lost their lives when Trans World Airlines flight 800 exploded just after takeoff from JFK International Airport and crashed into the Atlantic Ocean. Yet the crash of the airliner, not highway deaths, became the year's top press story, as plane crashes receive media coverage disproportionate to their death toll.[5] Understanding how plane crashes affect airline transportation policy is the focus of this book.

The terror attacks of September 11, 2001, led Jane Garvey, the head of the Federal Aviation Administration (FAA), to order the first-ever national ground stop, which effectively shuts down the domestic aviation system. Aviation security rose to the top of the transportation policy agenda. Despite all the tumult, however, one feature of air travel did not change: It remained an extremely safe way to travel. Fewer than 14,000 individuals have perished in U.S. airline disasters between the beginning of public aviation and the year 2000.[6] Nearly three times as many people lose their lives in automobile accidents *every year*. Yet a Gallup poll commissioned by the Air Transport Association indicates that a plurality of the public views automobiles as the safest mode of transportation.[7]

A dramatic rise in air travel has caused problems, but airline safety is not among them. In 1990 there were nearly 7 million departures. In 1999 that number was nearly 9 million.[8] At the same time, the infrastructure of the national aviation system is crumbling: Air traffic control systems are outmoded, delays have skyrocketed (up 33 percent in the 1990s), and service complaints have risen.[9] Although these problems receive attention from policymakers and the press, the airlines are often able to contain them by promising to make changes voluntarily.

Plane crashes are different. When a crash occurs on American soil, the mass media, the public, and the government focus on it, sometimes, perhaps, out of proportion to its importance. In the era of the twenty-four-hour news cycle, media coverage is immediate and continuous as is media speculation regarding the cause of the crash. Government teams rush to investigate, elected officials offer condolences and promise to find the cause, and sometimes legislation is quickly introduced.

Plane crashes capture our attention because they bring to the fore a fact about flying that is often unexpressed: Once the cabin door closes, passengers are at the mercy of the crew and the equipment. By nature, humans are loath to relinquish control over their fate, but that is precisely what travelers do each time they fly. As a consequence, faith in the air travel system is contingent on the public learning the reason a plane crashed. If there is an explanation, then there presumably is a way to prevent future incidents of a similar nature. Randomness is not a sufficient explanation, even if it is the only one available. "In such a culture," write Eleanor Singer and Phyllis Endreny in *Reporting on Risk*, "the ultimate horror is a disaster without an explanation, an essentially random event."[10]

The Airline Industry at a Glance

In March 1915 the Benoist Company began the first regularly scheduled passenger airline in the United States, offering travel between Saint Petersburg and Tampa, Florida. Less than one year later, the government formed the National Advisory Committee for Aeronautics to support aviation research and assist this nascent industry.[11] In May 1926 President Coolidge signed the Air Commerce Act into law, and the government entered into a regulatory partnership with the airline industry.[12]

Before 1978 the federal Civil Aeronautics Board (CAB) regulated schedules and fares: An airline could not initiate a new route or change fares

without approval from the CAB. As the industry grew, such a regulatory apparatus became unwieldy. The last chairman of the CAB, Alfred Kahn, did the unthinkable in Washington: He called for the elimination of his own agency (which was accomplished with the passage of the 1978 Airline Deregulation Act).[13] Suddenly, the fundamentals of air travel changed. The hub-and-spoke system, pioneered by Delta Airlines, became the industry standard.[14] Under this system, airlines use large airports as hubs for flights to a multitude of locations, allowing potentially unprofitable routes to be viable. For instance, the market for a flight from Rochester, N.Y., to San Antonio, Texas, is not very large. However, with the hub-and-spoke system, an airline can offer a flight from Rochester to Chicago, a United Airlines and American Airlines hub with connections to hundreds of cities, including San Antonio. One drawback of the hub-and-spoke system is that it has led to domination of certain airports by one or two airlines, leading to high ticket prices when the hub is the final destination.[15]

Deregulation also spawned no-frills airlines, which often eschew the use of hubs and emphasize point-to-point travel. The most notable example is Southwest Airlines, formed in 1971 to handle intrastate travel in Texas.[16] Southwest has since become a major player by expanding at smaller airports rather than at hub airports controlled by the major airlines. It is one of the few airlines to weather the recent economic downturns of the industry, and competitors now routinely match Southwest's fares on certain routes.

In general, deregulation is lauded for producing lower fares and more options for air travelers. To be sure, there have been calls for reregulation, most notably in 1989, when Senators Howard Metzenbaum (D-Ohio) and Robert Byrd (D-W.Va.) introduced S. 1854, known as the Airline Reregulation Act. The bill never left committee, and most observers agree that the days of government control of airline routes and fares have passed. The economists Steven Morrison and Clifford Winston find that fares dropped 22 percent as a consequence of deregulation.[17] Air travel is therefore now open to more travelers than it was in the 1970s. In 1978 about 25 percent of all Americans took a flight; this measure reached nearly 40 percent in 1997; in 1978 around 65 percent had ever flown on a commercial airliner, reaching 80 percent by 1997.[18]

The effect of deregulation on airline safety is more complicated. Most economists conclude that airline safety has been enhanced or at the very least been unaffected by the change.[19] But the safety benefits of a deregulated marketplace are not immediately obvious. First, when rates and routes

were heavily regulated, an airline's competitive edge was through service, which implicitly includes safety.[20] In a deregulated marketplace, however, an airline's competitive advantage comes in large measure from convenience and price. Second, the rise of low-cost airlines like Southwest has increased pressure on major airlines to cut costs, some of which may affect safety. Third, the hub-and-spoke system, which has been generally adopted under deregulation, produces a greater number of stops for each passenger, and accidents occur most often during takeoffs and landings.[21]

Counterbalancing these negatives is the desire of airlines, like most corporations, to protect their brand. Also, lower prices may induce individuals to shift from highway to airline travel, which is safer for longer distances. An airline can weather a single plane crash, but if its planes fall out of the sky regularly or if there is a perception that the airline is unsafe, the company or its management is in dire straits. Even though the effect of a crash on the bottom line is often negligible, the perception that an airline is dangerous can be fatal, and there can be a contagion effect. For instance, after the crash of low-cost carrier ValuJet's flight 592, all low-cost airlines suffered massive declines in their stock, while major carriers (including Southwest) saw a slight increase.[22]

Overall, crashes have been infrequent since deregulation.[23] In 1993, 1998, and 2002 there were no deaths on any major domestic carriers. Yet there is a continual tension between optimal levels of safety and the view that airline travel should be perfectly safe. The Department of Transportation (DOT) and the FAA have both set a goal of zero accidents, a goal that can be met only by grounding all planes.[24] In other words, this objective is unrealistic. Plane crashes are already rare, so the marginal cost of saving an additional life is extremely high.[25] The median cost for every life-year saved by an FAA regulation is estimated at $23,000, which is remarkably low.[26] By way of comparison, the Environmental Protection Agency imposes an average $7.6 million for every life-year saved. If regulations are imposed to address minor risks of air travel, the marginal cost of saving a life will skyrocket. Airlines therefore tangle with the FAA and the National Transportation Safety Board (NTSB) over safety procedures, with the airlines trying to balance safety with other considerations, such as profit. Meanwhile, the NTSB, which has no power to mandate safety measures, is concerned only with learning the causes of crashes and suggesting reforms. Implementation of suggestions falls to the FAA, which until recently had a dual mandate to both promote airlines and regulate their activity.[27]

Although flying is as safe as or safer than it has ever been, there are calls for further regulations. These calls often ignore the fact that airlines and airplane manufacturers already have an incentive to keep their planes safe, if only for purely economic reasons. The economist Nancy Rose writes, "This national preoccupation with airline safety may provide the ultimate explanation for the high safety standards maintained by the U.S. carriers and the immense improvements in air safety over time."[28] And the sociologist Charles Perrow writes,

> The aircraft and airlines industries are uniquely favored to support safety efforts. Profits are tied to safety; the victims are neither hidden, random, nor delayed and can include influential members of the industry and Congress; a vigorous union fights the industry's temptation to call "operator error" and instead looks for vendor and management errors; a remarkable voluntary reporting system exists, experience is extensive, and the repetitive cycle of takeoffs, cruising, and landing promotes rapid training, precise experience with failures, and trials with errors for new designs and conditions.[29]

The Flight Safety Foundation, which publishes a newsletter for airline executives, notes that "poor safety performance equals poor financial performance."[30] The evidence for this claim is not ironclad, but as long as airline executives view safety as an important component of their business, airlines are likely to select the optimal level of safety. It is doubtful, though, that airlines will ever be allowed to make the cost-benefit tradeoffs inherent in safety regulation without some government oversight. There may be some justification for this: Deregulation has increased the competitiveness of the industry but has also led to a challenging business environment (which has only been exacerbated by the events of September 11). The news media influence how the public views political issues, and it helps the public determine what issues are important and evaluate how political officials are managing conflict. The political scientist Bernard Cohen, echoing many others, says that the press "may not be successful in telling the public what to think, but it is stunningly successful in telling its readers what to think *about*."[31]

The journalist Roger Lowenstein terms the airlines "flying utilities" because of their high fixed capital costs. For example, a new plane can cost in excess of $100 million. This is exacerbated by high labor costs. These factors undoubtedly contributed to the 2002 bankruptcy filings by U.S. Airways and United Airlines. Overall airline financial performance

reflects these struggles. From 1995 to 1999, the most profitable five-year period in the industry, major companies made three and a half cents on every dollar; whereas most profitable businesses averaged six cents on the dollar. In the 1990s the return was less than a penny for every dollar earned.[32] Since deregulation the airlines have averaged a 0.3 percent profit margin, or an average annual profit of $255 million.[33]

Profitability in the airline industry is related to what is known as a load factor, or the percentage of seats filled on an airline's flights by paying passengers. The average load factor level has steadily increased since deregulation, rising from 61 percent in 1978 to 72 percent in 2002.[34] The breakeven load factor, the point at which airlines make zero profit, has also increased. The breakeven load factor rose to a record 81 percent in 2002.[35] This figure is even higher for some airlines. In the fourth quarter of 2001, for instance, the breakeven load factor for United Airlines was 96 percent and for American Airlines was around 85 percent.[36] While the airline industry was profitable in each year from 1995 through 2000, the trend reversed in 2001 and continued in 2002. The industry as a whole can expect to be profitable again in 2004, according to the Air Transport Association.[37]

The one ray of light in this otherwise bleak picture is Southwest Airlines, the only carrier to consistently return profits to shareholders by dramatically expanding its routes and flights over time. To minimize costs, on point-to-point routes the carrier uses one type of plane and one passenger class. Pilots fly more hours and planes remain on the ground for shorter periods of time than is true for the major carriers. Union problems are minimized by means of annual cash payments in a profit-sharing arrangement.[38] Other airlines are, however, unlikely to match the Southwest model.

Disaster Stories

Some scholars argue that there are very few news story formats and that only the issues and the names change. Gaye Tuchman writes: "Reports of news events are stories—no more, but no less. . . . Reporters discover events . . . (or are presented with events) in which they can locate themes and conflicts of a particular society. These events get retold as essentially the same story from year to year and even from decade to decade."[39] To understand why plane crashes receive so much media attention, it is important to view a plane crash as a political event with an intrinsic human interest angle.

Certain issues are more media friendly than others. After all, the media operate in a competitive economic marketplace and need viewers or readers to survive and prosper. Robert Entman argues that three principles govern media coverage of stories.[40] The first is *simplification*. To reach the largest audience possible, the story must be boiled down to its simplest and most basic elements. Complexity is to be avoided at all costs. The second principle is *personalization*. Stories must be humanized and framed in terms of an ordinary person's life; people can relate to narratives with a human face. Mention of abstract entities such as organizations and institutions is to be avoided. The third principle is *symbolization*. Stories must be reduced to words, phrases, slogans, gestures, objects, or dramatic actions that readers, listeners, and viewers can identify with. These symbols help frame the story. To shape stories, the media rely on dramatic imagery, a theme of conflict, and novelty. A story that lacks these will have a short life. The time span for most major stories is a few weeks.[41] Normally, objective statistics that show a problem worsening are not sufficient to sustain journalistic interest in a particular story.[42]

A subset of policy news features widespread threats to lives or property. These cases fall under the rubric of disaster news and embody all of the characteristics described above. While not a staple of media coverage, such occurrences dominate the news until the disaster abates or the paucity of new information precludes further coverage. Disasters are characterized by suddenness, lack of warning, impact on many lives, and threat to life and the environment. These events run the gamut from weather problems (hurricanes, floods, forest fires) to geological movements (earthquakes) to those involving human error (oil spills, airline accidents).

There are some common elements in these stories:

—Damage. The immediate angle is numbers. How many were killed? What is the value of the destroyed property? Is the coastline impacted and, if so, how? Numbers usually appear in all stories. Statistics include a dollar estimate of the damage and often feature calls for government aid to deal with the aftermath.

—Victims. The media invest considerable resources on the victim aspect of the tragedy. Those who experienced the disaster firsthand tell their stories; in the case of a disaster in which all victims perish, friends and relatives of the victims are sought out. Hour-by-hour reports of how people dealt with the situation and survived provide the backbone of the early stories. The focus is on people who coped despite overwhelming odds.

They are normally identified as heroes, even though many feel uncomfortable with the designation.

—Cause. Coverage inevitably turns to who or what caused the disaster. The media need a focus of responsibility. This interplay between victims and causes is sometimes referred to as the hero-villain syndrome. While those who survived are portrayed positively, those who might have contributed to the accidents are seen in negative terms. Obviously, some disasters have no human agent, if the cause is natural, and weather or earthquakes do not make convincing villains. In such situations, the only negative portrayal might be of the person who should have seen the event coming and taken more adequate preparations to avoid it. If an accident was caused by an unknown human, such as a camper who accidentally caused a forest fire, he or she is likely to be forgotten. But if the culpable person is a prominent player in the drama (for example, the captain of an oil tanker or a nuclear plant official), attention tends to last longer. The more mystery surrounding the cause, the more attention the press will give to a disaster.

—Cure. The final focus of disaster stories is the reaction of government agencies. Oftentimes this takes the form of public hearings followed by formal actions. Answers to the following questions normally attract media coverage: Are certain people to blame? Have regulations or laws been changed to avoid such calamities in the future? Have certain geographical areas or groups of people been given government funds to prepare for such events in the future? The cure phase may last from a few weeks to several years. Proposals for cures will often be cosmetic and provide questionable "solutions" to intractable problems.

The Role of Experts

Airline crashes place specific safety issues on the government agenda, with the media acting as an integral player in this process. Journalists usually lack the credentials to report on plane crashes with only their own expertise, and they rely on experts in meteorology, geology, chemistry, biology, or engineering to help them translate the story's technological or scientific language. The media encourage the view that experts have consensual views and do not consider that the opinions of their own experts often reflect a particular perspective. The credentials of many of these experts are questionable, and often their speculation

spreads misinformation. Jim Hall, the former National Transportation Safety Board chairman, says,

> For me, the biggest disappointment when I review press coverage is the cavalier way some news outlets give their air time away to people who really don't know what they're talking about. You've all seen examples of this. Where once reporters would try to verify stories before putting them on the air, now we constantly hear what can only be called rumors being spread by what are considered legitimate broadcasters. How many times have you heard a reporter say, "This isn't verified but . . . " or "A so-far-unsubstantiated report says. . . ." If it isn't verified, if it isn't substantiated, why are they broadcasting it?"[43]

Story Frames

Slogans, as well as verbal or visual images, anchor a story, but they can be manipulated to give false impressions. E. L. Quarantelli studied a variety of disasters and concludes that media reports of natural disasters "do not reflect reality but are a matter of social construction."[44] Many reporters, for example, prefer the term *toxic dump* to *nuclear disposal facility*.[45] Conrad Smith investigated the television and print coverage of three disasters: the earthquake in Oakland in 1989, the forest fires in Yellowstone Park in 1988, and the Exxon Valdez oil spill in 1989.[46] In each case the coverage promulgated a misconception. Although the earthquake damage was centered in Oakland, reporters relied on images of San Francisco and its 1906 quake to anchor their stories. The forest fire coverage stressed Yellowstone Park as the country's premier pristine national park untouched by external forces and gave the impression that such fires were less frequent than is actually the case. The Exxon Valdez case focused on dying, oil-covered animals, blackened beaches, and Alaska as the last frontier. The prominent symbols were "powerful natural forces, bumbling bureaucrats, anthropomorphized fires, and threatened forest creatures."[47]

Plane crashes are tailor-made for such stories, having all the necessary elements: death, destruction, mystery, conflict, human interest, and tragedy. When a plane filled with German tourists crashed off the coast of the Dominican Republic in 1996, killing all 189 aboard, at least ten major newspapers referred to the crash site as "shark-infested" waters.[48] After the crash of ValuJet flight 592 into the Florida Everglades, reporters said

that the plane had landed in "murky" waters "infested" with crocodiles and snakes.[49] Plane crashes fit well into Entman's framework, being easily simplified, personalized, and symbolized. "The way some journalists see it," according to Barry Glassner, "air safety objectively deserves a high level of coverage, not just on account of the drama surrounding plane crashes but because plane wrecks produce lasting effects on people's psyches and on the U.S. economy."[50] The long-term economic effect of a plane crash is actually not as large as journalists believe; nonetheless, the economic effect of a crash is a media focus.

Public Perception and Policy Responses

Airline safety is a political issue due to public anxiety, widespread media coverage, and politicians' attraction to high-visibility concerns, such as crashes. Days after TWA flight 800 crashed in 1996, a CBS News poll showed that 83 percent of regular fliers believed that airlines and government should spend more money on airline safety even if it meant higher ticket prices.[51] In a 1998 Kaiser Family Foundation poll, 65 percent of Americans believed that a lot of regulation was necessary, 23 percent believed that some was justified, and only 10 percent believed that little or none was required.[52] And in a 1999 Gallup poll 55 percent of Americans had "somewhat less" or "much less" confidence in airline safety compared with a few years before.[53] Clearly, an elected official can benefit by promoting safety, especially since airlines (and ultimately customers) bear the costs of additional regulation.

Even if statistics indicate that air travel is extremely safe, each plane crash looms large since news stories focus on them out of proportion to their death tolls. In general, the media tend to exaggerate certain risks. For example, a study in the *American Journal of Public Health* shows that news sources overemphasize deaths from drug use, car accidents, and toxic agents.[54] In a study examining plane crashes, the aviation expert Arnold Barnett shows that, in 1988–89, the *New York Times* gave 8,000 times more coverage (in terms of deaths per thousand people) to plane crashes than to cancer.[55] Further, people tend to overestimate the number of deaths from rare events and to underestimate the number of deaths from common events.[56] They also perceive links between rare events that occur close in time, even if none exists, so that they can avoid accepting that randomness is to blame.[57] Since airline crashes are so unusual, their occurrence is

cause for concern and airline safety hence occupies the agenda. Thomas Birkland argues, "The rarity or novelty of the event is important because run-of-the-mill events are unlikely to gain focal power because of their commonness."[58] When an airline crash occurs, government officials are quick to seek out a cause, thereby calming fears. If equipment failure is determined to be a contributory factor, then there may be debate about what action is required to ensure that the same problem does not recur. On a larger scale, a crash reminds policymakers and the public that airline travel carries some risk. According to a RAND study conducted for the NTSB, the crashes of TWA flight 800 and ValuJet flight 592 "shook the foundation of the aviation community. The traveling public was frightened, and media pundits questioned the . . . safety of domestic airline operations."[59] A single mishap often provides very little information about the overall safety of the airline industry. Precisely because they occur with such low frequency, crashes can be thought of as nearly random events that are bound to occur. Airline crashes remind the public and policymakers that airline safety is an issue of interest. Crashes act as triggering events, directing attention to the issue.

Regulatory changes with the aim of improving airline safety are often prompted by plane crashes, which may be misleading indicators of the safety of air travel. Plane crashes draw attention to airline safety, news stories of the crashes publicize the issue, the public then perceives it as a major problem, and political actors address this concern by means of new policy proposals. As we demonstrate in the next few chapters, the multiplicity of actors involved in air safety—all of whom come to the table with different agendas—makes public policy in this area disconnected and fairly chaotic. Airplanes are complex pieces of machinery, and a catastrophic failure may be, after all is said and done, a random event. The desire to find the smoking gun may divert resources and attention from more effective ways of ensuring safety in the skies.

The Rest of the Book

In the remainder of this book we examine the way plane crashes affect public policy. In chapter 2 the players in airline safety are identified, as is the sequence of the events that follow a plane crash. Chapter 3 provides statistics on airline safety, explains the high level of media attention to plane crashes, and notes the way crashes affect public policy. In

chapters 4 through 6 three crashes are considered in detail, using media coverage as the lens for analysis. In chapter 7 the effect of the events of September 11 are analyzed in relation to the link between aviation security and safety. In chapter 8 we outline our findings and offer some suggestions for reforming the system.