Preface

In terms of casualties, the Texas City disaster remains the worst industrial catastrophe in U.S. history. Its centerpiece is the explosion on 16 and 17 April 1947, sixteen hours apart, of ammonium nitrate fertilizer on two merchant ships. Because it occurred during the tremendous surge of chemical production and transportation that followed World War II, long before comprehensive precautions were embodied in the extensive governmental regulations that now encompass these operations, it constitutes the baseline hazardous materials disaster in the industrial culture of the United States. As such, it provides a potential benchmark for measuring progress in risk assessment and emergency management. Nonetheless, while issues of risk assessment and emergency management are necessarily present in this book, I have not attempted to extract lessons through the systematic application of these concepts, nor have I tested their applicability for analysis of subsequent disasters.

Replete with sudden death, mutilation, and property devastation, the disaster makes for disturbing but interesting history. During the immediate aftermath of the tremendous ship explosions, survivors exhibited a mixture of panic, heroism, and ingenuity in the face of imminent danger as well as confusion and ineptness. Surviving townspeople and residents of neighboring towns came to help, revealing grim determination to do whatever they could. The story concerns human nature in the workplace of the private sector and in government agencies at federal, state, and local levels. It demonstrates how tragedy can occur when employees, supervisors, managers, and bureaucrats charged with the safe handling of dangerous substances fail to fully consider the effect their actions might have upon others who share this responsibility. More than anything else, Texas City illustrates what can happen when complacency, neglect, ignorance, and even stupidity exist amid dangerous circumstances.

This disaster was a media event for radio and newspapers and riveted the attention of a shocked nation. It would have been particularly appro-

priate for the voyeurism of television, but this medium was then only in its infancy. After investigating the impact of television upon the federal government's response to Hurricane Andrew, two scholars concluded that it is a "voracious and insatiable medium" which finds disasters particularly appropriate for meeting its demands for drama and action.[1] One can only speculate about the impact the event would have had upon public opinion and government if television had been present to splash graphic images of the town's agony across the screens of America, accompanied by the provocative commentary of news reporters presenting their version of reality.

Curiously, the disaster and surrounding circumstances have never been investigated in their totality. Not even the technical reports submitted by fire and insurance investigators, the "experts" of the time, present information in a way that facilitates its incorporation into the overall context of the disaster. Apparently, many concluded that the sheer power of the explosions left little else to explain. Then again, given the complexity of the event, investigators may have been put off by the difficulty of making conclusive judgments. But the fact remains that hundreds died, thousands were injured, property worth millions of dollars was destroyed, and an entire community was severely disrupted by the ship explosions and their aftermath. Such results demand searching questions and forthright answers—if we cannot discern the truth about Texas City, we can neither identify those who are to blame nor recognize pitfalls to be avoided in the future.

How can we best identify and draw useful lessons from the pertinent conditions and actions that contributed to the disaster? For instance, how can we determine who was responsible for the safe transit of the fertilizer in terms of simple or culpable negligence? Can any of us recall an occasion when officials had the courage to step forward amid carnage and suffering and admit they were probably at fault? This certainly did not happen at Texas City. Even more intriguing is the fact that, except for damage suits entered in federal court by relatives of victims, the whole matter of culpability was quickly put aside. Consequently, our understanding of this horrible disaster rests on overly simple explanations and perhaps disinformation as well. Disinformation is not just a matter of lies;

it includes avoiding and not revealing awkward facts as well. A major premise of this book is that simple explanations of a complex event that happened in 1947 were just as misleading then as they are today. Was this deliberate or not? How much of the blame is attributable to a code of silence designed to discourage further inquiry? How much was the product of relative unfamiliarity with industrial disasters involving dangerous chemicals? Unfortunately, existing literature on the disaster does not provide much help in answering either question because it is largely confined to descriptions of events that triggered the ship explosions or to human interest stories about the aftermath.

Regardless of the presence or absence of a carefully drawn emergency plan, like every other disaster involving dangerous products, what happened at Texas City cannot be blamed on human error alone. This means that while "unsafe acts" on the part of officials require investigation, their significance must be assessed within the social and administrative context in which they occur. We need to learn whether or not information was disseminated about the potentially explosive quality of ammonium nitrate fertilizer, as well as who might or should have known this. We also need to understand how well safety standards were enforced at the docks.

The years since 1947 have witnessed improvements in emergency preparedness as well as in knowledge about hazardous products and safety programs. But the possibility of disaster is always relative to the seriousness of the threat. Whenever private sector operators and government officials are complacent, dilatory, or negligent about the dangers of storing and transporting hazardous substances and give only lip service to emergency preparedness, we are almost guaranteed to witness another Bhopal, *Exxon Valdez*, or even Texas City.

This book is designed to show what happened to people who were blind to the possibility of disaster and to provide explanations that may be helpful in understanding similar situations in our day and time. Chapter 1 provides a brief description of the explosions of the *Grandcamp* and *High Flyer*, the surrounding physical and cultural circumstances, and the state of preparedness for a major industrial emergency. The next four chapters describe the evolving crisis beginning on the morning of 16 April and ending on 22 April 1947. Chapter 2 takes up the chain of events lead-

ing to the explosion of the first ship, the *Grandcamp*. Chapter 3 details the effects of the blast and the reactions of survivors in Texas City and inhabitants of neighboring towns who rushed in to help. Chapter 4 describes events through the afternoon of the first day, focusing upon the difficulty both government and private sector officials encountered in formulating a coherent response amid the chaos. Chapter 5 describes the second day of the crisis, including the explosion of the *High Flyer* and subsequent events through the 22nd, when the crisis subsided and recovery began. Chapter 6 highlights continuing events over the next several months, including short-term recovery efforts and improvements in emergency preparedness inspired by the disaster. The final chapter provides a brief summary, including a discussion of the ramifications of poor preparedness for an industrial disaster, and assesses the question of negligence and culpability.

Like any study of an early disaster, this book cannot be complete and accurate in all respects. Texas City occurred before emergency management became an obligation of local government, before mandatory "after-action" reports, and before television gave us on-the-scene journalism. Moreover, nothing can wholly overcome the mind-numbing shock experienced by veterans of this event, the confused circumstances which followed the ship explosions, memories dimmed by the passage of half a century, and the death of key participants. But the story is told in considerable detail and, it is to be hoped, with insight that will enhance our understanding of this and ensuing disasters. It is offered to the reader in the same spirit as Thucydides offered his study of the Peloponnesian Wars: "It will be enough for me, however, if these words of mine are judged useful by those who want to understand clearly the events which happened in the past and which (human nature being what it is) will, at some point or other and in much the same ways, be repeated in the future."[2]